ACC Latin America 2026

Friday, 18 September 2026

Session Title:	**Complex Cases in Multimodal Imaging and Valvular Diseases**
Topic 1:	Valvular Diseases
Publishing Title:	SEVERE PROSTHETIC AORTIC STENOSIS WITHOUT INITIAL VEGETATIONS: AN UNUSUAL PRESENTATION OF EARLY PROSTHETIC VALVE ENDOCARDITIS CAUSED BY ENTEROCOCCUS DURANS
Author Block:	Jonathan Alexis Vallejos, Victor Cutimanco, Jose Merino Valencia, Zoila Rodríguez, INSTITUTO NACIONAL CARDIOVASCULAR (INCOR), Lima, Peru
Abstract Body:	**Background:** Early prosthetic valve endocarditis usually presents with regurgitation, vegetations, or perivalvular complications. Presentation as severe prosthetic stenosis without vegetations is exceptional **Case:** A 66-year-old man underwent ascending aortic replacement and bioprosthetic aortic valve replacement for endocarditis 6 months earlier, with normal prosthetic function at discharge and 3 months. He was on warfarin for postoperative atrial fibrillation. He presented with fever and hypotension. Transthoracic and transesophageal echocardiography showed severe prosthetic stenosis, peak velocity 4.86 m/s, mean gradient 57 mm Hg, leaflet thickening, and no vegetations. Cardiac computed tomography (CT) excluded perivalvular complications **Decision-making:** The obstructive phenotype, without severe regurgitation, posed a diagnostic challenge. Prosthetic thrombosis was ruled out by cardiac CT; mismatch by previously normal echocardiograms; and pannus by timing and negative cardiac CT. On day 5, blood cultures isolated Enterococcus durans, a rare microorganism. Ten days later, repeat imaging showed vegetations, abscess, pseudoaneurysm, and dehiscence. Valve replacement and ascending aortic replacement were performed, with favorable evolution **Conclusion:** Prosthetic valve endocarditis may present as severe stenosis before vegetations are evident. With fever and increased transprosthetic

gradient, serial blood cultures and multimodality imaging are key to diagnosis.

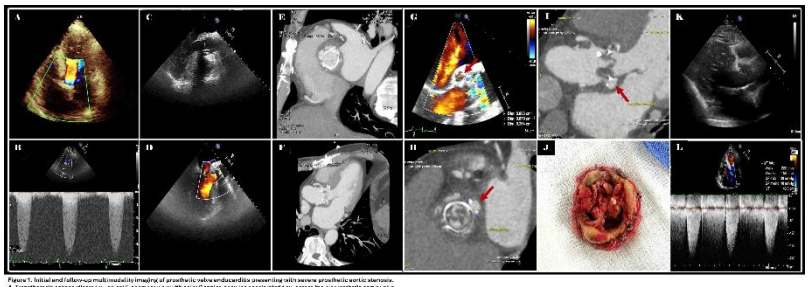


Figure 1. Initial and follow-up multimodality imaging of prosthetic valve endocarditis presenting with severe prosthetic aortic stenosis.

A. Transthoracic echocardiography, parasternal short-axis view with color Doppler, showing eccentric blood flow across the bioprosthetic aortic valve.

B. Transthoracic transesophageal echocardiography, with [illegible] in previous [illegible], demonstrating severe prosthetic valve stenosis with a peak velocity of 4.08 m/s, mean gradient of 37 mm Hg, and a Doppler velocity index of 0.22.

C. Transesophageal echocardiography, 3D view, [illegible] of all 3 prosthetic leaflets, [illegible] with no significant leaflet edge-effect identified [illegible].

D. Transesophageal echocardiography, 2D with color Doppler, confirming the absence of significant aortic regurgitation, considered as habitual in mechanical valves in the initial evaluation.

E-F. Cardiac computed tomography angiography of the prosthetic aortic valve, showing [illegible] in the following [illegible] initial assessment of aortic valve stenosis, [illegible] [illegible].

G. Full-resolution computed tomography of the thorax, showing [illegible] [illegible] associated with acute prosthetic aortic stenosis, [illegible] [illegible].

H. Follow-up computed tomography angiography showing regular [illegible] of the prosthetic leaflets with [illegible] lowering, [illegible] [illegible] [illegible].

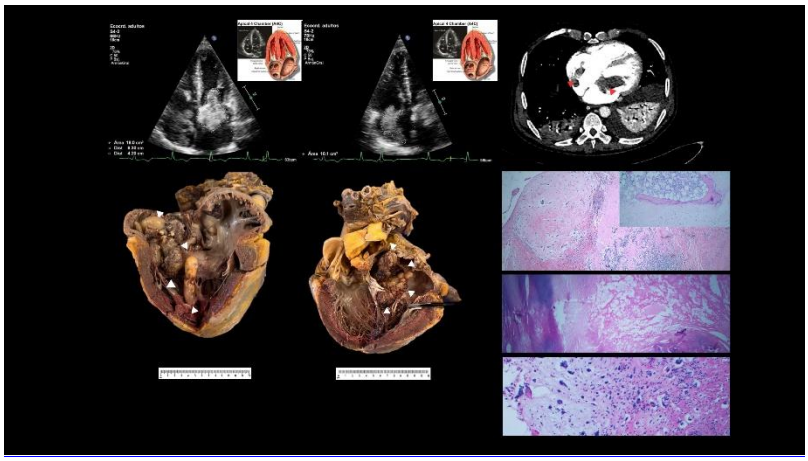
I. Follow-up cardiac computed tomography angiography, [illegible] 57 × 53 mm, [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible].

J. Gross pathological specimen of the explanted, bicuspid prosthetic aortic valve, showing [illegible] [illegible] vegetations.

K-L. Post-operative transthoracic echocardiography showing [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible].

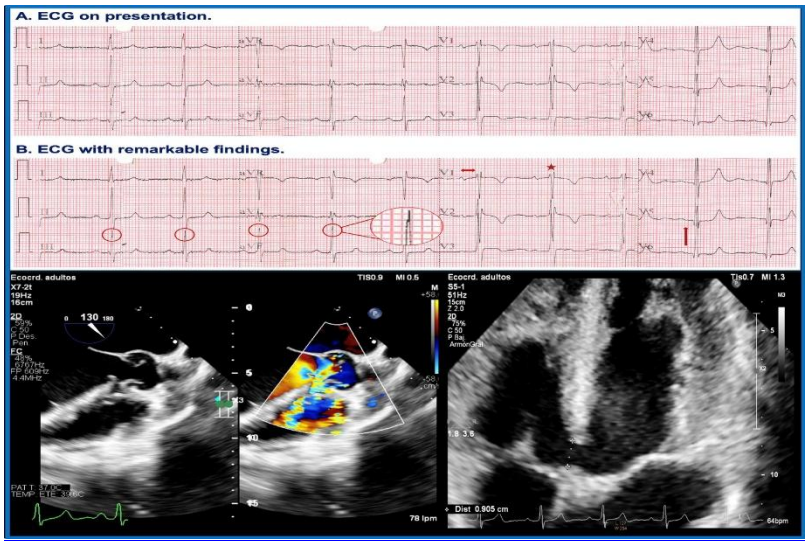
Session Title:	**Complex Cases in Multimodal Imaging and Valvular Diseases**
Topic 1:	Multimodal Imaging
Publishing Title:	CATASTROPHIC SYSTEMIC EMBOLISM AND AORTIC THROMBOSIS SECONDARY TO BILATERAL OSSIFIED ATRIAL MIXOMA: A RARE CLINICAL ENTITY
Author Block:	Emily Arrizon, Jacqueline cervantes, Axel Rodriguez, Edgar Garcia, Cesar Angulo, Hospital General del Estado de Sonora, Hemrosillo, Mexico
Abstract Body:	**Background:** Cardiac myxomas are rare primary tumors, typically solitary an locates in the left atrium. Bilateral involvement occurs less than 5% of cases, and metaplastic ossifications is an even rare feature reported in fewer than 15 cases in literature. **Case:** A 54 year old male presented with constitutional symptoms, acute chess pain, and severe lower limb ischemia. Physical examination revealed characteristic ``heart plops`` and distal cyanosis. Echocardiography identified large bilateral atrial masses, while CT imaging confirmed complete abdominal aortic thrombosis and multi-organ infracts. Despite intensive care, the patient died from cardiogenic shock. Autopsy and histopathology confirmed giant bilateral atrial myxomas (RA: 7.0 cm: LA 5.5 cm) and RV calcified thrombus and the RA mass Showing bone metaplasia. **Decision-making:** This case is exceptional due to its bilateral presentation and catastrophic embolic complications. The valvular plop was key clinical sing of intracavitary obstruction. Histological findings of bone metaplasia and extramedullary hematopoiesis within the tumor are extremely rare. The extensive aortic thrombosis resulted from systemic cardio embolism. **Conclusion:** Bilateral cardiac myxoma with metaplastic ossification is an exceptionally rare cause of fatal cardioembolic events. Multidisciplinary post-mortem review was essential to differentiate this rare entity from common

thrombi or malignant sarcomas.



Session Title:	**Complex Cases in Multimodal Imaging and Valvular Diseases**
Topic 1:	Valvular Diseases
Publishing Title:	IT IS NOT JUST A CROCHET HOOK
Author Block:	Juan Pablo Morales, Luisa Gómez, álvaro Herrera, Hospital Universitario del Valle - Evaristo García, Cali, Colombia
Abstract Body:	**Background:** The Crochetage sign—a notch at the QRS apex in inferior leads—is a classic electrocardiographic marker of intracardiac shunting, traditionally linked to atrial septal defects, though it may also reflect hemodynamic alterations in ventricular septal defects (VSD) **Case:** A 47-year-old woman with no cardiac history presented with abnormal uterine bleeding and hemodynamic instability. Examination revealed a grade V/VI harsh systolic murmur at the lower left sternal border. The ECG demonstrated the Crochetage sign in multiple inferior leads, incomplete right bundle branch block, first-degree AV block, and left ventricular hypertrophy by voltage criteria. Echocardiography identified a 9-mm membranous VSD (Qp/Qs 2.8), biventricular dilation, and right coronary cusp prolapse with mild aortic regurgitation, establishing the diagnosis of Laubry-Pezzi syndrome **Decision-making:** The Crochetage sign was the initial clue prompting echocardiographic confirmation. Laubry-Pezzi syndrome—VSD with aortic regurgitation from cusp prolapse via the Venturi effect—is rare and frequently underdiagnosed. Surgical VSD closure and aortic valve intervention were indicated given progressive regurgitation and hemodynamic burden **Conclusion:** The Crochetage sign is not exclusive to atrial septal defects and may guide early detection of complex congenital lesions, reinforcing the electrocardiogram as an indispensable diagnostic tool in rare entities such as

Laubry-Pezzi syndrome



Session Title:	**Complex Cases in Multimodal Imaging and Valvular Diseases**
Topic 1:	Multimodal Imaging
Publishing Title:	BEYOND THE SURFACE MULTIMODALITY IMAGING OF A BIATRIAL MYXOMA IN CARNEY COMPLEX
Author Block:	Katherin Daniela Medrano Orellana, Humberto Cordero, Hernan Molina, Vicente O. Godoy, Andres F. Mora, Roberto Mancilla, Juan C. Guay, Juan C. Espinal, Cardiovascular Surgery Unit of Guatemala, Guatemala, Guatemala
Abstract Body:	**Background:** Biatrial myxomas are rare primary cardiac tumors representing <2.5% of cases. Approximately 10% are associated with Carney complex (CC), an autosomal-dominant syndrome with high mortality due to embolic events and endocrine tumors. **Case:** A 40-year-old female presented with progressive dyspnea and lower limb edema. Initial 2D transthoracic echocardiogram (2D-TTE) suggested a large left atrial mass. Subsequent high-definition 3D transesophageal echocardiogram (3D-TEE) revealed a biatrial mass originating from the interatrial septum with two distinct attachment points, prolapsing through both mitral and tricuspid valves. **Decision-making:** 3D-TEE provided superior spatial resolution for surgical mapping, highlighting its superiority over 2D-TTE in characterizing complex masses. Under cardiopulmonary bypass, a biatrial approach allowed complete resection via a septal flap. The presence of biatrial involvement plus the skin lessions, acromegaly and paradoxical dexamethasone response, demands clinical suspicion for CC and emphasizes the need for long-term multidisciplinary surveillance. **Conclusion:** 3D-TEE is essential for characterizing complex biatrial myxomas and guiding surgical strategy. Early diagnosis and precise preoperative mapping are critical for successful outcomes and prompting the investigation of

associated genetic conditions like CC.

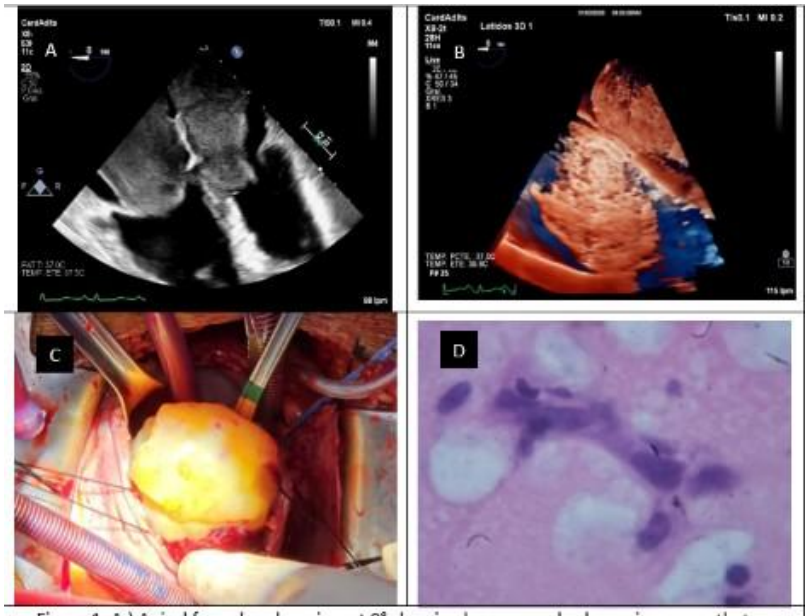
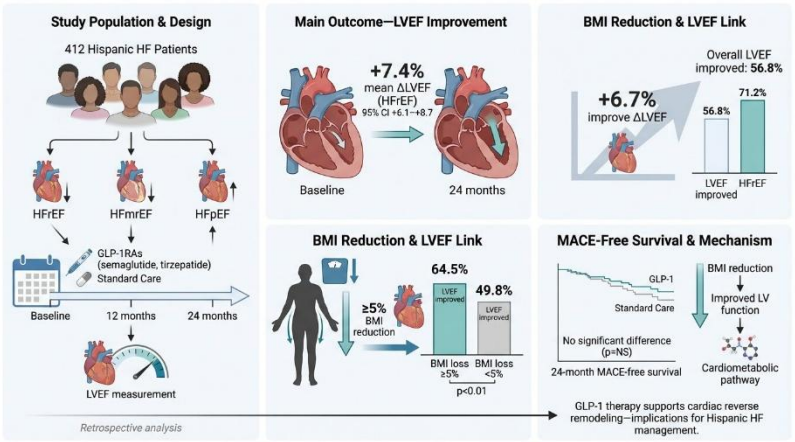


Figure 1: A.) Apical four-chamber view at 0° showing large, round echogenic masses that go through the valvular plane. B) 3D-TEE four chamber view at 0° showing the two masses attached to the interatrial septum. C.) The right atrial mass is expose through a right atriotomy D.) Pathology shows a neoplastic process characterized by low cell density formed by spindle-shaped or stellate cells with a small ovoid, elongated or stellate nucleus, abundant clear slightly vacuolated or eosinophilic cytoplasm with a poorly defined cell membrane surrounded by abundant eosinophilic myxoid intercellular matrix

Session Title:	**Cardiovascular Disease Prevention Oral Abstracts**
Topic 1:	Cardiovascular Disease Prevention
Publishing Title:	GLP-1 RECEPTOR AGONISTS ARE ASSOCIATED WITH REVERSE REMODELING IN HEART FAILURE: KAPLAN-MEIER EVIDENCE FROM A HISPANIC COHORT
Author Block:	Omarlyn Ruiz, Alvaro Taveras, Ana Isabella Bencosme, Isabel Cabral, Javier Acosta, Martín Durán, Ivan Rafael Figueroa Baez, Eliscer Guzman, Pontificia Universidad Católica Madre y Maestra, Santiago de los Caballeros, Dominican Republic, UConn Health, Farmington, CT, USA
Abstract Body:	**Background:** GLP-1 receptor agonists reduce cardiovascular risk; however, their role in cardiac remodeling in heart failure (HF) remains incompletely defined, particularly in Hispanic populations. **Methods:** We retrospectively analyzed 412 Hispanic patients with HF (HFrEF, HFmrEF, HFpEF) receiving GLP-1 receptor agonists (semaglutide, tirzepatide) or standard care. Left ventricular ejection fraction (LVEF) was assessed at baseline, 12, and 24 months. Kaplan-Meier analysis evaluated 24-month MACE-free survival. Associations between weight reduction and LVEF improvement were examined. **Results:** At 24 months, 56.8% of patients demonstrated LVEF improvement, most prominently in HFrEF (71.2%; mean ΔLVEF +7.4%, 95% CI +6.1-+8.7). Patients achieving ≥5% BMI reduction had greater rates of LVEF improvement (64.5% vs 49.8%, $p<0.01$), suggesting a link between metabolic modulation and cardiac recovery. Kaplan-Meier analysis showed no significant difference in MACE-free survival over 24 months. **Conclusion:** GLP-1 receptor agonist therapy is associated with meaningful reverse remodeling in HF, particularly among patients achieving weight reduction. These findings support a cardiometabolic mechanism linking BMI reduction to improved ventricular function and highlight the potential role of

GLP-1-based therapies in HF management in Hispanic populations.



Session Title:	**Cardiovascular Disease Prevention Oral Abstracts**
Topic 1:	Cardiovascular Disease Prevention
Publishing Title:	CARDIOVASCULAR PHENOTYPE IN EARLY ADULTHOOD OF A PRETERM COHORT EXPOSED TO KANGAROO MOTHER CARE: CLINICAL DESCRIPTION, ECG AND ECHOCARDIOGRAPHY
Author Block:	HERNAN RAMIREZ, Gustavo Lemus, Jose S. Arias, Nohra Romero, Raul Reyes, Jaime Torres, Francisco Sebastián Terán Ibarra, Andres F. Buitrago, Juan David Castillo Peña, Andrés Ruiz, Diana Carrillo, Diana Muñoz, Geny González, Karen Rivera, Catalina Lince, Nathalie Charpak, Maria A. Gutierrez, Bernardo Lombo, Robert L. McNamara, Fundacion Santa Fe de Bogota, Bogota, Colombia, Kangaroo Foundation, Bogota, Colombia
Abstract Body:	**Background:** Adults born preterm may develop a distinct cardiovascular phenotype, including higher blood pressure, ventricular remodeling, and subclinical myocardial dysfunction. Evidence from Latin American cohorts with standardized cardiovascular phenotyping is scarce, and the long-term cardiovascular profile of adults exposed to Kangaroo Mother Care (KMC) remains insufficiently characterized. **Methods:** Historical cohort with cross-sectional adult evaluation. Adults born preterm with birth weight <2000 g and gestational age <37 weeks underwent standardized blood pressure, 12-lead ECG, and transthoracic echocardiography, including 2D imaging, Doppler, tissue Doppler, speckle tracking, biventricular function, and pulmonary hemodynamics. Data are mean ± SD, median [IQR], or n (%). Comparisons used Welch's t-test, Mann-Whitney U test, or chi-square. Regression adjusted for gestational age, sex, growth restriction, and birth weight. **Results:** Ninety preterm adults were evaluated: 51 KMC-exposed and 39 non-exposed. Mean age was 31.3 years; female sex was 72% vs 69%. Gestational age was 33.1 ± 2.0 vs 33.3 ± 2.0 weeks, birth weight 1707 ± 258 vs 1748 ± 214 g, and growth restriction 37.3% vs 28.2%. Antenatal steroids were higher in non-exposed adults (43.6% vs 17.6%; p=0.007). In the KMC group, blood pressure was 118 [110-126]/74 [68-80] mmHg, ECG showed sinus rhythm in 100%, LVEF was 63.7 ± 3.4%, TAPSE 21 [20-22] mm, FAC 45 ± 5%, and E/A ratio 1.28 [1.23-

1.41]. Compared with non-exposed adults, KMC-exposed adults had lower systolic blood pressure (117.2 ± 13.9 vs 122.5 ± 8.7 mmHg; p=0.037) and more negative LV global longitudinal strain (−22.8 ± 2.4% vs −21.4 ± 2.7%; p=0.017), persisting after adjustment (β=−1.284; p=0.019). No overt diastolic or right ventricular dysfunction was identified.

Conclusion: KMC exposure was associated with normal-range cardiovascular parameters, preserved biventricular function, and more favorable LV global longitudinal strain in early adulthood. Lower systolic blood pressure requires cautious interpretation because of potential confounding, particularly antenatal steroid exposure.

Session Title:	**Cardiovascular Disease Prevention Oral Abstracts**
Topic 1:	Cardiovascular Disease Prevention
Publishing Title:	CLINICAL CHARACTERISTICS, MICROBIOLOGY, AND OUTCOMES OF INFECTIVE ENDOCARDITIS IN ANTIOQUIA, COLOMBIA ,THE REINA REGISTRY
Author Block:	Jorge Mario Largo Gil, Juan Valencia, Juan Manuel Senior, Gustavo Roncancio, Edison Muñoz Ortiz, Cristian Piedrahita, Juan Gamboa, James Samir Diaz, SR, Laura Duque González, Emilio Herrera, Alejandro Arroyave, Daniel Aguirre, Luis Arias, Laura Lopez, Juliana Valencia, Jairo Gandara, Miguel Giraldo, Nilson Lopez, Yasser Arana, Camilo Gomez, SR, Julio Boada, Diana Agredo, Santiago Giraldo, Sebastian Largo, Diego A Vargas Hernández, Universidad de Antioquia, Medellin, Colombia
Abstract Body:	**Background:** Background Infective endocarditis (IE) remains as a severe disease associated with high morbidity and mortality worldwide. In Latin America, available evidence is limited and largely derived from small cohorts, hindering accurate characterization of the disease and comparisons with international registries. The REINA Registry was designed to characterize the clinical profile, microbiology, management, and in-hospital outcomes of IE in Colombia. **Methods:** Methods We conducted a multicenter, retrospective, in-hospital cohort study including adult patients diagnosed with IE. Patients were treated at tertiary referral centers in Antioquia, Colombia, between 2013 and 2023. Demographic, clinical, microbiological, echocardiographic, and therapeutic data, as well as in-hospital outcomes, were systematically collected and analyzed. **Results:** Results A total of 760 patients were included; 65% were male, with a mean age of 57.3 years (SD 17.2). The most frequent comorbidities were hypertension (60.3%) and chronic kidney disease (25.5%). The most frequently identified pathogens were Staphylococcus aureus (33.2%), streptococci (23.3%), and enterococci (12%). Embolic complications occurred in 42.3% of patients,predominantly cerebral embolism (43%). Overall in-hospital mortality was 24.1%, with IE-attributable mortality of 22.8%. Cardiac surgery was required in 50.9% of

cases, with a median time of 7 days from diagnosis. Factors associated with reduced survival included age more than 60 years, acute heart failure at presentation, left ventricular ejection fraction lesser than 50%, and septic embolism.

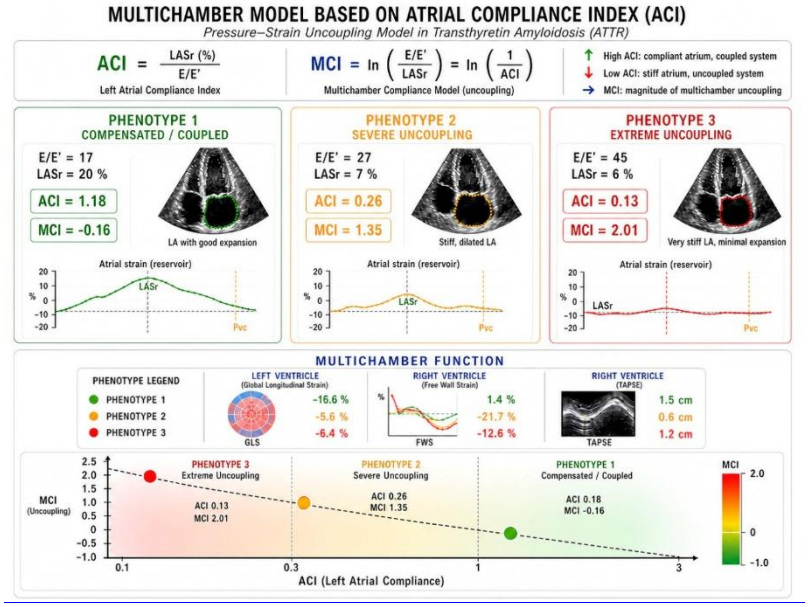
Conclusion: Conclusion

The REINA Registry provides a comprehensive overview of IE in Colombia, revealing a high burden of comorbidities, frequent embolic complications, and higher mortality compared with other international registries. These findings underscore the need to strengthen preventive strategies, promote early diagnosis, and ensure timely access to advanced imaging and surgicalmanagement. To date, this is one of the largest studies published in Latin America on this topic.

Session Title:	**Cardiovascular Disease Prevention Oral Abstracts**
Topic 1:	Cardiovascular Disease Prevention
Publishing Title:	BIOMASS SMOKE EXPOSURE AND CARDIOVASCULAR OUTCOMES ACROSS RURAL AND URBANMEXICAN REGIONS: A MULTI-REGIONAL CROSS-SECTIONAL STUDY
Author Block:	Ilani Paola Santoyo Pérez, Javier Andres Ascencio Guerrero, Daniel G. Gómez-Revilla Mancilla, Mario Lopez, Valeria Ortega Albarran, Hector Iñaki Marrufo Rizo, Jose Daniel Jimenez Tirado, Jesús E. González-López, Joselyn Noriega Saldaña, Diego I. Cardoso Casco, Edgar Francisco Carrizales-Sepulveda, Jennifer Ann Swain Saint Martin, Julio C. Pérez Bustamante, Irving U. Díaz Ramírez, Jorge A. Vázquez Acosta, Yolotzin G. Anguiano Ramos, Luis Fernanda Aguilera Mora, Salvando Latidos, Guadalajara, Jalisco, Mexico, Department of Medicine and Nutrition, University of Guanajuato, León, Guanajuato, Mexico
Abstract Body:	**Background:** Indoor biomass smoke is a common yet underrecognized environmental exposure in Latin America, with marked rural-urban variation. Its contribution to cardiovascular and respiratory outcomes across regions with different pollution profiles remains poorly characterized. **Methods:** A cross-sectional multi-regional analysis was conducted within a national cardiovascular screening program (2021-2026) including adults aged 40-74 years from four macro-regions: West-Central (n=984), Northern (n=297), Central Metropolitan (n=192), and South-Southeast (n=229); total n=1,702. Biomass exposure was assessed by standardized questionnaire. Outcomes included hypertension (HTN), dyslipidemia, ischemic heart disease (IHD), stroke/TIA, peripheral arterial disease (PAD), heart failure (HF), COPD, obstructive sleep apnea (OSA), and 10-year cardiovascular risk estimated by GLOBORISK-LAC. Multivariable logistic regression models were adjusted for age, sex, BMI, smoking, alcohol use, physical inactivity, and type 2 diabetes. **Results:** Among 1,702 participants (62.1% female; median age 56 years), biomass exposure was highest in the South-Southeast Region (57.2%). OSA was the outcome most consistently associated with biomass exposure: West-Central Region (OR 2.24; 95% CI 1.54-3.26; p<0.001) and South-Southeast Region (OR 4.77; 95% CI 2.00-11.38; p<0.001). Dyslipidemia was

independently associated in the West-Central Region (OR 1.38; 95% CI 1.02-1.87; p=0.039). In the Northern Region, biomass exposure was associated with higher GLOBORISK-LAC score (OR 2.46; 95% CI 1.47-4.11; p<0.001). No significant associations were observed for HTN, IHD, PAD, stroke/TIA, or HF. **Conclusion:** Biomass smoke exposure is independently associated with OSA and dyslipidaemia in predominantly rural regions, and with higher overall cardiovascular risk in urban-transitional areas. The consistent association with OSA across multiple regions suggests a shared pathophysiological pathway deserving further investigation. These findings support region-specific environmental strategies in cardiovascular prevention across Latin America.

Session Title:	**Multimodal Imaging Oral Abstracts**
Topic 1:	Multimodal Imaging
Publishing Title:	MULTICHAMBER CARDIAC INVOLVEMENT IN TRANSTHYRETIN AMYLOIDOSIS, INTEGRATING ATRIAL DYSFUNCTION AND VENTRICULAR STIFFNESS
Author Block:	Katihurca Almonte Montes de Oca, Rosa Noemi Cueto Payano, Maria Natividad Diaz Estrella, Luz Del Alba Javier Cornelio, Sara Divanne González, Oscar Ortega, Josue Pichardo, Miguel Arias, Wilnelia Acosta, Nelson Acosta, Ernesto Diaz Alvarez, Maria Eugenia Linares, Luis Alberto Castillo, ASOCIACION INSTITUTO DOMINICANO DE CARDIOLOGIA, SANTO DOMINGO, Dominican Republic
Abstract Body:	**Background:** Cardiac amyloidosis transthyretin (CATTR) is traditionally characterized by ventricular involvement; however, emerging evidence suggests a diffuse, multichamber process. **Methods:** 29 Patients with CATTR underwent comprehensive speckle-tracking echocardiography. Left atrial reservoir strain (LASr), E/e', left ventricular global longitudinal strain, and right ventricular strain (RVLS) were measured. Atrial stiffness (LASI = E/e'/LASr), atrial compliance (ACI = LASr/[E/e' × ln(LAVI)]), and ventricular stiffness (LVSI = E/e'/|GLS|) were calculated. A novel multichamber coupling index (MCI) was derived as ln[(|GLS| × |RVLS|)/ACI]. **Results:** Among 29 patients (77 ± 9 years), atrial mechanics were uniformly impaired, with elevated LASI (3.85 ± 4.37) severely reduced ACI (0.16 ± 0.20). In contrast, ventricular stiffness (LVSI 2.95 ± 2.38) and multichamber coupling (MCI 5.3-8.5) demonstrated substantial heterogeneity. Atrial stiffness was significantly higher in Atrial Fibrillation (p = 0.046). **Conclusion:** CATTR is not a single-chamber disease but a multidimensional process characterized by **uniform atrial failure, variable ventricular stiffness, and dissociated multichamber dynamics**.The ventricular stiffness reflects hemodynamic burden, and multichamber coupling captures clinical expression. This integrative framework challenges conventional paradigms and provides a novel and exploratory index for disease phenotyping characterization and risk stratification.


MULTICHAMBER MODEL BASED ON ATRIAL COMPLIANCE INDEX (ACI)
Pressure–Strain Uncoupling Model in Transthyretin Amyloidosis (ATTR)
ACI = LASr (%) / E/E'
Left Atrial Compliance Index
MCI = ln (E/E' / LASr) = ln (1 / ACI)
Multichamber Compliance Model (uncoupling)
High ACI: compliant atrium, coupled system
Low ACI: stiff atrium, uncoupled system
MCI: magnitude of multichamber uncoupling
PHENOTYPE 1
COMPENSATED / COUPLED
E/E' = 17
LASr = 20 %
ACI = 1.18
MCI = -0.16
LA with good expansion
Atrial strain (reservoir)
LASr
Pvc
PHENOTYPE 2
SEVERE UNCOUPLING
E/E' = 27
LASr = 7 %
ACI = 0.26
MCI = 1.35
Stiff, dilated LA
Atrial strain (reservoir)
LASr
Pvc
PHENOTYPE 3
EXTREME UNCOUPLING
E/E' = 45
LASr = 6 %
ACI = 0.13
MCI = 2.01
Very stiff LA, minimal expansion
Atrial strain (reservoir)
LASr
Pvc
MULTICHAMBER FUNCTION
PHENOTYPE LEGEND
PHENOTYPE 1
PHENOTYPE 2
PHENOTYPE 3
LEFT VENTRICLE
(Global Longitudinal Strain)
-16.6 %
-5.6 %
-6.4 %
GLS
RIGHT VENTRICLE
(Free Wall Strain)
1.4 %
-21.7 %
-12.6 %
FWS
RIGHT VENTRICLE
(TAPSE)
1.5 cm
0.6 cm
1.2 cm
TAPSE
MCI (Uncoupling)
PHENOTYPE 3
Extreme Uncoupling
ACI 0.13
MCI 2.01
PHENOTYPE 2
Severe Uncoupling
ACI 0.26
MCI 1.35
PHENOTYPE 1
Compensated / Coupled
ACI 0.18
MCI -0.16
ACI (Left Atrial Compliance)
MCI

Session Title:	**Multimodal Imaging Oral Abstracts**
Topic 1:	Multimodal Imaging
Publishing Title:	REST AND STRESS CARDIAC MRI USING T1 AND T2 MAPPING FOR ISCHEMIC AND INFARCTED MYOCARDIUM DETECTION IN CAD
Author Block:	Sergio M. Solis-Barquero, Veronica Aramendia-Vidaurreta, Ana Ezponda, Marta Vidorreta, Marina Pascual, Gorka Bastarrika, Maria A. Fernandez-Seara, Universidad de Navarra, Pamplona, Spain, Universidad de Costa Rica, San Jose, Costa Rica
Abstract Body:	**Background:** Cardiac MRI provides a non invasive diagnostic option for coronary artery disease (CAD). However, traditional images rely on gadolinium based contrast agents (GBCA), limiting their use in patients with renal dysfunction, where CAD is prevalent. T1 and T2 mapping could offer a non GBCA alternative. T1 has been used to detect myocardial edema following acute ischemia and characterize ischemic or infarcted tissue. T2 values rise with increased myocardial perfusion and are influenced by water content. This research aimed to evaluate native T1 and T2 mapping to characterize infarcted and ischemic myocardial segments quantitively, without using GBCA. **Methods:** The study was approved by the local Ethics Committee. All participants provided written informed consent. Adult patients with known or suspected CAD were prospectively recruited. Scans were performed using a 1.5T Aera MRI scanner. A fixed adenosine dose of 140 µg/kg/min was used. T1 mapping was conducted using a MOLLI 5(3)3 sequence. T2 mapping employed adiabatic preparations at 0ms, 25ms and 50ms. Motion-corrected maps of the mid-ventricular short-axis slice were generated by the sequence. Myocardial values were obtained from manually drawn ROI divided into the AHA segments. Mean T1, T2, and their adenosine reactivity values (%) were calculated. Myocardial segments were classified by radiologic assessment as: ischemic, infarcted, or non-CAD normal, and served as the reference standard. Statistical analyses were performed with a p-value <0.05 indicating significance. All tests were nonparametric. **Results:** Forty-seven (36 males, 64±14 years) were scanned and included in the study. Infarcted myocardial segments showed higher T1 values than

normal segments (p=0.02) in both rest and stress conditions. All rest and stress comparisons were statistically significant (p<0.001), except for T1 (p=0.08) and T2 values in infarct (p=0.1) and T2 values in ischemic myocardial segments (p=0.24). T2 reactivity was lower in ischemic than normal segments, approaching significance (p=0.06).
Conclusion: Multiparametric CMR with T1 and T2 mapping could offer a viable contrast free method to characterize the myocardial tissue in CAD patients.

Session Title:	**Multimodal Imaging Oral Abstracts**
Topic 1:	Multimodal Imaging
Publishing Title:	FEMORAL VENOUS DOPPLER TO IDENTIFY PROBABLE PULMONARY HYPERTENSION IN CHRONIC HEMODIALYSIS
Author Block:	Cesar Rodrigo Arce Sandoval, Eduardo Rios Argaiz, Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, Mexico City, Mexico

Abstract Body:

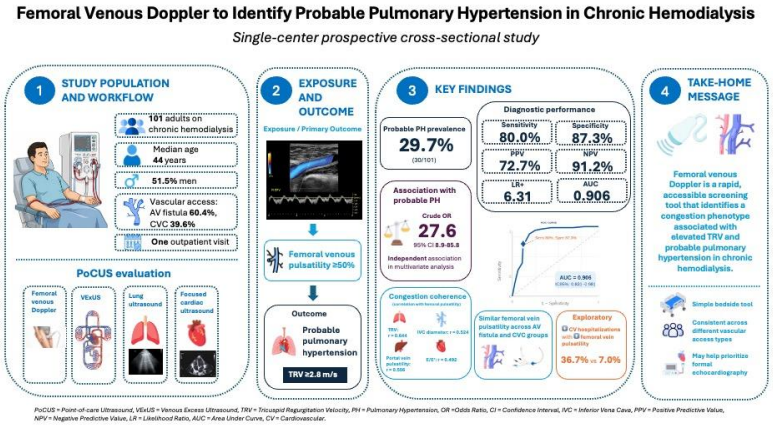
Background: Pulmonary hypertension is frequent in chronic hemodialysis, and echocardiography may be difficult to obtain serially. We evaluated whether femoral venous Doppler identifies probable pulmonary hypertension.

Methods: In this single-center prospective cross-sectional study, adults on chronic hemodialysis underwent point-of-care ultrasound during one outpatient visit, including femoral venous Doppler, venous congestion, lung, and focused cardiac ultrasound. The index test was femoral venous pulsatility ≥50%. The primary outcome was probable pulmonary hypertension, defined as tricuspid regurgitation velocity (TRV) ≥2.8 m/s.

Results: We included 101 patients; median age was 44 years, 51.5% men, 60.4% had an arteriovenous fistula, and 39.6% a hemodialysis catheter. Probable pulmonary hypertension was present in 29.7% (30/101). Femoral venous pulsatility ≥50% had sensitivity 80.0%, specificity 87.3%, positive predictive value 72.7%, negative predictive value 91.2%, positive likelihood ratio 6.31 and area under the curve (AUC) 0.906. The crude odds ratio was 27.6 (95% confidence interval 8.9-85.8). Femoral pulsatility correlated with TRV (r=0.644) and portal vein pulsatility (r=0.556).

Conclusion: Femoral venous Doppler is a rapid, accessible screening tool that identifies a venous congestion phenotype associated with elevated TRV and

probable pulmonary hypertension in chronic hemodialysis.



Session Title:	**Multimodal Imaging Oral Abstracts**
Topic 1:	Multimodal Imaging
Publishing Title:	MULTIMODAL IMAGING HIGH-RISK FEATURES MORTALITY IN ACUTE AORTIC DISSECTION AT A CARIBBEAN TERTIARY CENTER
Author Block:	Alberto Bermejo, Pamela Pina Santana, José Iribarren, Davide Pacini, Cesar J. Herrera, CEDIMAT Cardiovascular Center, Santo Domingo, Dominican Republic

Abstract Body:

Background: CTA and transthoracic echocardiogram (TTE) are essential for prompt identification of acute aortic dissection (AAD) and its complications, and are widespread available. This study aims to identify prognostic findings alongside the Stanford classification.

Methods: We retrospectively analyzed 67 patients with AAD treated at a tertiary cardiovascular center from 2016-2025. CTA and TTE findings studied include Stanford type, proximal extension, false-lumen branch origin, effusions, and aortic regurgitation (AR). Associations with in-hospital mortality were assessed using Fisher exact testing, relative risks, and exploratory risk-feature burden.

Results: In-hospital mortality was 25.4% (17/67). Mortality was higher when proximal and/or aortic root was involved (34.8% vs 8.3%; RR 4.19, p=0.020). Moderate/severe pericardial effusion (PE) was the strongest individual marker, with mortality in 6/6 patients (RR 5.55, p<0.001). Moderate/severe AR was also associated with mortality (42.9% vs 12.8%; RR 3.34, p=0.009). An image based high-risk burden score combining these findings identified a high-risk group: ≥2 features had 50.0% mortality vs 5.4% with 0-1 features (RR 9.25; p<0.001; AUC 0.80).

Conclusion: In this Latin American cohort, imaging features reflecting proximal disease severity identified patients at increased in-hospital mortality risk. An exploratory Multimodal imaging risk-feature burden score may support early

risk stratification beyond diagnosis alone.

Multimodal Imaging Features Associated With In-Hospital Mortality

Variable	Overall N=67	Deceased n=17	Alive n=50	RR for mortality (95% CI)	p value
Demographic characteristics					
Age, years	55.6±12.9	59.1±13.4	54.5±12.7	—	0.226
Male sex	60/67 (89.6)	14/17 (82.4)	46/50 (92)	0.54 (0.21–1.44)	0.358
Imaging features					
Proximal/ascending involvement	43/67 (64.2)	15/17 (88.2)	28/50 (56)	4.19 (1.04–16.78)	0.020
Malperfusion signs	13/67 (19.4)	5/17 (29.4)	8/50 (16)	1.73 (0.74–4.05)	0.289
≥1 branch from false lumen	44/67 (65.7)	14/17 (82.4)	30/50 (60)	2.44 (0.78–7.63)	0.140
Spiral dissection	11/67 (16.4)	5/17 (29.4)	6/50 (12)	2.12 (0.94–4.81)	0.130
Moderate/severe pericardial effusion	6/67 (9.0)	6/17 (35.3)	0/50 (0)	5.55 (3.25–9.47)	<0.001
Moderate/severe aortic regurgitation	28/67 (41.8)	12/17 (70.6)	16/50 (32)	3.34 (1.33–8.42)	0.009
Moderate/severe pleural effusion	2/67 (3.0)	1/17 (5.9)	1/50 (2)	2.03 (0.48–8.66)	0.446
High-risk burden score					
0–1 high-risk features	37/67 (55.2)	2/17 (11.8)	35/50 (70)	Reference	—
≥2 high-risk features	30/67 (44.8)	15/17 (88.2)	15/50 (30)	9.25 (2.29–37.31)	<0.001

Values are mean±SD or n/N (%). RR represents unadjusted relative risk of in-hospital mortality. The image-based high-risk burden score assigns 1 point each for Stanford type A dissection, moderate/severe pericardial effusion, and moderate/severe aortic regurgitation.

Session Title:	**Interventions and Ischemic Heart Diseases Oral Abstracts**
Topic 1:	Interventions and Ischemic Heart Diseases
Publishing Title:	SYSTEMIC ATHEROSCLEROTIC BURDEN IN ACUTE MYOCARDIAL INFARCTION: PREVALENCE AND DETERMINANTS OF REDUCED ANKLE BRACHIAL INDEX
Author Block:	Loreanna Y. Prada, Lempira A. Guevara, Carlos Mogollon, Victor D. Camejo, Daniel C. Castro, Vargas Hospital in Caracas, Caracas, Venezuela
Abstract Body:	**Background:** Peripheral artery disease coexists with acute myocardial infarction far more often than clinicians actually diagnose it. The problem is worse in resource-limited settings where prevalence data don't exist. We set out to measure how often abnormal ankle brachial index (ABI <0.90) appears in Venezuelan patients with acute coronary syndromes, and which factors predict it. **Methods:** We studied 261 consecutive patients admitted with AMI between January 2025 and April 2026. ABI was measured bilaterally within 48 hours of admission. Poisson regression estimated relative risks (RR) (with 95% confidence intervals) adjusted for age and sex. **Results:** Of 261 patients, 139 (53.3%) had ABI <0.90. The group was 62.5% male, median age 62 years (55-72), with 44% STEMI and 56% NSTEMI. Two factors were strongly tied to abnormal ABI. Dyslipidemia: RR 1.48 (95% CI 1.17-1.86, p=0.0012). Active smoking: 1.43 (95% CI 1.11-1.85, p=0.0058). Surprisingly, hypertension was associated with less abnormal ABI (RR 0.65, 95% CI 0.51-0.82, p=0.0004), possibly a survivor effect. Diabetes mellitus showed no independent association (RR 1.06, p=0.77). Age showed a clear dose-response: abnormal ABI was present in 37.8% of patients under 50 years, rising to 78.4% in those over 75 (p<0.0001). **Conclusion:** Over half the cohort had subclinical or clinical peripheral artery disease. Dyslipidemia and smoking were the strong, modifiable drivers. The unexpected inverse association with hypertension suggests this relationship is more nuanced than current thinking. Routine ABI screening in AMI populations

would identify many patients with generalized atherosclerotic disease who slip through standard evaluation.

Session Title: **Interventions and Ischemic Heart Diseases Oral Abstracts**

Topic 1: Interventions and Ischemic Heart Diseases

Publishing Title: MANAGEMENT AND OUTCOMES OF STEMI IN LATIN AMERICA: A SEX BASED ANALYSIS

Author Block: Ana M. Coeto, Edith Tonalli Adame-Avilés, Pamela Pina Santana, Hector Gonzalez-Pacheco, Dulce Renee Soto Gonzalez, Marlon Miguel Espaillat, Sara Divanne González, Miguel Delgado, SR, Carlos Garcia Lithgow, SR, Paula Polanco-Lou, Jose Antonio Cornejo-Guerra, Sebastian Pérez, Sonia Margarita Moreno-Díaz, Jose Alfaro, Ivan Paredes, Diego Rengifo, Diana Llumipanta, Cristian Eduardo Vimos Gagñay, Liliana Cardenas, JAIME SALGUEIRO BUSTILLOS, Alexandra Arias-Mendoza, Cesar J. Herrera, Instituto Nacional de Cardiologia Ignacio Chavez, MEXICO CITY, Mexico, CEDIMAT Cardiovascular Center, Santo Domingo, Dominican Republic

Abstract Body: **Background:** Sex-based differences in ST-segment elevation myocardial infarction (STEMI) remain poorly characterized in Latin America, and women (W) may experience disparities in management and prognosis
Methods: We analyzed data from a multicenter STEMI network (2020-2025) [Dominican Republic, Guatemala, Mexico, Ecuador and Bolivia]. Patients were stratified by sex, management and outcomes were compared. Multivariable logistic regression identified independent predictors of in-hospital death and a composite of death, cardiogenic shock, and acute heart failure
Results: 5766 consecutive pts with STEMI were studied (79% men, 21% W). Antithrombotic strategies were similar between sexes, however, despite receiving more reperfusion than men (80% vs. 76%; p= 0.009) W had higher rates of in-hospital death (11.6% vs. 7.1%; p<0.001). Independent predictors of mortality were cardiogenic shock on admission (OR 7.16, 4.81-10.46), Killip II-IV (OR 4.98, 3.37-7.59), and LVEF <40% (OR 2.93, 2.19-3.95). Female sex was not independently associated with in-hospital death (p=0.40), but independently predicted the composite outcome (OR 1.43, 1.17-1.73; p<0.001) even after adjusting for stent implantation
Conclusion: Women with STEMI in Latin America experience significantly worse clinical outcomes than men, including death. Female sex independently

predicts an adverse composite of cardiovascular events, highlighting critical persistent disparities that demand targeted healthcare interventions

Sex-based analysis of the management and outcomes of STEMI in LATAM

Variable	Overall N = 5,766	Men N = 4,561	Women N = 1,205	p
REPERFUSION STRATEGY				
Primary PCI	1,643 (30%)	1,291 (28%)	352 (29%)	0.26
Pharmaco-invasive	2,005 (37%)	1,600 (35%)	405 (34%)	0.36
Thrombolysis only	443 (8.2%)	359 (7.9%)	84 (7.0%)	0.33
No reperfusion	1,323 (24%)	1,081 (24%)	242 (20%)	**0.009**
Reason for no reperfusion: Late presentation	1,023 (92%)	850 (93%)	173 (88%)	0.024
ANGIOGRAPHIC FINDINGS				
Culprit: LAD	2,412 (49%)	1,958 (43%)	454 (38%)	0.01
Culprit: RCA	1,954 (39%)	1,568 (34%)	386 (32%)	0.13
Culprit: LCx	427 (8.6%)	340 (7.5%)	87 (7.2%)	0.83
Stent implantation	2,457 (83%)	1,952 (84%)	505 (79%)	**<0.001**
ANTITHROMBOTIC THERAPY				
Aspirin within 24h	5,572 (99%)	4,416 (99%)	1,156 (98%)	0.5
P2Y12 agent within 24h	5,513 (99%)	4,371 (99%)	1,142 (98%)	0.24
PARENTERAL ANTICOAGULATION				
Enoxaparin	3,248 (58%)	2,557 (57%)	691 (62%)	**<0.01**
UFH	2,095 (38%)	1,744 (39%)	351 (32%)	**<0.01**
INTERVENTIONS				
Thrombectomy	76 (1.5%)	58 (1.4%)	18 (1.8%)	0.5
IABP	272 (5.3%)	230 (5.6%)	42 (4.2%)	0.075
Mechanical circulatory support	12 (0.2%)	9 (0.2%)	3 (0.3%)	0.9
IN-HOSPITAL OUTCOMES				
Death	464 (8.0%)	324 (7.1%)	140 (11.6%)	**<0.001**
Acute heart failure	341 (5.9%)	228 (5.0%)	113 (9.4%)	**<0.001**
Cardiogenic shock	312 (5.4%)	214 (4.7%)	98 (8.1%)	**<0.001**
AKI	486 (8.4%)	351 (7.7%)	135 (11.2%)	**<0.001**
Major arrhythmias	500 (8.7%)	388 (8.5%)	112 (9.3%)	0.46
Major bleeding	152 (2.6%)	123 (2.7%)	29 (2.4%)	0.67
Reinfarction / stent thrombosis	35 (0.6%)	23 (0.5%)	12 (1.0%)	0.091
Stroke	71 (1.2%)	55 (1.2%)	16 (1.3%)	0.78
Composite outcome (death + CS + AHF)	**846 (14.7%)**	**593 (13.0%)**	**253 (21.0%)**	**<0.001**

Men Women p significant <0.05

Data expressed as N (%). P-values from chi-square test. AHF = acute heart failure; AKI = acute kidney injury; IABP = intra-aortic balloon pump; LAD = left anterior descending artery; LCx = left circumflex artery; RCA = right coronary artery; UFH = unfractionated heparin; CS = Cardiogenic shock

Session Title:	**Interventions and Ischemic Heart Diseases Oral Abstracts**
Topic 1:	Interventions and Ischemic Heart Diseases
Publishing Title:	CHARACTERIZATION AND CLINICAL OUTCOMES IN PATIENTS WITH ACUTE CATEGORY C OR HIGHER PULMONARY THROMBOEMBOLISM MANAGED BY A MULTIDISCIPLINARY PULMONARY EMBOLISM RESPONSE TEAM (PERT): EXPERIENCE IN A HIGH COMPLEXITY CENTER IN MEDELLIN COLOMBIA
Author Block:	Juanita Velasquez-Ospina, Juana Valentina Ospina-Restrepo, Pedro Miguel Hernandez-Aramburo, Natalia Mejía-Zapata, Julián Rondón-Carvajal, Simon Villa-Pérez, Jose Gabriel Lotero, Jorge Mario Sastoque, Alejandro Jaramillo-Yepes, Jaime Alberto Gomez-Rosero, Maria Clara Gaviria-Aguilar, Clínica Las Vegas, Medellín, Colombia, Universidad CES
Abstract Body:	**Background:** Acute pulmonary embolism (PE) management requires specialized risk stratification. Multidisciplinary Pulmonary Embolism Response Team (PERT) groups optimize care for high-risk patients (AHA/ACC 2026 categories C and D) through synchronized decision-making, reducing mortality, enhancing safety, and generating local real-world data in Latin American populations **Methods:** A retrospective observational cross-sectional study was conducted on 38 adult patients with acute PE category C or higher evaluated by a PERT between 2024 and 2026 at a high-complexity center. We analyzed clinical characteristics and hemodynamic outcomes, focusing on the subset selected for catheter-directed therapy (CDT): Catheter-guided thrombolysis or mechanical suction thrombectomy **Results:** A total of 38 patients were evaluated, whose clinical and demographic characteristics are described in Table 1. Of these, 16 (42 %) underwent CDT (56.25% catheter-directed thrombolysis and 43.75% mechanical thrombectomy). In this high-risk cohort, 100% were classified as Pulmonary Embolism Severity Index (PESI) class III-V, and 80% showed right ventricular dysfunction on imaging. In the CDT group, median pulmonary artery pressure significantly decreased from 38.3 to 29.3mmHg. No major bleeding occurred **Conclusion:** The PERT model optimizes clinical decision-making for high-risk PE. Ongoing recruitment will provide vital local evidence on the impact of CDT

on mortality and clinical outcomes in Colombia

***Table 1.** Baseline Characteristics of Patients with Intermediate-High and High Risk Pulmonary Embolism*

Variable[1]	Total (n = 38)[1]	Medical Management (n = 22)[1]	Catheter-Based (n = 16)[1]	p-value[1]
Age (years)	67.7 ± 15.5	73.8 ± 11.7	59.4 ± 16.5	**0.008**
Sex				>0.999
Female	21 (55.3%)	12 (54.5%)	9 (56.3%)	
Male	17 (44.7%)	10 (45.5%)	7 (43.8%)	
Heart Rate (bpm)	98.6 ± 24.2	85.8 ± 17.8	116.1 ± 20.9	**<0.001**
Systolic BP (mmHg)	117.4 ± 24.6	115.3 ± 24.0	120.2 ± 25.8	0.824
Diastolic BP (mmHg)	74.7 ± 17.4	71.5 ± 19.7	79.1 ± 12.9	0.315
SpO_2 (%)	88.9 ± 6.2	90.1 ± 5.1	87.2 ± 7.3	0.150
Respiratory Rate (rpm)	23.3 ± 7.2	23.0 ± 8.3	23.6 ± 5.5	0.432
Syncope	9 (23.7%)	5 (22.7%)	4 (25.0%)	>0.999
NT-proBNP (pg/mL)	3,815.4 ± 5,044.8	3,900.8 ± 6,176.6	3,680.2 ± 2,628.6	0.220
Missing data	7	3	4	
Troponin				**0.007**
Normal	16 (47.1%)	13 (68.4%)	3 (20.0%)	
Elevated	18 (52.9%)	6 (31.6%)	12 (80.0%)	
Missing data	4	3	1	
AHA Classification				**0.005**
C1	2 (5.3%)	2 (9.1%)	0 (0.0%)	
C1R	5 (13.2%)	5 (22.7%)	0 (0.0%)	
C2R	5 (13.2%)	5 (22.7%)	0 (0.0%)	
C3	1 (2.6%)	1 (4.5%)	0 (0.0%)	
C3R	20 (52.6%)	8 (36.4%)	12 (75.0%)	
D1R	1 (2.6%)	0 (0.0%)	1 (6.3%)	
D2R	1 (2.6%)	0 (0.0%)	1 (6.3%)	
E1R	1 (2.6%)	0 (0.0%)	1 (6.3%)	
E2R	2 (5.3%)	1 (4.5%)	1 (6.3%)	
RV/LV Ratio				**<0.001**
Normal	20 (54.1%)	17 (77.3%)	3 (20.0%)	
Elevated	17 (45.9%)	5 (22.7%)	12 (80.0%)	
Missing data	1	0	1	
Catheter Type				>0.999
Fontaine	9 (56.3%)	0 (NA%)	9 (56.3%)	
Inari	4 (25.0%)	0 (NA%)	4 (25.0%)	
Penumbra	3 (18.8%)	0 (NA%)	3 (18.8%)	
Missing data	22	22	0	
Pre-procedure mPAP (mmHg)	38.3 ± 5.1	NA ± NA	38.3 ± 5.1	
Missing data	23	22	1	
Post-procedure mPAP (mmHg)	29.3 ± 8.2	NA ± NA	29.3 ± 8.2	
Missing data	27	22	5	

[1]BP: blood pressure; SpO_2: peripheral oxygen saturation; NT-proBNP: N-terminal pro-B-type natriuretic peptide; RV/LV: right ventricle to left ventricle ratio; mPAP: mean pulmonary arterial pressure.
Continuous variables expressed as mean ± standard deviation.
Categorical variables expressed as n (%).
Wilcoxon rank-sum test for continuous variables; Fisher's exact test for categorical variables.

Session Title:	**Interventions and Ischemic Heart Diseases Oral Abstracts**
Topic 1:	Interventions and Ischemic Heart Diseases
Publishing Title:	BUILDING A TAVR PROGRAM IN AN LMIC: TEN-YEAR SINGLE-CENTER EXPERIENCE FROM THE DOMINICAN REPUBLIC
Author Block:	Miguel Delgado, SR, Marlon Miguel Espaillat, Pamela Pina Santana, Samuel Gabino Guzman, Ruth Ely Guzman Vargas, Ricardo Blanchery, Carlos M. Martinez, Carlos Garcia Lithgow, SR, CEDIMAT Cardiovascular Center, Santo Domingo, Dominican Republic
Abstract Body:	**Background:** TAVR access remains limited in many low- and middle-income countries (LMICs), where cost, referral patterns, and infrastructure constrain program growth. We describe implementation of a low-volume TAVR program at a tertiary center in the Dominican Republic. **Methods:** We retrospectively studied consecutive patients undergoing TAVR from 2016-2026. Clinical, echo, procedural, and follow-up data were abstracted. Outcomes were compared pre-/post-TAVR and by era: 2016-2021 vs 2022-2026. **Results:** Forty-five patients were included; 26/45 (57.8%) were men, and mean age was 78.4±10.1 years. Transfemoral access was used in 43/45 (95.6%), Perclose closure in 42/45 (93.3%), and procedural success was 45/45 (100%). Mean aortic gradient decreased from 52.7±23.5 to 9.2±5.5 mmHg (n=42; Δ -43.6±22.9; p<0.001). Among 40 with paired NYHA data, 32 improved and none worsened; 33/40 (82.5%) were NYHA I at follow-up. Early events occurred in 18/45 (40.0%), mainly AV block (8/45, 17.8%). The late era had younger patients (75.1±8.4 vs 89.6±6.7 years; p<0.001), a descriptively higher transfemoral use, higher Perclose use and numerically fewer early recorded events. **Conclusion:** Despite low annual volume, TAVR implementation in this LMIC setting was feasible and effective, with procedural success, hemodynamic improvement, and functional recovery; supporting the scalability of structured

TAVR programs in resource-constrained settings.

Baseline, Procedural, and Outcome Characteristics by Implant Era

Characteristic	Overall (N=45)	Early era 2016–2021(n=10)	Late era 2022–2026 (n=35)	p-value
Demographics				
Age, years	78.4±10.1	89.6±6.7	75.1±8.4	<0.001
Male sex	26/45 (57.8)	8/10 (80)	18/35 (51.4)	0.154
Comorbidities				
Hypertension	37/45 (82.2)	8/10 (80)	29/35 (82.9)	1.000
Diabetes mellitus	16/45 (35.6)	5/10 (50)	11/35 (31.4)	0.455
Dyslipidemia	17/45 (37.8)	3/10 (30)	14/35 (40)	0.719
Chronic kidney disease	2/45 (4.4)	1/10 (10)	1/35 (2.9)	0.399
Peripheral artery disease	5/45 (11.1)	0/10 (0)	5/35 (14.3)	0.571
Prior CABG	4/45 (8.9)	2/10 (20)	2/35 (5.7)	0.209
Pre-existing pacemaker	5/39 (12.8)	1/9 (11.1)	4/30 (13.3)	1.000
Baseline clinical status				
NYHA II–IV at baseline	38/45 (84.4)	7/10 (70)	31/35 (88.6)	0.172
Heart failure symptoms	36/45 (80.0)	7/10 (70)	29/35 (82.9)	0.393
Angina symptoms	13/45 (28.9)	3/10 (30)	10/35 (28.6)	1.000
Syncope symptoms	7/45 (15.6)	3/10 (30)	4/35 (11.4)	0.172
Mean aortic gradient, mmHg	53.2±23.3	52.7±18.5	53.4±24.8	0.929
LVEF, %	56.8±14.9	53.4±18.1	57.8±13.9	0.490
Moderate/severe aortic regurgitation	5/45 (11.1)	0/10 (0.0)	5/35 (14.3)	0.571
Procedural characteristics				
Transfemoral access	43/45 (95.6)	9/10 (90)	34/35 (97.1)	0.399
Self-expanding valve	26/45 (57.8)	10/10 (100)	16/35 (45.7)	0.002
Balloon-expandable valve	19/45 (42.2)	0/10 (0.0)	19/35 (54.3)	0.002
Perclose closure	42/45 (93.3)	8/10 (80)	34/35 (97.1)	0.119
General anesthesia	45/45 (100.0)	10/10 (100)	35/35 (100)	—
Procedural success	45/45 (100.0)	10/10 (100)	35/35 (100)	—
Early and follow-up outcomes				
Any event <24 h*	18/45 (40.0)	5/10 (50)	13/35 (37.1)	0.489
AV block <24 h	8/45 (17.8)	2/10 (20)	6/35 (17.1)	1.000
Vascular/access event <24 h**	4/45 (8.9)	2/10 (20.0)	2/35 (5.7)	0.209
Paired gradient change, mmHg	−43.6±22.9	−40.1±12.4	−44.5±25.1	0.474
NYHA improved at follow-up	32/40 (80.0)	7/10 (70)	25/30 (83.3)	0.388
Follow-up NYHA class I	33/40 (82.5)	9/10 (90)	24/30 (80)	0.656

Values are mean±SD or n/N (%). Continuous variables were compared using Welch's t test; categorical variables were compared using Fisher's exact test *Events included: AV block, vascular/access events, arrhythmias, acute kidney injury, decompensated heart failure, cardiac tamponade and cardiac arrest. **Vascular/access events were right iliofemoral dissection, right iliofemoral occlusion and puncture site bleeding.

Session Title:	**Friday Morning Poster Session**
Topic 1:	Cardiac Arrhythmias
Publishing Title:	A SMARTWATCH ALERT UNVEILS A GIANT LEFT ATRIAL MYXOMA, WHEN ARTIFICIAL INTELLIGENCE DETECTS MORE THAN ARRHYTHMIA
Author Block:	Marco Antonio Rubio Bueno, Araiza Garaygordobil Diego, Estanislao Antonio Calixto, National Institute of Cardiology Ignacio Chávez, Mexico City, Mexico

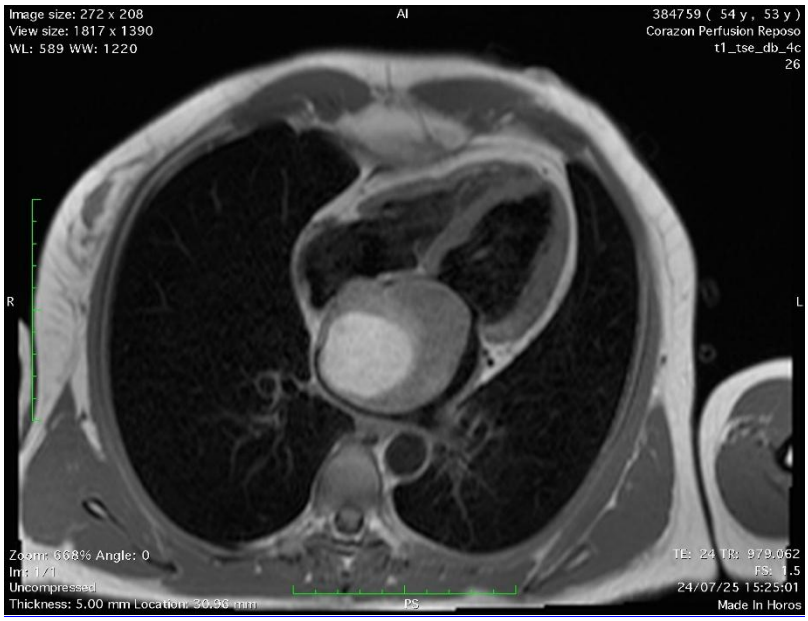
Abstract Body:

Background: Left atrial masses carry significant risk of embolization and obstruction. Artificial intelligence (AI)-enabled wearable devices can detect arrhythmias outside clinical settings and trigger early evaluation.

Case: A 53-year-old woman with hypothyroidism presented with progressive palpitations and dyspnea. She reported recurrent nocturnal smartwatch alerts for irregular rhythm suggestive of atrial fibrillation (AF), prompting evaluation. On exam, a tumor plop was noted. NT-proBNP was elevated. Transthoracic echocardiography revealed a large left atrial mass causing moderate mitral stenosis and mild regurgitation, with severe atrial enlargement. Cardiac magnetic resonance confirmed a 64×53 mm heterogeneous mass attached to the interatrial septum, suggestive of myxoma.

Decision-making: Given AF, obstructive physiology, and embolic risk, urgent surgical resection was performed. A large gelatinous mass arising from the interatrial septum was excised without complications. This case emphasizes evaluation of secondary causes of AF and the value of wearable alerts in accelerating diagnosis.

Conclusion: AI-enabled wearable devices extend arrhythmia detection beyond clinical environments and act as early warning systems. In this case, a smartwatch alert led to diagnosis and treatment of a potentially fatal cardiac tumor. Integration of wearable data with clinical assessment and imaging may enable earlier detection of structural heart disease and timely interventions.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Session Title:	**Friday Morning Poster Session**
Topic 1:	Cardiac Arrhythmias
Publishing Title:	EARLY EXPERIENCE WITH PULSED-FIELD ABLATION FOR ATRIAL FIBRILLATION IN A LOW- AND MIDDLE-INCOME COUNTRY: FEASIBILITY, SAFETY, AND RAPID PROCEDURAL OPTIMIZATION
Author Block:	Felix R. Almanzar, JR, Jose Valdez, Rafael Cortorreal, Elaine E. Nunez Ayala, Fernando Vidal, Pamela Pina Santana, Cesar J. Herrera, CEDIMAT, Santo Domingo, Dominican Republic, Instituto Tecnologico de Santo Domingo, Dominican Republic

Abstract Body:

Background: Pulsed-field ablation (PFA) with the Farapulse system is a novel nonthermal technique with favorable results in high-income countries, but evidence from LMICs is limited and may be influenced by resource and patient factors.

Methods: We analyzed 21 patients undergoing PFA for paroxysmal or persistent AF in the Dominican Republic. Endpoints included fluoroscopy and dwell time and applications per vein. Acute PV isolation success and periprocedural safety were assessed.

Results: Twenty-one patients underwent PFA, including 15 (71%) with paroxysmal AF and 6 (29%) with persistent AF. Procedural efficiency improved markedly after the first 10 cases, with fluoroscopy time decreasing from 32.4 to 16.3 minutes and left atrial dwell time from 33.9 to 22.5 minutes. Posterior wall ablation was performed in 4 patients with persistent AF. Acute PV isolation was achieved in all cases without major complications. One transient asystolic event resolved with pacing, and no phrenic nerve injury or atrioventricular conduction disturbances occurred. Most patients were discharged the same day. At median follow-up of 16.7 weeks, one AF recurrence occurred within the blanking period, with no late recurrences observed.

Conclusion: In this initial LMIC experience, PFA demonstrated high acute success, a favorable safety profile, and rapid procedural optimization. Outcomes were consistent with prior high-income cohorts, supporting feasible

PFA implementation across diverse healthcare settings.

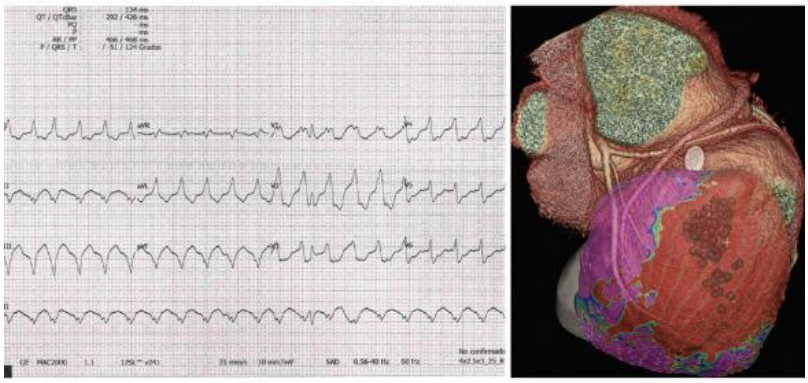
Table. Baseline demographics and procedural characteristics of patients undergoing pulsed-field ablation (n = 21)

Sex (n, %)	Male: 12 (57%) Female: 9 (43%)
Age (yrs)	55 ± 11
Left atrial volume index (mL/m²)	34.1 ± 8.4
AF type (n, %)	Paroxysmal: 15 (71%) Persistent: 6 (29%)
Mean ablation time (applications only, min)	2.3 ± 1.1
Mean left atrial dwell time (min)	29 ± 8
Mean fluoroscopy time (min)	24 ± 10
Pulmonary vein applications (mean ± SD, %)	LIPV: 8.7 (22%) LSPV: 11.6 (29%) RIPV: 8.3 (21%) RSPV: 8.4 (21%)
Additional ablation	Posterior wall: 4 patients (19%); mean 18.5 applications
Total applications per patient	46 ± 7 (range 38–64)

Abbreviations: AF = atrial fibrillation; LIPV = left inferior pulmonary vein; LSPV = left superior pulmonary vein; RIPV = right inferior pulmonary vein; RSPV = right superior pulmonary vein; PV = pulmonary vein.

Session Title:	**Friday Morning Poster Session**
Topic 1:	Cardiac Arrhythmias
Publishing Title:	SUCCESSFUL STEREOTACTIC ARRHYTHMIA RADIOABLATION FOR REFRACTORY VENTRICULAR TACHYCARDIA IN A PATIENT WITH CHAGAS CARDIOMYOPATHY
Author Block:	Nadia María Sabbag chalela, Juan Cabrera, Alvaro Muñoz, Jose Restrepo, Fundación Santa Fé de Bogotá, Bogotá, Colombia
Abstract Body:	**Background:** Chagas cardiomyopathy (CCM) is a severe cause of cardiopathy in Latin America, with incident sudden death and arrhythmias. Sereotactic arrhythmia radioablation (STAR) is useful in refractory ventricular tachycardia (RVT). **Case:** 65 year old female with a history of CCM with severe compromise of eyection fraction in need of cardiac resynchronization therapy, RVT, and severe mitral insufficiency consults due to chest pain, palpitations and dyspnea. She presents in shock, EKG evidenced ventricular tachycardia, electrical cardioversion resulted in pacemaker rhythm and resolution of instability. In the past she required endo and epicardial ablation with recurrence and subsequent bilateral sympathectomy. Pericardial adherences of ablations and bleeding needing a pericardial window impeded percutaneous modulation. Epicardial ablation in surgery wasn´t feasible because of high surgical risk, cardiac transplant wasn´t possible because of immunization. Successful STAR was done considering the arrhythmia appeared to have a mesocardial component that hadn´t been controlled with conventional ablation, as it doesn´t create lesions that deep. **Decision-making:** STAR is emerging in patients with RVT, if the main treatment fails with antiarrhythmics, at least one percutaneous ablation (or contraindicated), or cardiac structural compromise with high risk. **Conclusion:** Though its use is still limited and investigational in specialized

centers, STAR has promising results in RVT.



Session Title:	**Friday Morning Poster Session**
Topic 1:	Cardiac Arrhythmias
Publishing Title:	AMIODARONE UNMASKED: A REVERSIBLE CAUSE OF COLA-COLORED URINE
Author Block:	Julian Jose Rubio Gil de Lamadrid, Diego Ortiz, Julio D. Vega-Torres, Rafael J. Cummings-Lopez, Nicole M. Vazquez-Morales, Francisco J. Cordova, Veterans Affairs Caribbean Healthcare System, San Juan, PR, USA
Abstract Body:	**Background:** Dark urine after rhythm-control therapy is often considered benign, but hemoglobinuria with a negative DAT (Direct Antiglobulin Test) may indicate drug-related hemolysis. Amiodarone is widely used for atrial arrhythmias, yet acute hematologic toxicity is rarely recognized. **Case:** A 40-year-old man with paroxysmal atrial fibrillation presented with atrial flutter. Rate-control attempts failed, leading to intravenous amiodarone loading. After conversion to sinus rhythm, he developed dark cola-colored urine. Urinalysis showed heme without significant RBCs. Labs indicated intravascular hemolysis and a 3 g/dL hemoglobin drop. DAT was negative. Renal function was preserved, and no schistocytes were present. No infection or oxidant exposure was found. Discontinuation of amiodarone led to rapid resolution of pigmenturia and improvement in hemolysis. He later underwent successful ablation and was discharged. **Decision-making:** The presentation suggested acute, amiodarone-induced intravascular hemolysis. However, abrupt onset, preserved counts, lack of thrombosis, and quick recovery after withdrawal argued against PNH (Paroxysmal Nocturnal Hemoglobinuria). Findings supported a reversible, drug-mediated mechanism. **Conclusion:** Amiodarone can rarely cause acute, DAT-negative intravascular hemolysis mimicking PNH. Early recognition and discontinuation enable rapid recovery and prevent unnecessary treatment.

Session Title:	**Friday Morning Poster Session**
Topic 1:	Cardiac Arrhythmias
Publishing Title:	SUDDEN CARDIAC DEATH IN MARATHON RUNNERS AUTOPSY CASE REPORTS
Author Block:	John Buitrago, Jose Polo, Pastrana Samuel, Jairo Montes, Laura Marcela Niño Rojas, Jorge Castro, Universidad FUCS, Bogota, Colombia

Abstract Body:

Background: Sudden cardiac death (SCD) during endurance sports is a rare but devastating event. Underlyingcardiovascular disease is often undetected prior to the fatal event, highlighting the need for pre-participation screening. Autopsy studies provide critical insight into the pathological substrate ofexercise-related SCD.

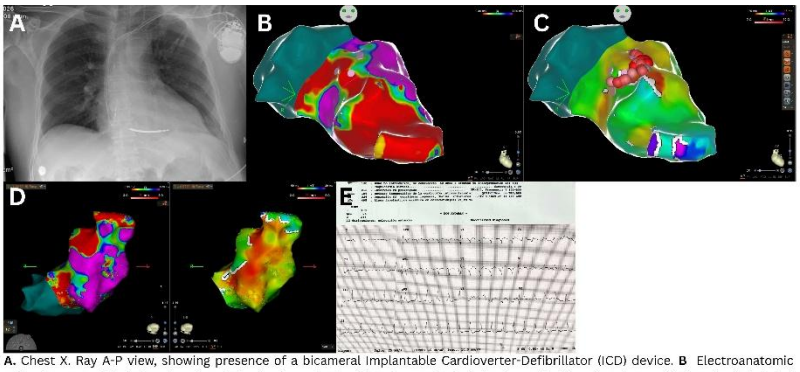
Case: Two men aged 45 and 42 years, without known medical history, collapsed during half-marathonraces in Bogotá, Colombia. One collapsed 200 meters from the finish line and the other atkilometer 12. Both received immediate resuscitation but died shortly after hospital transfer. External examination revealed no signs of trauma. Anthropometric data: Case 1: 85 kg, 1.77 m; Case 2: 75 kg, 1.71 m. Internal examination focused on the cardiovascular system. Case 1: cardiomegaly (485 g), hypertensive heart disease, macroscopic findings consistent with acute myocardial infarction, and aortic medial myxoid degeneration (AMMD). Case 2: hypertensive heart disease, severe AMMD, nephroarteriosclerosis, and multi-organ congestion. Both cases showed pulmonary edema and anthracosis. Final anatomopathological diagnoses included fatal cardiac arrhythmia as the immediate cause of death in both cases.

Decision-making: These cases illustrate how undiagnosed hypertensive heart disease and vascular degenerationcan remain clinically silent until triggered by intense physical exertion. AMMD, found in both cases,represents a structural vascular vulnerability that may predispose to aortic complications andarrhythmias. The absence of prior symptoms underscores the limitations of history-basedscreening and supports objective cardiovascular evaluation before high-demand athleticparticipation.

Conclusion: SCD in apparently healthy runners may be associated with

undiagnosed hypertensivecardiovascular disease and degenerative vascular pathology. These cases emphasize the value ofpre-participation cardiovascular screening and forensic autopsy in elucidating the etiology ofexercise-related sudden death.

Session Title:	**Friday Morning Poster Session**
Topic 1:	Cardiac Arrhythmias
Publishing Title:	FROM ISCHEMIC SCAR TO ELECTRICAL STORM: MANAGEMENT OF REFRACTORY REENTRANT VENTRICULAR TACHYCARDIA OF THE MID ANTERIOR SEGMENT
Author Block:	Ana M. Coeto, Emilio Bautista Torres, Carmen Alicia Sánchez Contreras, Rodrigo Gopar-Nieto, Alexandra Arias-Mendoza, Santiago Nava Townsend, Instituto Nacional de Cardiología "Ignacio Chávez", Ciudad de México, Mexico
Abstract Body:	**Background:** Electrical storm secondary to ischemic scar-related ventricular tachycardia (VT) remains a major therapeutic challenge. **Methods:** A 69-year-old man with prior anterior myocardial infarction treated with a left anterior descending (LAD) stent presented with heart failure symptoms and palpitations. Admission ECG showed sustained monomorphic VT with AV dissociation. Echocardiography revealed LVEF 36% with extensive regional wall motion abnormalities. Initial treatment included intravenous diuretics, amiodarone, and lidocaine infusion. Coronary angiography showed LAD restenosis and significant right coronary artery disease, treated with PCI and drug-eluting stents. Despite revascularization, he developed refractory electrical storm with recurrent sustained VT and R-on-T-induced Torsade de Pointes requiring multiple cardioversions. **Results:** CARTO-guided electrophysiological study with substrate-based radiofrequency ablation using high-density voltage mapping identified extensive anteroseptal scar tissue and achieved significant substrate modification. However, recurrent VT persisted despite antiarrhythmic therapy. Clinical stabilization was ultimately achieved with bilateral stellate ganglion block, transition to sotalol, and secondary-prevention ICD implantation. **Conclusion:** This case highlights the complexity of managing ischemic scar-related electrical storm. Even after complete revascularization and substrate-guided ablation.



A. Chest X. Ray A-P view, showing presence of a bicameral Implantable Cardioverter-Defibrillator (ICD) device. **B** Electroanatomic activation map. **B** Anterior view showing extensive anterior-lateral scar substrate (red areas) with a clear linear ablation strategy being mapped. **C** Local Activation Time (LAT) map showing ablation points delivered. **D**: Post-ablation assesment of the left ventricle viewed from the inferior aspect showing purple areas that represent healthy tissue. **E:** 12 lead electrocardiogram with ventricular tachycardia heart rate of 136 bpm. Findings included atrioventricular (AV) dissociation, with an origin suggestive of the basal anteroseptal wall of the left ventricle.

Session Title:	**Friday Morning Poster Session**
Topic 1:	Cardiovascular Disease Prevention
Publishing Title:	BETWEEN TRADITION AND TRANSITION: CARDIOVASCULAR HEALTH RISKS IN AGING IMMIGRANT POPULATIONS
Author Block:	Christopher Emmanuel Fontanez, Alena Gonzalez, Nischal Sharma, Vishwajit Tuchscherer, Marcos Fernandez, Ivan Figueroa Baez, University of Alabama at BIrminham, Birmingham, AL, USA
Abstract Body:	**Background:** Global migration has accelerated cultural and dietary transitions that may increase cardiovascular disease (CVD) risk among aging immigrant populations. Older adults may be particularly vulnerable to cardiometabolic changes associated with dietary acculturation. We evaluated the impact of post-migration dietary shifts on obesity and cardiometabolic outcomes in first-generation immigrants aged ≥50 years and identified protective sociocultural factors. **Methods:** We conducted a structured narrative review of PubMed-indexed studies published between January 2020 and March 2025 using the terms “elderly immigrants,” “dietary acculturation,” “migration,” and “cardiovascular health.” Studies were included if they assessed post-migration changes in diet, obesity, or cardiometabolic risk in first-generation immigrants aged ≥50 years. Data were synthesized across four domains: diet quality and obesity trends, micronutrient deficiencies, behavioral transitions, and protective sociocultural factors. **Results:** Twenty studies, including immigrants from South Asia, Latin America, the Middle East, Africa, and East Asia, were analyzed. Within 5-10 years of migration, 68-85% demonstrated dietary shifts toward Westernized patterns. These changes were associated with 38% higher odds of cardiometabolic risk (OR 1.38; 95% CI 1.18-1.60; $p<0.001$) and a 12.6% decline in diet quality. Obesity among Chinese immigrants increased from 21.2% to 33.9% post-migration. Among rural-to-urban Indian migrants, 65% of adiposity gain was attributed to changes in diet and activity. Over 70% of immigrants in Northern European cohorts exhibited vitamin D deficiency. Strong cultural retention and social cohesion were associated with 24% lower odds of CVD (OR 0.76; 95% CI

0.61-0.94).
Conclusion: Dietary acculturation is consistently associated with rising obesity and cardiometabolic risk among aging immigrants, while preservation of traditional practices appears protective. Culturally tailored cardiovascular prevention strategies are needed to address this growing at risk population.

Session Title:	**Friday Morning Poster Session**
Topic 1:	Cardiovascular Disease Prevention
Publishing Title:	WHEN THE HEART SAYS NO: MYOCARDITIS FROM DURVALUMAB AND TREMELIMUMAB
Author Block:	Victor Daniel Vivas Lopez, Giovanni Rivera Colon, Angelica Quinones, Francisco J. Cordova, Veterans Affairs Caribbean Healthcare System, San Juan, PR, USA
Abstract Body:	**Background:** Immune Checkpoint Inhibitors (ICI) are a group of drugs that enhance antitumor immunity. Although rare, it causes immune related adverse events (irAEs), such as myocarditis (1.1%), carrying a 25-50% mortality in patients. **Case:** An 83-year-old man with arterial hypertension and hepatocellular carcinoma receiving durvalumab and tremelimumab, presented to the ED with generalized weakness four weeks after the first infusion. He denied chest pain, dyspnea or palpitations. Initial ECG showed sinus rhythm, frequent APCs, no ischemic changes. Hs-cTnT were elevated at 701 ng/L, then 679 ng/L and 671 ng/L at 1 and 3 hours, CPK at 9627 U/L, AST 729 U/L, ALT 496 U/L, ESR 31 mm/1Hr, CRP 53.7 mg/L. He was admitted to CVICU, where ICI was stopped; IV methylprednisolone was given for 3 days, then oral corticosteroids started. Echocardiogram showed EF 50-55%, strain with apical sparing pattern, and global hypokinesis. Coronary Angiography showed a 70% tubular lesion of the distal LAD that did not explain his clinical status. The final diagnosis was ICI related definite myocarditis with multisystem irAEs. Myocardial injury continued despite therapy, and hospitalization was complicated with COVID-19, PE, and acute respiratory failure with MICU transfer. He died under hospice care. **Decision-making:** High-dose corticosteroids are first-line for ICI related definite myocarditis. Advanced imaging and biopsy aid confirmation but may be limited in unstable patients. Coronary disease was excluded as culprit, supporting a non-ischemic mechanism. **Conclusion:** This case illustrates fatal multisystem irAEs from combined ICI therapy, including myocarditis without classically ischemic findings. Early

recognition, prompt ICI discontinuation, and immunosuppression are critical. Clinicians should maintain high suspicion for cardiac involvement when laboratory abnormalities suggest multiorgan injury. Interdisciplinary collaboration is essential to optimize outcomes as ICI use expands.

Session Title:	**Friday Morning Poster Session**
Topic 1:	Cardiovascular Disease Prevention
Publishing Title:	PSORIATIC ARTHRITIS IDENTIFIES A HIGH-RISK CARDIOMETABOLIC PHENOTYPE IN PSORIASIS: IMPLICATIONS FOR CARDIOVASCULAR RISK STRATIFICATION
Author Block:	Alvaro Taveras, Vianka De La Cruz Gómez, Steffanie Camilo Tertulien, Perla Garcia, Santiago García García, Licurgo Jacob Cruz, Rosa Tertulien, Hospital Metropolitano de Santiago, Santiago de los Caballeros, CT, USA, UConn Health, Farmington, CT, USA
Abstract Body:	**Background:** Psoriasis is increasingly recognized as a systemic inflammatory disease associated with elevated cardiovascular risk; however, data from the Caribbean and Latin America remain limited. Whether psoriatic arthritis (PsA) identifies a subgroup with heightened cardiometabolic burden is not well defined. **Methods:** In this retrospective cross-sectional study, 548 patients with dermatologist-confirmed psoriasis from a tertiary care center in the Dominican Republic were analyzed. Patients were stratified by the presence of PsA. Cardiometabolic risk factors—including hypertension (HTN), type 2 diabetes mellitus (T2DM), and obesity—were compared between groups. Multivariable logistic regression was used to assess independent associations between PsA and these risk factors, adjusting for age and sex. The cumulative burden of risk factors was evaluated as a proxy for elevated risk of major adverse cardiovascular events (MACE). **Results:** PsA was present in 158 patients (28.8%) and identified a subgroup with significantly greater cardiometabolic risk. Compared with psoriasis alone, PsA was associated with higher prevalence of HTN (62.4% vs 41.8%, p=0.014), T2DM (38.7% vs 22.5%, p=0.038), and obesity (55.1% vs 33.6%, p=0.009). After adjustment, PsA remained independently associated with HTN (OR 2.1; 95% CI 1.4-3.2; p<0.001), obesity (OR 1.9; 95% CI 1.3-2.8; p=0.001), and T2DM (OR 1.7; 95% CI 1.1-2.6; p=0.015). Notably, PsA patients demonstrated a higher clustering of cardiometabolic risk factors, consistent with an elevated estimated risk of MACE.

Conclusion: Psoriatic arthritis identifies a distinct high-risk cardiometabolic phenotype among patients with psoriasis and may serve as a clinically accessible marker for cardiovascular risk stratification. These findings support the integration of routine cardiovascular screening and preventive strategies in patients with PsA, emphasizing its relevance within preventive cardiology and population health frameworks.

Session Title:	**Friday Morning Poster Session**
Topic 1:	Cardiovascular Disease Prevention
Publishing Title:	NAIL PSORIASIS IDENTIFIES A HIGH-RISK CARDIAC AND VASCULAR PHENOTYPE IN PSORIATIC ARTHRITIS: ECHOCARDIOGRAPHIC AND CAROTID ULTRASOUND INSIGHTS FROM A LATIN AMERICAN COHORT
Author Block:	Alvaro Taveras, Steffanie Camilo Tertulien, Vianka De La Cruz Gómez, Carmen García-Valdez, Ivan Rafael Figueroa Baez, Licurgo Jacob Cruz, Santiago García García, Luis Trinidad, Rosa Tertulien, Hospital Metropolitano de Santiago, Santiago de los Caballeros, Dominican Republic, UConn Health, Farmington, CT, USA
Abstract Body:	**Background:** Psoriatic arthritis (PsA) is associated with increased cardiovascular risk driven by systemic inflammation. Nail psoriasis has been linked to greater inflammatory burden; however, its relationship with subclinical cardiac and vascular abnormalities remains poorly defined, particularly in Latin American populations. **Methods:** We conducted a cross-sectional study of adult patients with PsA fulfilling CASPAR criteria. Patients with prior cardiovascular events or other systemic diseases were excluded. Participants were stratified by the presence of nail psoriasis (NAPSI >0 vs 0). All underwent transthoracic echocardiography and carotid ultrasound performed by blinded operators. Clinical, echocardiographic, and vascular parameters were compared between groups, and correlations between NAPSI and imaging findings were assessed. **Results:** A total of 53 patients were included, 19 with nail psoriasis and 34 without. Baseline characteristics were similar between groups. Patients with nail psoriasis demonstrated significantly lower tricuspid annular plane systolic excursion (TAPSE) (20.5±2.9 mm vs 22.7±3.0 mm, p=0.012) and a higher prevalence of eccentric left ventricular hypertrophy (36.8% vs 2.9%, p=0.002). Carotid plaque was more frequently observed in patients with nail psoriasis, indicating increased subclinical atherosclerotic burden. NAPSI correlated inversely with TAPSE (r=−0.35, p=0.010). **Conclusion:** Nail psoriasis identifies a high-risk cardiac and vascular phenotype in PsA, associated with subclinical ventricular dysfunction,

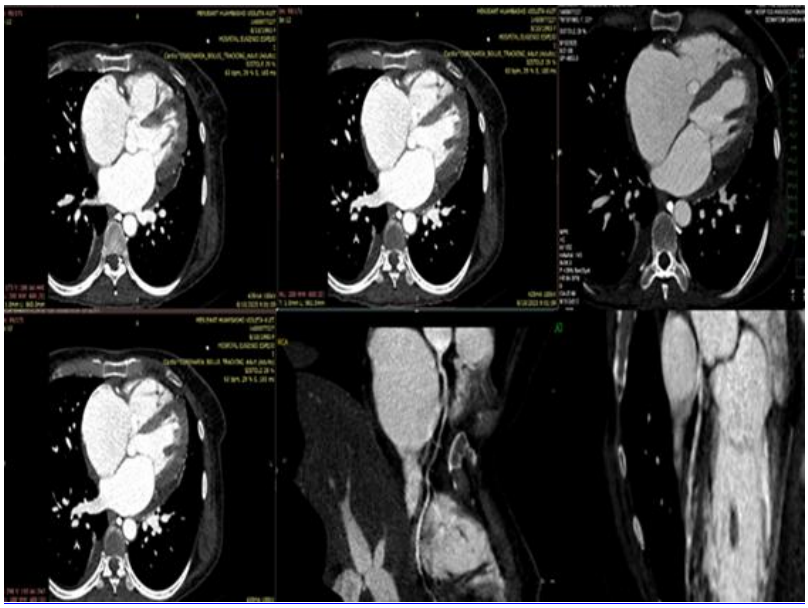
structural remodeling, and increased atherosclerotic burden. These findings support multimodality imaging for targeted cardiovascular screening and early risk stratification in PsA patients with nail involvement.

Session Title:	**Friday Morning Poster Session**
Topic 1:	Cardiovascular Disease Prevention
Publishing Title:	SUBCLINICAL CORONARY ATHEROSCLEROSIS IN PREDIABETES: A CORONARY CTA ANALYSIS IN THE CARIBBEAN
Author Block:	Alvaro Taveras, Carmen García-Valdez, Samuel De Jesus Vasquez, Martín Durán, Diana Durán, Ivan Rafael Figueroa Baez, Eliscer Guzman, Licurgo Jacob Cruz, Hospital Metropolitano de Santiago, Santiago de los Caballeros, Dominican Republic, UConn Health, Farmington, CT, USA
Abstract Body:	**Background:** Prediabetes is often considered a low-risk metabolic state, yet emerging data suggest early vascular injury may already be present. The burden of silent coronary atherosclerosis in prediabetes remains incompletely defined. **Methods:** We conducted a retrospective cohort study of consecutive adults undergoing clinically indicated coronary computed tomography angiography (CTA) at a tertiary referral center in Dominican Republic (2019-2024). Prediabetes was defined as HbA1c 5.7-6.4% within 3 months of imaging. Patients with known coronary artery disease, prior revascularization, or diabetes (HbA1c ≥6.5% or on therapy) were excluded. Prediabetic patients were matched 1:1 to normoglycemic controls by age and sex. The primary outcome was presence of any coronary plaque on CTA. Secondary outcomes included obstructive coronary artery disease (≥50% luminal stenosis), segment involvement score (SIS), and coronary artery calcium (CAC). Multivariable logistic regression adjusted for hypertension, dyslipidemia, BMI, and smoking. **Results:** A total of 2,140 patients were included (1,070 per group; mean age 52±11 years; 48% female). Prediabetes was associated with higher prevalence of any coronary plaque (46.2% vs 28.5%, $p<0.001$) and obstructive disease (14.8% vs 7.2%, $p<0.001$). Median CAC score was significantly higher in prediabetes (62 [IQR 12-148] vs 18 [IQR 0-72], $p<0.001$), with greater plaque burden reflected by higher SIS (3.1±1.8 vs 1.9±1.3, $p<0.001$). After adjustment, prediabetes remained independently associated with coronary plaque (OR 1.78, 95% CI 1.45-2.18) and obstructive disease (OR 1.94, 95% CI 1.39-2.70).

Conclusion: Prediabetes is associated with a higher burden of subclinical and obstructive coronary atherosclerosis. These findings challenge the perception of prediabetes as benign and support earlier imaging-based risk assessment and preventive strategies.

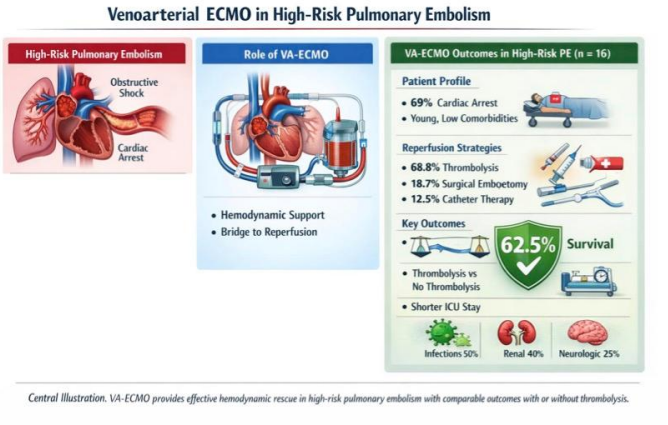
Session Title:	**Friday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	RUPTURED NONCORONARY SINUS OF VALSALVA ANEURYSM WITH RIGHT HEART CHAMBERS PRESENTING AS ADVANCED RIGHT-SIDED HEART FAILURE IN A YOUNG WOMAN
Author Block:	Edgar Fernando Lopez Rondón, Karla Alexandra Mera Sacoto, Pamela Alexandra Cadena Pineda, Doris Patricia Paucar Naula, Edgar Patricio Castillo Jumbo, Marlon Rojas Cadena, Department of Cardiology, Hospital de Especialidades Eugenio Espejo, Quito, Ecuador
Abstract Body:	**Background:** Sinus of Valsalva fistula is a rare congenital anomaly capable of causing progressive right-sided volume overload. Multimodal imaging is essential for diagnosis, and surgical repair significantly improves prognosis. We report a rare case presenting as advanced right-sided heart failure secondary to a noncoronary sinus of Valsalva fistula. **Case:** A 33-year-old woman presented with progressive ascites, congestive hepatomegaly, and serous effusions. Physical examination revealed jugular venous distension, significant ascites, and a grade III/VI holosystolic murmur at the tricuspid focus. ECG showed incomplete right bundle branch block. TTE demonstrated severe right chamber dilation, severe tricuspid regurgitation, and an anomalous communication compatible with noncoronary sinus of Valsalva fistula draining into the right heart. Cardiac CT angiography confirmed drainage into both the right atrium and right ventricle. The patient underwent successful surgical repair with a pericardial patch, with an uneventful postoperative course. **Decision-making:** SVA is a rare congenital anomaly (<1%), with the noncoronary sinus least affected (~5%). Simultaneous RA and RV drainage is exceptional. CT angiography best characterizes the rupture site and guides repair. **Conclusion:** Noncoronary SVA with biventricular right heart drainage is exceptional. Early multimodal imaging diagnosis and surgical repair are

essential to reverse advanced right-sided heart failure and improve outcomes.



Session Title:	**Friday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	VENOARTERIAL EXTRACORPOREAL MEMBRANE OXYGENATION (VA-ECMO) IN PATIENTS WITH HIGH-RISK PULMONARY EMBOLISM: EXPERIENCE FROM A LATIN AMERICAN CENTER
Author Block:	Mauricio Manrique, Claudia Jaramillo, Claudia Poveda, David Alberto Ocampo, Diego Ortega-Gomez, Jenny P. Garzón, Gloria Mary M. Rodriguez, Fundación Clínica Shaio, Bogotá, Colombia
Abstract Body:	**Background:** Up to 12% of patients with pulmonary embolism (PE) develop hemodynamic instability, and some cases require advanced extracorporeal support therapies. In our setting, the outcomes associated with the use of VA-ECMO in this context are unknown. **Methods:** We conducted a retrospective case series of patients with high-risk acute PE supported with VA-ECMO between 2019 and 2025. Data were analyzed descriptively using Stata 15; continuous variables are presented as mean (SD) or median (IQR), and categorical variables as frequencies and percentages. Outcomes were compared between patients who received systemic thrombolysis and those who did not. **Results:** Among 522 adults supported with ECMO, 215 received VA support and 16 had high-risk PE. Mean age was 36.9 years, 75% were women, and 68.75% had cardiac arrest. Main etiologies were infection and immobilization. Systemic thrombolysis was used in 68.75% and 18.7% received mechanical thrombectomy. Overall survival was 62.5%. There was hemodynamic and metabolic improvement after VA-ECMO support. Infectious, renal, and neurological complications predominated. Overall survival was 62.5%, with no differences between reperfusion strategies. **Conclusion:** In our cohort, survival was comparable to that reported in the literature, with lower rates of infectious and renal complications. There were no statistically significant differences in survival or complications between

patients who underwent systemic thrombolysis and those who did not.



Central Illustration. VA-ECMO provides effective hemodynamic rescue in high-risk pulmonary embolism with comparable outcomes with or without thrombolysis.

Session Title:	**Friday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	HIGH BURDEN OF SUBCLINICAL CARDIAC DYSFUNCTION IN PREECLAMPSIA: ECHOCARDIOGRAPHIC INSIGHTS FROM LATIN AMERICA
Author Block:	Alvaro Taveras, Martín Durán, Sofía Lara, Perla Garcia, Nisa Vásquez, Ivan Rafael Figueroa Baez, Licurgo Jacob Cruz, Hospital Presidente Estrella Ureña, Santiago de los Caballeros, Dominican Republic, UConn Health, Farmington, CT, USA
Abstract Body:	**Background:** Preeclampsia is a systemic disorder associated with increased maternal cardiovascular risk; however, subclinical cardiac involvement remains underrecognized, particularly in Latin American populations with limited data. **Methods:** We conducted a cross-sectional study of 70 pregnant patients with preeclampsia at a tertiary care center. Comprehensive transthoracic echocardiography was performed to assess structural and functional cardiac abnormalities. Clinical, obstetric, and hemodynamic variables were analyzed. Multivariable logistic regression identified independent predictors of echocardiographic abnormalities. **Results:** Mean age was 28.9±6.1 years, and 41.4% had early-onset preeclampsia. Echocardiographic abnormalities were identified in 44.3% of patients, most commonly left ventricular hypertrophy (28.6%) and diastolic dysfunction (24.3%), consistent with increased afterload and myocardial remodeling. Patients with abnormalities had significantly higher systolic blood pressure, BMI, and rates of early-onset disease. In multivariable analysis, systolic blood pressure (OR 1.08; p=0.006), BMI (OR 1.12; p=0.015), and early-onset preeclampsia (OR 2.74; p=0.034) remained independent predictors. The model demonstrated good discrimination (AUC=0.81). **Conclusion:** Preeclampsia is associated with a high burden of subclinical cardiac remodeling, identifying a high-risk cardiovascular phenotype. Early-onset disease and cardiometabolic factors define patients at greatest risk,

supporting the use of echocardiography for targeted screening and early cardiovascular risk stratification in this population.

Session Title:	**Friday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	MAVACAMTEN AND IMPROVEMENT IN NYHA FUNCTIONAL CLASS IN OBSTRUCTIVE HYPERTROPHIC CARDIOMYOPATHY: SYSTEMATIC REVIEW AND META-ANALYSIS
Author Block:	Alvaro Taveras, Natanael Duarte, Omarlyn Ruiz, Gabriela Martínez, Samuel De Jesus Vasquez, Yahilda Vinas, Ana Canahuate, Perla Garcia, Karan Hajare, Jonathan Arias, Maite De Leon Paulino, Oriana Sanabria, Omar Sención, Licurgo Jacob Cruz, Hospital Metropolitano de Santiago, Santiago de los Caballeros, Dominican Republic, UConn Health, Farmington, CT, USA
Abstract Body:	**Background:** Obstructive hypertrophic cardiomyopathy (oHCM) is the most common inherited heart disease and a major cause of heart failure symptoms and sudden cardiac death. Functional limitation, often reflected by NYHA class, remains central to prognosis. Traditional therapies are symptomatic, and septal reduction is invasive. Mavacamten, the first selective cardiac myosin inhibitor, directly targets hypercontractility, but its overall impact on function and safety across studies has not been systematically assessed. **Methods:** We performed a systematic review and meta-analysis of clinical trials and observational studies of mavacamten in adults with oHCM. Outcomes included ≥1 NYHA class improvement and treatment-emergent serious adverse events (TESAEs). Pooled odds ratios (OR) with 95% confidence intervals (CI) were estimated using a random-effects model. **Results:** Nine studies were included: six clinical trials (n=939) and three observational studies (n=440). Four randomized controlled trials (EXPLORER-HCM, EXPLORER-CN, VALOR-HCM, MAVERICK-HCM; n=503) showed significantly greater NYHA improvement with mavacamten vs control (177/273 vs 63/230; pooled OR 5.55; 95% CI 1.94-15.87; p=0.001). TESAEs were similar (37/218 vs 30/203; OR 1.16; 95% CI 0.67- 2.01; p=0.59). Two open-label trials (PIONEER-OLE, HORIZON-HCM; n=436) reported consistent benefit. MAVERICK-HCM, though mainly nonobstructive, showed directionally similar results. The three observational studies further supported functional and symptomatic benefit in realworld settings, but were not included in the

quantitative meta-analysis.

Conclusion: Across six clinical trials, mavacamten significantly improved functional status in oHCM without increasing serious adverse events. Observational evidence reinforces effectiveness in practice, supporting mavacamten as a safe targeted therapy with meaningful patient-centered benefit.

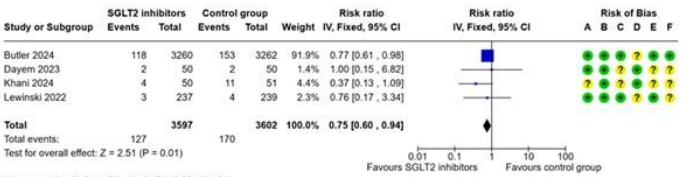
Session Title:	**Friday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	GLP-1 RECEPTOR AGONIST THERAPY AND LEFT VENTRICULAR REVERSE REMODELING IN A HISPANIC DIABETIC COHORT WITH HEART FAILURE
Author Block:	Alvaro Taveras, Ivan Rafael Figueroa Baez, Jean Medina, Jazmín Mena, Suleyvi Almonte, Carmen García-Valdez, Omarlyn Ruiz, Martín Durán, Pontificia Universidad Católica Madre y Maestra, Santiago de los Caballeros, Dominican Republic, UConn Health, Farmington, CT, USA
Abstract Body:	**Background:** GLP-1 receptor agonists (GLP-1 RAs) reduce cardiovascular risk; however, their impact on left ventricular systolic function remains incompletely defined, particularly in Hispanic patients with diabetes, an underrepresented population **Methods:** We retrospectively analyzed 412 Hispanic patients with diabetes and heart failure receiving GLP-1 RAs (semaglutide, tirzepatide, liraglutide). All patients were on guideline-directed medical therapy at initiation. Left ventricular ejection fraction (LVEF) was assessed at baseline, 12, and 24 months. Patients were stratified as HFrEF (<40%), HFmrEF (40-49%), or HFpEF (≥50%). The primary outcome was ≥5% absolute increase in LVEF. **Results:** Among 412 patients, 18% had HFrEF, 27% HFmrEF, and 55% HFpEF. At 24 months, 56.8% demonstrated LVEF improvement, 28.6% remained stable, and 14.6% worsened. Improvement was most pronounced in HFrEF (71.2%; mean ΔLVEF +7.4%, 95% CI +6.1-+8.7), followed by HFmrEF (58.3%; +4.2%, 95% CI +3.1-+5.3) and HFpEF (47.9%; +2.1%, 95% CI +1.2-+3.0). Patients achieving ≥5% BMI reduction were significantly more likely to experience LVEF improvement (64.5% vs 49.8%, p<0.01). **Conclusion:** GLP-1 receptor agonist therapy is associated with meaningful left ventricular reverse remodeling in Hispanic patients with diabetes and heart failure, with the greatest benefit observed in HFrEF. The strong association between BMI reduction and LVEF improvement suggests a cardiometabolic mechanism linking weight loss to cardiac recovery. These findings provide real-

world evidence supporting the potential role of GLP-1-based therapies in heart failure and warrant prospective investigation.

Session Title:	**Friday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	SODIUM-GLUCOSE COTRANSPORTER-2 INHIBITORS IN HEART FAILURE: A SYSTEMATIC REVIEW OF CARDIOVASCULAR OUTCOMES
Author Block:	Ricardo Cundapí González, Erick O. Pérez Rodríguez, Manuel H. Serrano Velázquez, Ingrid Y. González López, Alondra M. Meneses Sumuano, Hilda I. Arriaga García, José A. Cruz Esteban, Guadalupe M. Bartolón Barrios, Cynthia Martínez Torrestiana, José L. Dominguez Solís, Citlali E. Mendoza Chavez, Universidad Autónoma de Chiapas, Tapachula, Mexico
Abstract Body:	**Background:** Heart failure (HF) is one of the leading causes of morbidity and mortality worldwide. Sodium-glucose cotransporter-2 (SGLT2) inhibitors, originally developed for type 2 diabetes mellitus, have demonstrated cardiovascular benefits across a broad range of patients with HF, including those without diabetes. Their role as a cornerstone therapy in HF management has recently expanded. **Methods:** A systematic review of randomized controlled trials was conducted using PubMed, Embase, and the Cochrane Library up to 2024. Studies evaluating SGLT2 inhibitors in patients with heart failure (reduced and preserved ejection fraction) were included. Primary outcomes were cardiovascular death and hospitalization for heart failure. **Results:** Eight major randomized trials, including over 30,000 patients with heart failure or relevant subpopulations, were analyzed. Los inhibidores de SGLT2 redujeron el resultado combinado de muerte cardiovascular u hospitalización por insuficiencia cardíaca (HR ≈ 0,75; IC del 95%: 0,70-0,80). Las hospitalizaciones por insuficiencia cardiaca disminuiron en aproximadamente un 30%, y la mortalidad cardiovascular en un 10-15%. Los beneficios fueron consistentes independientemente del estado diabético y en todos los fenotipos de insuficiencia cardíaca. Los eventos adversos fueron generalmente leves. **Conclusion:** SGLT2 inhibitors improve cardiovascular outcomes in patients

with heart failure, regardless of diabetes status, supporting their role as cornerstone therapy in HF management.

Session Title:	**Friday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	EVALUATION OF THE SAFETY AND EFFICACY OF SODIUM-GLUCOSE COTRANSPORTER 2 INHIBITORS (SGLT2I) IN PATIENTS WITH ACUTE MYOCARDIAL INFARCTION: A SYSTEMATIC REVIEW AND META-ANALYSIS
Author Block:	Carlos Hernan Calderon, Miguel A. Narvaez, Maria I. Barros Vergara, Gabriela Revelo Urbano, Nicolas Corredor Silva, Nicolas Cabezas Dominguez, Juan J. Santander Molina, Cristian O. Porras Bueno, Edward Cáceres Méndez, Angel Alberto Garcia Peña, Universidad Pontificia Javeriana, Bogota, CO, Colombia, Hospital San Ignacio, CO, Colombia
Abstract Body:	**Background:** Acute myocardial infarction (AMI) remains a leading cause of cardiovascular morbidity and mortality, frequently complicated by adverse ventricular remodeling and heart failure (HF) despite optimal medical therapy. Sodium-glucose cotransporter 2 inhibitors (SGLT2i) have demonstrated consistent cardiovascular benefits, yet their role in the early post-AMI phase remains uncertain. **Methods:** We conducted a systematic review and meta-analysis of randomized controlled trials enrolling adult patients with AMI treated with SGLT2i versus placebo on top of standard care. Primary outcomes included all-cause mortality and HF hospitalization. Effect estimates were pooled as risk ratios (RR) with 95% confidence intervals (CI), using fixed- or random-effects models according to heterogeneity. **Results:** Five trials (n=11,216) were included. SGLT2i therapy significantly reduced HF hospitalization (RR 0.75; 95% CI 0.60-0.94). The composite of death or HF (RR 0.89; 95% CI 0.77-1.03) and all-cause mortality (RR 0.95; 95% CI 0.78-1.17) were not statistically significant. A modest improvement in left ventricular ejection fraction (~2.7%) was observed. **Conclusion:** In AMI patients, SGLT2i reduce HF hospitalization and improve ventricular function without a clear mortality benefit. These findings support a role in modulating post-infarction remodeling, although larger trials are needed to define their impact on hard clinical outcomes.



Heterogeneity: Chi² = 1.79, df = 3 (P = 0.62); I² = 0%

Risk of bias legend

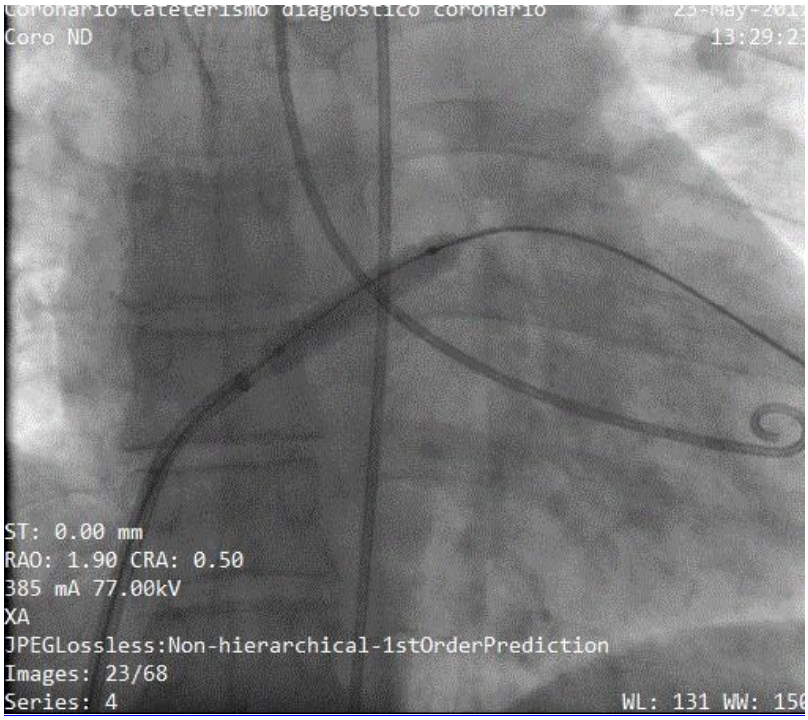
(A) Bias arising from the randomization process
(B) Bias due to deviations from intended interventions
(C) Bias due to missing outcome data
(D) Bias in measurement of the outcome
(E) Bias in selection of the reported result
(F) Overall bias

Session Title:	**Friday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	RECURRENT CARDIAC TAMPONADE AS A MANIFESTATION OF TUBERCULOUS PERICARDITIS: CASE REPORT
Author Block:	Aylin Sabina Garcia Flores, Ray Erik Coutiño De Avila, Luis Miguel Alfonso Fernández Gutiérrez, Instituto Mexicano del Seguro Social, HGR 1, Queretaro, Mexico
Abstract Body:	**Background:** Cardiac tamponade is a life-threatening condition with diverse etiologies. Tuberculous pericarditis remains a significant cause of exudative pericardial effusion in developing countries, posing diagnostic challenges that highlight the value of molecular testing. **Case:** A 62-year-old woman with type 2 diabetes, hypertension, end-stage renal disease on peritoneal dialysis, and ischemic heart failure (LVEF 25%) presented with altered mental status and shock. She had prior cardiac tamponade in May 2025 treated with pericardiocentesis. ECG showed low voltage and electrical alternans; exam revealed jugular venous distention and muffled heart sounds. Echocardiography demonstrated severe pericardial effusion with hemodynamic compromise. Pericardiocentesis drained serohematic fluid. **Decision-making:** Pericardial fluid analysis revealed an exudate with elevated beta-2 microglobulin. GeneXpert was positive for Mycobacterium tuberculosis, supporting tuberculous pericarditis. This entity often presents subacutely and may be underrecognized, particularly in patients with multiple comorbidities. Conventional diagnostic methods have limited sensitivity and long turnaround times, whereas molecular assays allow rapid and specific detection. Early identification is crucial, as delayed treatment is associated with high mortality and progression to constrictive pericarditis. **Conclusion:** Tuberculous pericarditis should be suspected in recurrent or unexplained tamponade. The incorporation of molecular diagnostics such as GeneXpert facilitates prompt diagnosis and early initiation of targeted therapy,

which may improve survival and reduce long-term complications, especially in high-risk populations.

Session Title:	**Friday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	NINE-YEAR FOLLOW-UP AFTER BALLOON ATRIAL SEPTOSTOMY AS BRIDGE THERAPY IN IDIOPATHIC PULMONARY ARTERIAL HYPERTENSION: A LONG JOURNEY TOWARD RIGHT VENTRICULAR FAILURE
Author Block:	Carlos Agenor García Rosales, Gabriel Alejandro Benitez Torres, Nayeli Guadalupe Zayas Hernandez, Julio César López Reyes, Rodrigo Zebadúa Torres, Arantxa Nava Suárez, Mario Alejandro Díaz Pastrana, Victor Edgar González Ramírez, Itzel Ramírez, Instituto Nacional de Cardiología Ignacio Chavez, Ciudad de Mexico, Mexico
Abstract Body:	**Background:** Balloon atrial septostomy (BAS) is a palliative bridge therapy for high-risk pulmonary arterial hypertension (PAH). Long-term outcomes beyond 5 years are scarcely reported. **Case:** A 49-year-old woman with idiopathic PAH (mPAP 73 mmHg, PVR elevated, 2006), CKD, and type-2 diabetes presented in 2017 with WHO-FC III, recurrent syncope, and clinical deterioration despite dual therapy (sildenafil + macitentan). 6-minute walk distance (6MWD) dropped from 387m (2013) to 239m. NT-proBNP 968 pg/mL. BAS was performed (May 2017) with an 8mm balloon, achieving SaO2 92% (baseline 79%) and symptomatic improvement. Over 9 years she developed atypical atrial flutter, suspected limited systemic sclerosis, progressive right ventricular failure, and ESRD requiring hemodialysis (2023). Triple therapy was escalated to macitentan + riociguat + subcutaneous treprostinil. By 2026, recurrent admissions for cellulitis, RV failure, and refractory congestion required vasopressor support and renal replacement. **Decision-making:** BAS provided meaningful clinical bridging with sustained survival despite progressive disease and multiple comorbidities, in a setting without access to lung transplantation. Sequential escalation to parenteral prostanoids was decisive in long-term survival. **Conclusion:** This case illustrates a 9-year survival after BAS in high-risk PAH,

highlighting its role as durable bridge therapy when transplant is unavailable.



Session Title:	**Friday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	COMPARISON OF SEPTAL REDUCTION THERAPIES IN OBSTRUCTIVE HYPERTROPHIC CARDIOMYOPATHY: A SINGLE-CENTER EXPERIENCE WITH ALCOHOL ABLATION VERSUS RADIOFREQUENCY
Author Block:	Freddy Javier Medina Santos, Rodrigo Antonio Bonilla, Kevin J. Acevedo Gomez, Yancy Yuliana Erazo Dorado, Julieta Danira Morales Portano, Ana Karen Garro Almendaron, Centro Medico Nacional 20 de Noviembre, Mexico City, Mexico
Abstract Body:	**Background:** Obstructive hypertrophic cardiomyopathy (HCM) requires septal reduction therapies (SRT) when symptoms persist despite medical therapy. While alcohol septal ablation (ASA) is established, radiofrequency ablation (RFA) has emerged as a less invasive alternative. We aim to compare the efficacy and safety of both techniques in a tertiary center. **Methods:** A descriptive and cross-sectional study was conducted at the Centro Médico Nacional 20 de Noviembre. We analyzed clinical and echocardiographic parameters before and after SRT. Statistical significance was defined as $p < 0.05$ using paired and independent t-tests. **Results:** We included 28 patients (64.3% female; mean age 60.4 ± 14.4 years): 15 underwent ASA and 13 RFA. The most prevalent symptom was dyspnea (78.6%). Post-procedure, the peak left ventricular outflow tract (LVOT) gradient decreased by 61.3%, from 78.3 ± 44.1 mmHg to 28.2 ± 31.5 mmHg ($p < 0.001$). Interventricular septal thickness reduced from 18.7 ± 6.5 mm to 15.4 ± 7.1 mm ($p = 0.07$). No significant difference was found between ASA and RFA regarding the magnitude of gradient reduction ($p = 0.55$), indicating comparable short-term efficacy. **Conclusion:** SRT is highly effective for gradient relief in obstructive HCM. Both ASA and RFA demonstrated comparable efficacy in reducing the LVOT gradient, supporting RFA as a viable percutaneous alternative in specialized centers.

Session Title:	**Friday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	SACUBITRIL/VALSARTAN FOR PREVENTION OF CHEMOTHERAPY-RELATED CARDIAC DYSFUNCTION IN BREAST CANCER: A META-ANALYSIS OF RANDOMIZED TRIALS
Author Block:	Jose Alejandro Gasca, Nelson Eduardo Murillo, SR, Andrea Beltran, Lizeth Villota, Luis Cueva, Mauricio Herrera, Rolando Gomez, Bruce Gomez, Sebastian Cordoba, Universidad Santiago de Cali, Cali, Colombia, Angiografía de Occidente, Cali, Colombia
Abstract Body:	**Background:** Cancer therapy-related cardiac dysfunction remains a major limitation of anthracycline-based chemotherapy in breast cancer and may compromise oncologic treatment continuity and long-term cardiovascular outcomes. Whether sacubitril/valsartan prevents early myocardial injury during chemotherapy remains uncertain. **Methods:** We performed a systematic review and meta-analysis of randomized controlled trials comparing sacubitril/valsartan versus placebo or standard care in breast cancer patients receiving cardiotoxic chemotherapy. Outcomes included left ventricular ejection fraction (LVEF), global longitudinal strain (GLS), N-terminal pro-B-type natriuretic peptide, high-sensitivity cardiac troponin I, and high-sensitivity cardiac troponin T. Random-effects models were used to pool standardized mean differences (SMDs). **Results:** Three randomized trials, including 365 patients (152 sacubitril/valsartan; 213 controls) were analyzed. Sacubitril/valsartan significantly preserved myocardial deformation, improving GLS (SMD −0.64; 95% CI −0.93 to −0.36; P<0.00001; I^2=37%). No significant differences were observed for LVEF (SMD 0.57; 95% CI −0.14 to 1.28; P=0.11), N-terminal pro-B-type natriuretic peptide (SMD −0.88; 95% CI −2.08 to 0.31; P=0.15), high-sensitivity cardiac troponin I (SMD −0.06; 95% CI −0.30 to 0.18; P=0.64), or high-sensitivity cardiac troponin T (SMD −0.11; 95% CI −0.38 to 0.17; P=0.45). **Conclusion:** Sacubitril/valsartan preserved subclinical myocardial function, as reflected by improved GLS, without significant changes in LVEF or circulating cardiac biomarkers. These findings support a potential role for early

neurohormonal modulation to attenuate chemotherapy-related myocardial injury before overt systolic dysfunction develops.

Session Title:	**Friday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	ELECTROPHYSIOLOGIC PHENOTYPE OUTPERFORMS VENTRICULAR EJECTION FRACTION IN IMMUNE CHECKPOINT INHIBITOR-ASSOCIATED MYOCARDITIS: A POOLED CASE-LEVEL ANALYSIS
Author Block:	Mohamed Ibrahim, Bakr Alhayek, Munir Ghandour, Diya Asad, Muhammad Umar, Rebekah Alison, Asha Ramsakal, Jordan Christopher Ray, Taimur Sher, Grace Lin, Awais Malik, Mayo Clinic, Jacksonville, FL, USA, Advent Health, Tampa, FL, USA
Abstract Body:	**Background:** Immune checkpoint inhibitor (ICI) associated myocarditis carries high mortality, yet risk stratification remains heavily dependent on left ventricular ejection fraction (LVEF), despite many fatal cases occurring with preserved systolic function. We evaluated whether electrophysiologic involvement provides superior prognostic discrimination compared with LVEF in ICI myocarditis. **Methods:** We performed a pooled case level analysis of published ICI myocarditis cases identified through systematic PubMed review. Electrophysiologic phenotype (EP) was defined as high grade atrioventricular block, sustained ventricular tachycardia, ventricular fibrillation, or cardiac arrest. LVEF was dichotomized at ≤35%. Cluster robust logistic regression assessed associations with in hospital mortality. Sensitivity analyses included conduction specific EP definitions, multiple imputation, and alternative LVEF thresholds. **Results:** Among 242 publications, 319 unique cases were identified; 180 with complete mortality, EP, and LVEF data comprised the analytic cohort. Overall mortality was 42.8%. EP involvement was present in 66.7% of patients and was associated with markedly higher mortality compared with EP negative cases (55.0% vs 18.3%; RR 3.00, 95% CI 1.72 to 5.24; p<0.001). In contrast, LVEF ≤35% was not significantly associated with mortality (50.7% vs 38.1%; p=0.125). Among patients with LVEF >35%, EP involvement identified substantially higher mortality (55.1% vs 11.4%; p<0.001). In adjusted models, EP remained independently associated with mortality (OR 5.27, 95% CI 2.29 to

12.13; p<0.001), whereas LVEF was not independently predictive (OR 1.38; p=0.36). Findings remained consistent across multiple sensitivity analyses, including conduction specific EP models and multiple imputation.
Conclusion: Electrophysiologic involvement is a dominant prognostic marker in ICI myocarditis and provides clinically meaningful risk stratification beyond LVEF. Early recognition of conduction abnormalities and malignant arrhythmias may better identify high risk patients than reliance on systolic function alone.

Session Title:	**Friday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	DISCHARGE NT-PROBNP AND IN-HOSPITAL REDUCTION PREDICT 180-DAY ADVERSE EVENTS AFTER DECOMPENSATED HEART FAILURE
Author Block:	Joaquin Berarducci, Jorge A. Ortega-Hernández, Hector Gonzalez-Pacheco, Instituto Nacional de Cardiologia Ignacio Chavez, Mexico City, Mexico
Abstract Body:	**Background:** N-terminal pro-B-type natriuretic peptide (NT-proBNP) at discharge may reflect residual congestion after hospitalization for decompensated heart failure (HF) better than admission values. We assessed whether discharge NT-proBNP and in-hospital change predict 180-day major adverse cardiovascular events (MACE). **Methods:** Retrospective cohort of adults hospitalized for decompensated HF in a coronary care unit during 2024. The primary endpoint was 180-day MACE, defined as all-cause death or HF rehospitalization among patients discharged alive with admission and discharge NT-proBNP available. NT-proBNP was assessed at admission, day 3 and discharge. In-hospital reduction was calculated from admission to discharge. Discrimination was evaluated by area under the curve (AUC), and the optimal cutoff by Youden index. Logistic regression estimated the association between lower NT-proBNP reduction and MACE. **Results:** Among 166 patients, 53 (31.9%) developed 180-day MACE. Discharge NT-proBNP was higher in patients with MACE than in those without MACE (8,707 [4,152-17,478] vs 3,948 [1,314-10,670] pg/mL; p=0.001), whereas admission values were similar (p=0.857). Percent reduction from admission to discharge was lower in patients with MACE (25.6% [-26.3 to 60.0] vs 53.7% [13.3 to 79.5]; p=0.003). A reduction ≤26.6% identified higher-risk patients, with sensitivity 54.7%, specificity 70.5%, positive predictive value 46.8% and negative predictive value 76.7%. Each 10% lower relative reduction was associated with higher odds of MACE (odds ratio 1.07, 95% confidence interval 1.02-1.12; p=0.007). Discharge NT-proBNP had better unadjusted discrimination than admission or day-3 values (AUC 0.70 vs 0.53 and 0.53; p<0.001 for both).

Conclusion: In patients hospitalized for decompensated HF, discharge NT-proBNP and limited in-hospital reduction were associated with 180-day adverse events. Serial NT-proBNP assessment, particularly at discharge, may help identify patients requiring closer post-discharge follow-up and treatment optimization.

Session Title:	**Friday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	THE LDL/HDL RATIO AND IN-HOSPITAL MORTALITY IN ACUTE HEART FAILURE: EVIDENCE OF A U-SHAPED ASSOCIATION AND THE LIPID PARADOX.
Author Block:	Jorge Luis Vallee, Jhoel Amores, Juan C. Wong, Jose Tordecilla, Andrea Ortiz, Francisco Palma, Daniela Cortes, Hospital Santo Tomas, Panama, Panama
Abstract Body:	**Background:** Historically, the LDL/HDL ratio has been a cornerstone incardiovascular risk stratification, with higher values linearly associated with increased atherogenic risk. However, in acute heart failure (AHF), a "lipidparadox" has been described where low cholesterol levels correlate with pooroutcomes due to systemic inflammation and metabolic depletion.Purpose: To evaluate the association between the LDL/HDL ratio and in-hospitalmortality and to investigate its relationship with Left Ventricular Ejection Fraction(LVEF) and NT-proBNP levels in patients hospitalized for AHF **Methods:** We analyzed 400 patients hospitalized for AHF. The cohort was divided into quartiles (Q) based on the LDL/HDL ratio. In-hospital mortality was the primary endpoint. Continuous variables are expressed as Median [Interquartile Range]. Correlation analysis was performed using Spearman's rho, and mortality rates across quartiles were compared using Chi-square tests. **Results:** The study population had a median age of 60.0 years [52.0-71.0] and66.2% (n=265) were male. The overall median LDL/HDL ratio was 3.17 [2.23-4.12]. While no global statistical association was found between the LDL/HDLratio and mortality (p=0.13), a clear U-shaped trend was observed. Mortality was highest in the lowest quartile (Q1: 18.0%) and the highest quartile (Q4: 17.0%),compared to the middle quartiles (Q2+Q3: 9.5%). The higher mortality in Q1 compared to the middle quartiles represented a near-significant trend (p=0.054).Furthermore, a lower LDL/HDL ratio showed a borderline significant trend toward reduced LVEF (rho = -0.10, p = 0.056), while no significant association was observed for NT-proBNP levels (p=0.16) **Conclusion:** In hospitalized patients with AHF, the LDL/HDL ratio exhibits a U-shaped trend with mortality, diverging from the linear risk model of primary

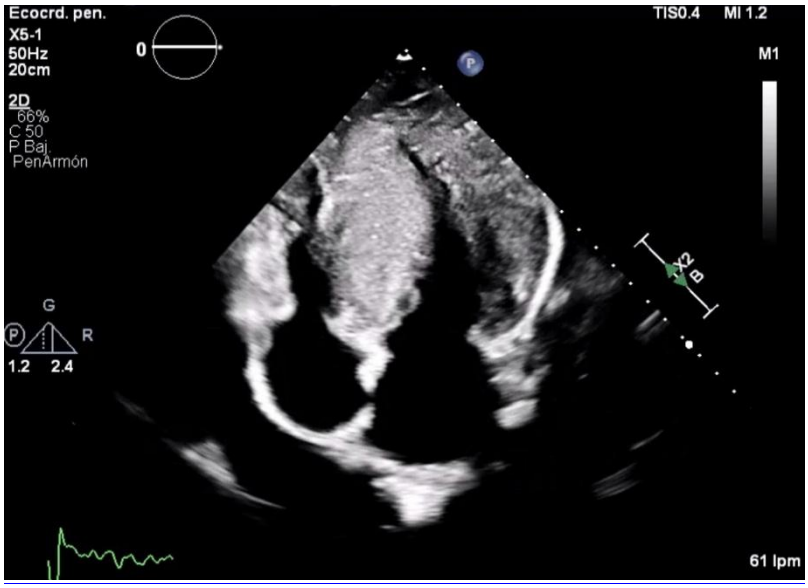
prevention. The increased mortality in the lowest quartile supports the "lipidparadox," identifying a high-risk phenotype characterized by lower LVEF andpotential metabolic exhaustion in the acute setting.

Session Title:	**Friday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	HEREDITARY TRANSTHYRETIN AMYLOIDOSIS IN PERU: GENETIC LANDSCAPE AND TREATMENT GAP
Author Block:	Javier Torres, Hector Bojorquez, Fiorella Navarro Vasquez Navarro, Daniel Borja, Elder Quispe, Nelson Purizaca-Rosillo, Valery Karla Trancón Guillén, Heidi Vela, Sebastian Sorolla, Jose Parodi, Ricardo Fujita, Gustavo Moretta, Hospital Nacional Edgardo Rebagliati Martins, Lima, Peru
Abstract Body:	**Background:** Hereditary transthyretin amyloidosis (ATTRv) is a rare multisystemic disease with variable phenotypic expression. No prior published data characterize ATTRv in the Peruvian population, representing a significant gap in Latin America. **Methods:** Descriptive, observational, retrospective case series of 23 patients with ATTRv confirmed by molecular genetic testing, evaluated in Lima, Peru, between 2021 and December 2025. Neurological (NIS, Norfolk QOL-DN, PND), autonomic (COMPASS-31, SUDOSCAN), and cardiovascular assessments (echocardiography, Tc99m-pyrophosphate scintigraphy, troponin T, NT-proBNP) were performed to classify clinical phenotypes according to AHA/ACC criteria and the THAOS registry. **Results:** Median age was 60 years (IQR 45-70); 69.6% male. Notably, 47.6% of patients originated from Andean highland cities. The predominant variants were Val142Ile (56.5%), Ala65Val (34.8%), and Val50Met (8.7%). All Ala65Val carriers originated from Ancash, an Andean high-altitude region, suggesting a geographic cluster. Phenotypic distribution: preclinical 47.8%, mixed 30.4%, cardiac 17.4%, neurological 4.4%. Over half of patients were identified through family screening. One death was recorded (4.4%) in a 67-year-old Val142Ile carrier. Critically, only one patient — a Val50Met carrier receiving acoramidis abroad — currently has access to disease-modifying therapy; no other patient in this cohort receives treatment. **Conclusion:** This first ATTRv case series in Peru reveals a distinct genetic and geographic landscape, including a potential Ala65Val cluster in the Andean region of Ancash. The near-complete absence of access to disease-modifying

therapies exposes a critical treatment gap in a low-to-middle income country context, underscoring the urgent need for national awareness programs, systematic family screening, and policies ensuring equitable access to approved therapies.

Session Title:	**Friday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	BEYOND THE SARCOMERE: EXTREME ADOLESCENT HYPERTROPHIC CARDIOMYOPATHY FROM PATHOGENIC MYL2 WITH CONCURRENT ELAC2 AND RYR2 VARIANTS
Author Block:	Carlos Agenor García Rosales, Jessica Loreley Lima Díaz, Rodrigo Soria García, Enrique A. Berrios, Gabriel Alejandro Benitez Torres, Jose Raul Nieto-Saucedo, Jimena Alejandra Ramírez Hernández, Victor Edgar González Ramírez, Itzel Ramírez, Instituto Nacional de Cardiología Ignacio Chavez, Mexico City, Mexico
Abstract Body:	**Background:** MYL2 causes less than 2% of genotype-positive hypertrophic cardiomyopathy (HCM); coexisting non-sarcomeric variants may modify severity. **Case:** A 16-year-old male with paternally inherited HCM (father, grandmother) had two unexplained syncopes at ages 2 and 4. A 168-gene panel identified heterozygous MYL2 c.53T>C, classified pathogenic per ACMG with cosegregation, plus two variants of uncertain significance: ELAC2 (mitochondrial RNA processing, linked to oxidative phosphorylation deficiency) and RYR2 (calcium handling, arrhythmogenic). A subcutaneous defibrillator was placed at age 11. Septal thickness rose from 12 mm at age 5 to 46.8 mm at 16. Echocardiography showed concentric hypertrophy, resting LV outflow gradient 167 mmHg with systolic anterior motion, mitral regurgitation, ejection fraction 64%, global longitudinal strain -13.9%. Coronary CT revealed ectasia (right coronary 6.9 mm, Z+8.07) and a deep mid-LAD myocardial bridge. Despite NYHA I, exercise testing showed peak VO2 54% predicted, flat pressure response, VE/VCO2 37.1, and oscillatory ventilation. **Decision-making:** Phenotypic severity exceeds typical MYL2 disease. Co-occurring ELAC2 and RYR2 variants raise digenic modulation as a hypothesis, with ELAC2 potentially amplifying hypertrophy via mitochondrial dysfunction. **Conclusion:** Pathogenic MYL2 with non-sarcomeric variants produced extreme adolescent HCM; broad panels and functional testing redirected care toward

septal reduction therapy.



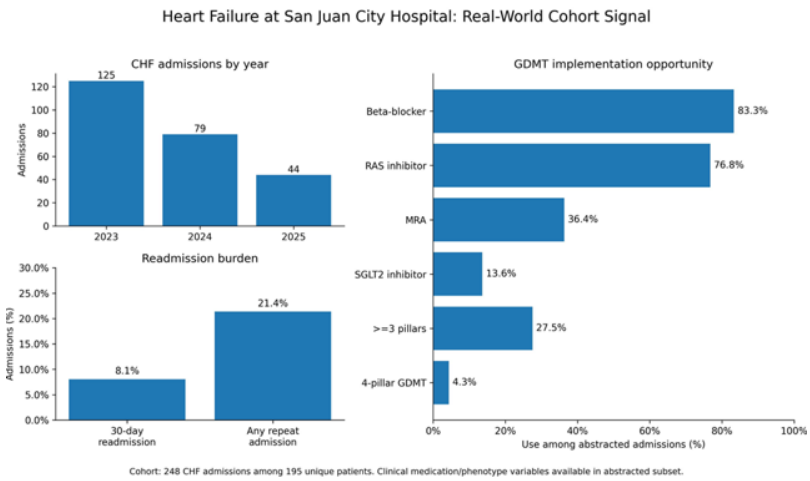
Session Title:	**Friday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	*CANDIDA PARAPSILOSIS* PERICARDITIS AND FUNGEMIA AFTER ORTHOTOPIC HEART TRANSPLANT
Author Block:	Daniel Arroyo, Alejandro Araujo Adams, Sonya Kalani, Lia Joubert Garcia, Carlos Matos Tirado, Dhruv Patel, Rani Marhaba, Fathima Jahufar, Daniel Sims, Montefiore Medical Center, Bronx, NY, USA
Abstract Body:	**Background:** Fungal pericarditis is rare but carries mortality approaching 50% in reported cases, of which *Candida* is the most common fungal pathogen. Persistent pericardial effusions after orthotopic heart transplant (OHT) are often attributed to postoperative bleeding, however infectious pericardial involvement must remain on the differential in immunosuppressed patients. **Case:** 62-year-old man with nonischemic cardiomyopathy supported with HeartMate 3 underwent combined heart-kidney transplantation. His postoperative course was complicated by right ventricular free-wall bleeding requiring repair and multiple mediastinal re-explorations. Serial echocardiography then showed a recurrent large pericardial effusion requiring pericardiocentesis. Pericardial fluid culture grew *Candida parapsilosis*. Blood cultures also grew *C. parapsilosis* while receiving HD through a tunneled catheter. **Decision-making:** The initial decision was to drain the large postoperative effusion because of its size and persistence after a complicated post-transplant course. Once *C. parapsilosis* was isolated from both pericardial fluid and blood, the collection could no longer be managed as a sterile postoperative fluid collection. Since candedemia developed while HD catheter was in place, line seeding versus ongoing pericardial infection became the major source-control question. Micafungin was initiated, then transitioned to fluconazole after blood culture clearance to complete 6 weeks of therapy. Serial echocardiography showed an increasingly organized, thrombosed collection with preserved biventricular function, no tamponade, and no biopsy-proven rejection, so repeat invasive intervention was deferred. At seven months post-transplant, he had no biopsy-proven rejection and no

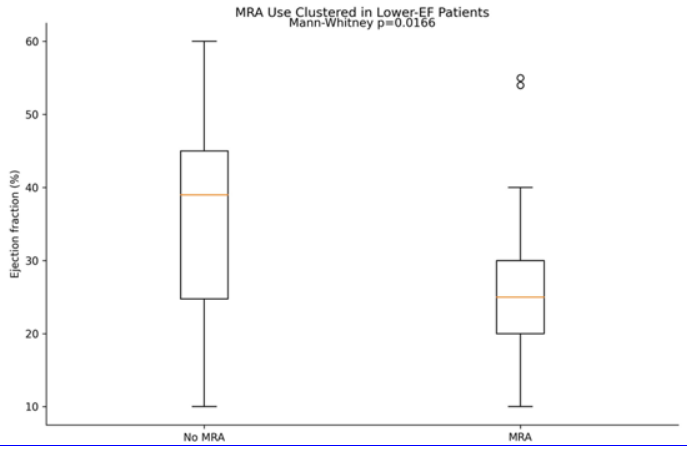
documented recurrence of *Candida* infection.
Conclusion: In OHT recipients, persistent postoperative pericardial collections should not automatically be attributed to bleeding alone. Drainage, microbiologic evaluation, and serial echocardiographic surveillance were essential in diagnosing and managing invasive *Candida parapsilosis* pericarditis with fungemia.

Session Title:	**Friday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	RIGHT VENTRICULAR FUNCTION MODIFIES MORTALITY RISK IN ADVANCED SCAI SHOCK STAGES
Author Block:	Alejandro Araujo Adams, Daniel Arroyo, Carlos D. Matos, Bryan Velez, Sheetal Vasundara, Fathima Jahufar, Daniel Sims, Montefiore Einstein Center for Heart & Vascular Care, Bronx, NY, USA
Abstract Body:	**Background:** Right ventricular (RV) dysfunction is increasingly recognized as an important determinant of outcomes in cardiogenic shock, but its prognostic impact across Society for Cardiovascular Angiography and Interventions (SCAI) shock stages remains incompletely understood. We sought to determine whether RV dysfunction influences mortality risk across SCAI shock stages in hospitalized patients with left ventricular ejection fraction (LVEF) <35%. **Methods:** We analyzed a prospectively collected cohort of hospitalized patients with LVEF <35% who underwent serial SCAI staging. RV function was categorized as normal, mild, moderate, or severe dysfunction based on qualitative echocardiographic assessment. The primary outcome was in-hospital mortality, analyzed across RV function categories and stratified by SCAI shock stage at the time of admission. **Results:** Among 291 patients, mean age was 68±15 years and 36.8% were women. Overall, in-hospital mortality was 14.4% (42/291) and increased with worsening RV dysfunction, occurring in 9.1% (9/99) with normal RV function, 7.9% (5/63) with mild dysfunction, 16.3% (15/92) with moderate dysfunction, and 35.1% (13/37) with severe dysfunction (P for trend = 0.001). However, the prognostic impact of RV dysfunction appeared greatest in advanced shock stages. Among patients with advanced shock (SCAI C-E, n=64), severe RV dysfunction was associated with higher mortality. In this subgroup, in-hospital mortality was higher with severe RV dysfunction (66.7% [8/12]) compared with those without severe RV dysfunction (42.3% [22/52]; unadjusted odds ratio 2.7). After adjustment for SCAI shock stage, severe RV dysfunction was associated with increased in-hospital mortality (adjusted odds ratio 4.4,

P=0.004).
Conclusion: RV dysfunction amplifies mortality risk in advanced cardiogenic shock beyond SCAI stage alone. Severe RV dysfunction identifies a particularly high-risk phenotype among patients with SCAI stage C-E and may improve risk stratification and identification of patients who could benefit from earlier escalation to advanced therapies.

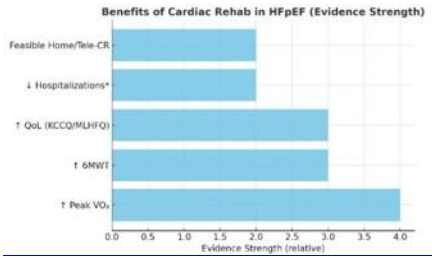
Session Title:	**Friday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	REAL-WORLD HEART FAILURE CARE AT SAN JUAN CITY HOSPITAL: GDMT GAPS AND READMISSION BURDEN IN AN UNDERREPRESENTED HISPANIC COHORT
Author Block:	Ivan Rafael Figueroa Baez, Marcos Fernandez, Andrea Figueroa, Sofia Torres Bigio, Christopher Emmanuel Fontanez, Jesus Sevillano Rodriguez, Amanda Franko, Andrew Engel-Rodriguez, San Juan City Hospital, San Juan, PR, VA Caribbean Healthcare System, San Juan, PR, USA
Abstract Body:	**Background:** Real-world heart failure data from Hispanic Caribbean populations are limited. We characterized CHF admissions at San Juan City Hospital and evaluated GDMT use and readmission burden. **Methods:** Retrospective cohort analysis of CHF admissions from 2023-2025. Demographics and repeat admissions were evaluated in the full cohort; EF, comorbidities, length of stay and GDMT were analyzed in the clinically abstracted subset. Repeat admission was estimated using the next discharge date for the same medical record. **Results:** We identified 248 CHF admissions among 195 unique patients; 46.4% were female. Annual admissions were 125 in 2023, 79 in 2024 and 44 in 2025. A 30-day repeat-admission proxy occurred in 20 admissions (8.1%), and any repeat admission in 53 (21.4%). In the clinically abstracted subset (n=69), median EF was 30% (IQR 20-40), 78.9% had EF <=40% and median length of stay was 5 days (IQR 4-8). Beta-blocker use was 83.3%, while MRA, SGLT2 inhibitor, ARNI and complete 4-pillar GDMT use were 36.4%, 13.6%, 3.0% and 4.3%, respectively. MRA use clustered in lower-EF patients (median 25% vs 39%; p=0.0166). **Conclusion:** In this Puerto Rico CHF cohort, systolic dysfunction and repeat admissions were common, while contemporary 4-pillar GDMT implementation was limited. These findings support a targeted HF pathway emphasizing discharge GDMT optimization, medication access and early follow-up.


Heart Failure at San Juan City Hospital: Real-World Cohort Signal
CHF admissions by year
Admissions
125
79
44
2023
2024
2025
Readmission burden
Admissions (%)
8.1%
21.4%
30-day readmission
Any repeat admission
GDMT implementation opportunity
Beta-blocker
83.3%
RAS inhibitor
76.8%
MRA
36.4%
SGLT2 inhibitor
13.6%
>=3 pillars
27.5%
4-pillar GDMT
4.3%
Use among abstracted admissions (%)
Cohort: 248 CHF admissions among 195 unique patients. Clinical medication/phenotype variables available in abstracted subset.


MRA Use Clustered in Lower-EF Patients
Mann-Whitney p=0.0166
Ejection fraction (%)
No MRA
MRA

Session Title:	**Friday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	CARDIAC REHABILITATION IN HEART FAILURE WITH PRESERVED EJECTION FRACTION: A SCALABLE, UNDERUSED STRATEGY TO IMPROVE FUNCTIONAL CAPACITY
Author Block:	Jaime Da Silva Lugo, Ivan Rafael Figueroa Baez, Sophia Isabel Lopez, Diego Otero, Carol Fernandez Hazim, Han Naung Tun, San Juan City Hospital, San Juan, PR, Geisel School of Medicine, Dartmouth College, Hanover, NH, USA
Abstract Body:	**Background:** Heart failure with preserved ejection fraction (HFpEF) is characterized by exercise intolerance, impaired functional capacity, and reduced quality of life. Cardiac rehabilitation (CR) remains underused despite growing evidence supporting its role in HFpEF management. **Methods:** A structured literature review of studies published from 2010-2025 was conducted using PubMed and Embase. Eligible studies included randomized controlled trials, prospective cohorts, and meta-analyses evaluating aerobic, resistance, multimodal, and home-based CR interventions in HFpEF. Outcomes included peak oxygen consumption (VO_2), 6-minute walk distance (6MWD), quality of life, and safety. **Results:** Eighteen studies including approximately 1,200 patients were analyzed. CR consistently improved functional capacity, with peak VO_2 increases of ~1.5-3.0 mL/kg/min and 6MWD improvements of ~30-70 meters compared with usual care. Quality of life improved across validated measures. Multimodal interventions incorporating resistance training and weight-loss strategies demonstrated additive benefit, particularly in obese HFpEF populations. Home-based and tele-rehabilitation programs were feasible and safe. **Conclusion:** Cardiac rehabilitation is an effective and scalable intervention in HFpEF that improves exercise capacity and quality of life. Broader implementation of center- and home-based CR programs may improve access and functional outcomes in this growing heart failure population.

Study Type	Intervention	Key Population	Main Findings	Clinical Impact
RCTs	Aerobic training	Stable HFpEF	↑ Peak VO_2, ↑ 6MWD	Improved exercise capacity
RCTs	Aerobic + Resistance	HFpEF (mixed)	↑ Functional performance, ↑ strength	Better physical function
RCTs	Exercise + Weight Loss	Obese HFpEF	↑ Peak VO_2, ↓ weight, ↑ QoL	Synergistic benefit
Cohort Studies	Home-based rehab	Older HFpEF	Feasible, safe	Expands access
Meta-analyses	Mixed interventions	HFpEF	↑ Exercise capacity, ↑ QoL	Consistent benefit
Guidelines	CR programs	Chronic HF (incl. HFpEF)	Recommended in stable patients	Supports implementation



Session Title:	**Friday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	LATE RIGHT-SIDED HEART FAILURE AND MULTIORGAN DYSFUNCTION AFTER REPAIR OF LUTEMBACHER SYNDROME
Author Block:	Luis Alfredo Acevedo Soto, Hector J. Martinez-Gonzalez, Christian O. Camacho Ramirez, Kimberly Pagan, Marangely Gonzalez-Mercado, Milton Carrero-Quinones, Mayaguez Medical Center, Mayaguez, PR, USA
Abstract Body:	**Background:** Lutembacher Syndrome is a rare congenital condition characterized by the coexistence of atrial septal defect and mitral stenosis. Although surgical correction improves survival, persistent hemodynamic remodeling may lead to progressive ventricular dysfunction, valvular disease, and advanced heart failure years after repair. **Case:** A 48-year-old male with repaired Lutembacher syndrome status post mechanical mitral valve replacement during childhood, heart failure with reduced ejection fraction with implantable cardioverter-defibrillator placement, chronic kidney disease, and hypertension presented with progressive dyspnea and abdominal distension. Physical examination demonstrated elevated jugular venous pressure and tense ascites. Chest radiography revealed cardiomegaly with pulmonary venous congestion, while abdominal ultrasound demonstrated large-volume ascites and hepatic venous dilation consistent with congestive hepatopathy. Transthoracic echocardiography demonstrated severely reduced left ventricular ejection fraction (<20%), restrictive filling physiology, severely enlarged right ventricle with reduced systolic function, severe functional tricuspid regurgitation, biatrial enlargement, and moderately elevated pulmonary artery systolic pressure. The mechanical mitral valve demonstrated normal function. Laboratory studies were notable for acute kidney injury and acute liver failure. **Decision-making:** The presentation was attributed to advanced biventricular failure with predominant right-sided congestion driven by severe secondary tricuspid regurgitation and chronic ventricular remodeling. Multidisciplinary evaluation supported cardiohepatorenal syndrome secondary to advanced heart failure. Management focused on therapeutic paracentesis and carefully

titrated diuretic therapy with symptomatic improvement.
Conclusion: This presentation emphasizes the importance of long-term surveillance in repaired congenital heart disease, where progressive valvular remodeling and right ventricular dysfunction may culminate in advanced heart failure and multiorgan dysfunction decades after surgical correction.

Session Title:	**Friday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	GLP-1 RECEPTOR AGONISTS REDEFINING CARDIOMETABOLIC HEART FAILURE: DIVERGENT EFFECTS IN HFPEF AND HFREF
Author Block:	Diego Aguirre Villegas, SR, Jorge Massu Noriega, Monica Isabella Palancares Ochoa, Paulina Provencio Lameiras, Orly Braverman Habif, Andres Kleiman Abadi, Carlos Manuel Leyva López, Jose Luis Leiva Pons, Instituto Nacional de Cardiología Ignacio Chávez, Ciudad de México, Mexico, Universidad Anáhuac México, Huixquilucan, Mexico
Abstract Body:	**Background:** Heart failure with preserved ejection fraction (HFpEF), often linked to obesity and T2DM, represents nearly 50% of HF cases. While GLP-1 show cardiometabolic benefits, their impact across HF phenotypes remains unclear. We evaluated GLP-1 effects in HFpEF vs. HFrEF. **Methods:** Systematic review of PubMed, Scopus, and Google Scholar (2016-2026). We included RCTs and observational studies assessing HF hospitalization, cardiovascular (CV) mortality, MACE, functional capacity, and quality of life. Benefits and limitations compared between HFpEF and HFrEF. **Results:** 16 studies (>78,000 patients) were included; HFpEF, semaglutide significantly improved symptoms, functional status (KCCQ, 6MWD), and weight loss. Observational data showed reductions in HF hospitalizations and mortality, in obese/T2DM patients. Tirzepatide lowered HF exacerbation and mortality risk (HR 0.52; p<0.001). Combined GLP-1/SGLT2i therapy showed additive benefits. Compared to SGLT2i alone, GLP-1 therapies reduced CV events (HR 0.71; p<0.001), hospitalizations (HR 0.74; p<0.001), and composite mortality/hospitalization (HR 0.78; p<0.0001). Conversely, HFrEF evidence was limited and inconsistent, with largely neutral results. **Conclusion:** GLP-1 offer consistent clinical benefits in HFpEF, reducing HF related events and improving quality of life, especially obesity/T2DM phenotypes. Findings don ´t support similar benefits in HFrEF. GLP-1 emerge as a promising phenotype directed therapy for HFpEF.

Table 1. Characteristics and main findings of the included studies

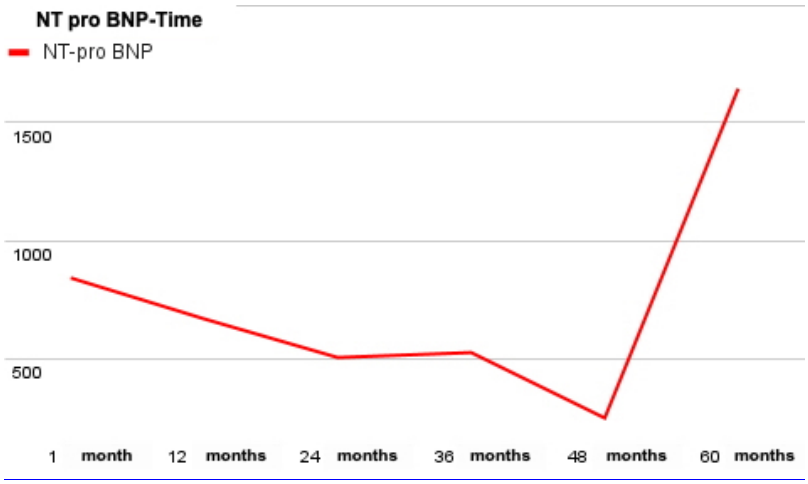
Randomized Controlled Trials (RCT)

Author/Year	Design	Population (HF Type)	N Interv / N Control	Intervention	Control	Follow-up (months)	Primary Result (↑ ↓ = NS)	Study Conclusion	Quality (RoB/NOS)
Kosiborod (2023)	RCT	HFpEF + Obesity	263 / 266	Semaglutide 2.4 mg	Placebo	12	↑ KCCQ-CSS (+7.8 pts; p<0.001); ↓ body weight (-10.7%; p<0.001)	Semaglutide improved symptoms, physical limitations, and significantly reduced body weight in patients with HFpEF and obesity.	Low risk
Kosiborod (2024)	RCT	HFpEF + T2DM + Obesity	310 / 306	Semaglutide 2.4 mg	Placebo	12	↑ KCCQ-CSS (+7.3 pts; p<0.001); ↓ body weight (-6.4%; p<0.001)	Semaglutide improved symptoms, functional status, and reduced body weight in HFpEF associated with obesity and T2DM.	Low risk
Jorsal (2017)	RCT	HFrEF (LVEF ≤45%)	122 / 119	Liraglutide 1.8 mg	Placebo	6	↔ LVEF (-0.8%; p=0.24); ↑ heart rate; ↑ serious cardiac events	Liraglutide did not improve LVEF in HFrEF and was associated with possible cardiovascular safety signals.	Low risk
Margulies (2016)	RCT	HFrEF (LVEF ≤40%)	154 / 146	Liraglutide 1.8 mg	Placebo	6	↔ Clinical stability (OR 1.3; p=0.31)	Liraglutide did not improve clinical stability in patients hospitalized for HFrEF.	Low risk

Observational Studies

Author/Year	Design	Population (HF Type)	N Interv / N Control	Intervention	Control	Follow-up (months)	Primary Result (↑ ↓ = NS)	Study Conclusion	NOS
Monzo (2026)	Cohort (PSM)	HFpEF + Obesity	1258 / 1258	Tirzepatide	Semaglutide	6	↔ CV/HF events (HR 1.14; p=0.286)	Tirzepatide and semaglutide showed similar clinical results in patients with HFpEF and obesity.	High quality (9/9)
Wu (2025)	Cohort (PSM)	HFpEF	7077 / 7077	Tirzepatide	No Tirzepatide	12	↓ HF exacerbation / All-cause mortality (HR 0.52; 95% CI 0.42–0.63; p<0.001)	Tirzepatide was associated with a lower risk of HF exacerbation and all-cause mortality in HFpEF patients.	High quality (8/9)
Chen (2025)	Cohort (PSM)	HF + ASCVD	5272 / 5272	GLP-1 RA + SGLT2i	SGLT2i	12	↓ Mortality/Hospitalization (HR 0.78; 95% CI 0.74–0.83; p<0.0001)	GLP-1 RA + SGLT2i reduced mortality and hospitalization at one year in patients with HF and ASCVD.	High quality (7/9)
Li (2025)	Cohort (PSM)	HFpEF + DM	2177 / 2177	GLP-1 RA	SGLT2i	36	↓ CV/HF events vs SGLT2i (HR 0.71; p<0.001)	GLP-1 RA showed greater cardiovascular protection than SGLT2i in patients with T2DM and HFpEF.	High quality (8/9)
Sardu (2025)	Prosp. Obs.	T2DM + CRTd	575 / 1682	GLP-1 RA + SGLT2i	Mono therapies	12	↑ CRT response (66.3% vs 59%; p=0.014) / ↓ HF hospitalization (15.7% vs 24%; p=0.001)	GLP-1 RA + SGLT2i improved CRT response and reduced HF hospitalizations in patients with T2DM.	High quality (7/9)
Trenas (2025)	Prosp. Obs.	HFpEF + T2DM + Obesity	188 / 188	Semaglutide	No GLP-1 RA	18	↑ KCCQ (OR 2.92; IC95% 1.45–4.90) / ↓ Peso (-9.5 vs -2.0 kg)	Semaglutide improved health status and promoted greater weight loss in patients with HFpEF, T2DM, and obesity.	High quality (8/9)
Ibrahim (2025)	Cohort (PSM)	HFpEF + Obesity	2747 / 2747	GLP-1 RA	Bariatric Surgery	31	↓ HF events (HR 0.78) / ↓ Hospitalization (HR 0.62); p<0.001	GLP-1 RA was associated with better clinical outcomes than bariatric surgery in patients with HFpEF and obesity.	High quality (9/9)
Khatke (2025)	Cohort (PSM)	HFpEF + T2DM (Non-obese)	42495 / 42495	GLP-1 RA	No GLP-1 RA	12	↓ HF exacerbation (HR 0.60) / ↓ Hospitalization or ER visits (HR 0.67)	GLP-1 RA was associated with lower risk of CV events and HF exacerbations in non-obese patients with T2DM and HFpEF.	High quality (8/9)
Patel (2024)	Cohort (PSM)	HFpEF + T2DM + Obesity	7044 / 7044	GLP-1 RA + SGLT2i	SGLT2i alone	12	↓ HF exacerbation (HR 0.62) / ↓ Hospitalization or ER visits (HR 0.74); p<0.001	Adding GLP-1 RA to SGLT2i reduced HF exacerbations and hospitalizations in patients with T2DM and HFpEF.	High quality (8/9)
Wallner (2024)	Cohort (PSM)	HF + T2DM	706 / 706	GLP-1 RA (Lira/Sema)	No GLP-1 RA	19	NS HHF/CV Death (HR 0.84) / ↓ MACE (HR 0.64; p=0.001)	GLP-1 RA was associated with lower MACE risk and higher survival, without significant reduction of the HHF/CV mortality composite.	High quality (9/9)
Rehman (2024)	Retro. Cohort	HFpEF + Obesity	104 / 214	Semaglutide 2.4 mg	Placebo	12	↓ Weight (-2.9%) / ↑ 6-MWT (+15.1 m)	Semaglutide was associated with improvement in weight, functional capacity, and symptoms in patients with HFpEF and obesity.	High quality (7/9)
Pérez-Velasco (2024)	Cohort (PSM)	HFrEF + T2DM	122 / 122	Weekly Semaglutide	No GLP-1 RA	12	↓ HF events (OR 0.82) / ↓ HF hospitalization (HR 0.84); p<0.05	Weekly semaglutide was associated with lower risk of HF events and hospitalizations in patients with T2DM and HFrEF.	High quality (9/9)

Session Title:	**Friday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	MOSAICISM IN A MAN WITH X-LINKED CARDIOMYOPATHY: AN ECCENTRIC CASE
Author Block:	Anderson David Mesa Rojo, Edward Cáceres, Angel Garcia, Nicolas Rodriguez, Department of Internal Medicine, San Ignacio University Hospital, Bogotá, Colombia, Department of Cardiology, San Ignacio University Hospital, Bogotá, Colombia
Abstract Body:	**Background:** Genetic factors cause <30% of dilated cardiomyopathy (DCM). We present a 48-year-old male from Colombia with severe X-linked DCM due to a somatic mosaic *DMD* variant and a concurrent *MYBPC3* VUS. **Methods:** The patient presented with 15 days of fatigue, NYHA III dyspnea, and chest pain. BNP was elevated; chest X-ray showed pulmonary cephalization. ECG showed LVH. TTE/cMRI revealed biventricular failure: LVEF 10-15%, dilated LV, Grade II diastolic dysfunction, reduced TAPSE, and moderate-to-severe MR/TR. Ischemic, arrhythmic, and Chagas etiologies were ruled out. NGS showed a heterozygous *DMD* variant (indicating somatic mosaicism in this male) and a *MYBPC3* VUS. EMG/NCS were normal. Despite GDMT and an ICD, the patient had two VT episodes and a 12-point LVEF decline. Colombia's social security barriers prevented biopsies and tissue allelic quantification. **Results:** Global cases of *DMD* somatic mosaicism include a 22-year-old Japanese (mixed cardiac fibers), a 20-year-old African American (50% blood/20% muscle mutation), a 26-year-old Spaniard (isolated DCM, 30% muscle mutation), and a 58-year-old Portuguese (onset age 44, 70% mutant X). NGS is vital to identify mosaicism early. **Conclusion:** Identifying somatic mosaicism via NGS is crucial to assess cardiac stress vulnerability and initiate early protection. Regional healthcare barriers can limit crucial tissue-specific genetic quantification.

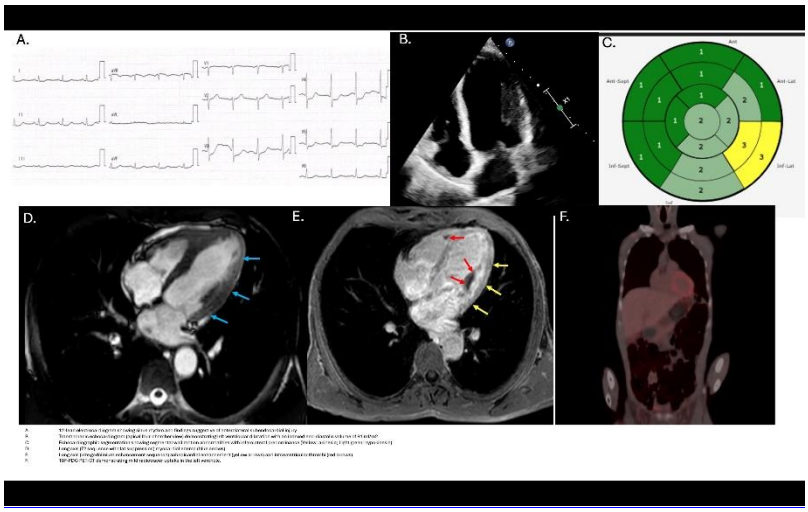

NT pro BNP-Time
NT-pro BNP
1500
1000
500
1 month
12 months
24 months
36 months
48 months
60 months

Session Title:	**Friday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	PREVALENCIA Y EVOLUCIÓN TEMPRANA DEL FORAMEN OVALADO PERMANENTE EN NEONATOS: UNA REVISIÓN SISTEMÁTICA CON SÍNTESIS NARRATIVA
Author Block:	Samuel Alejandro Lucano Tello, SR, Sheyla Johanna Hernandez Del Vecchio, Luisa Fernanda Osorio Ojeda, Universidad Libre Seccional Cali, Santiago de Cali, Colombia
Abstract Body:	**Background:** Patent foramen ovale is a frequent interatrial communication in neonates and is usually considered a benign transitional finding, although it may have clinical relevance in selected contexts. This study aimed to determine the prevalence of patent foramen ovale diagnosed by echocardiography in neonates and to describe its early evolution and associated findings. **Methods:** A systematic review with narrative synthesis was conducted in PubMed. Observational studies evaluating neonates aged 0 to 28 days with echocardiographic diagnosis of patent foramen ovale were included. Six studies with different neonatal populations, including healthy newborns, preterm infants, and infants at higher clinical risk, were analyzed **Results:** Patent foramen ovale showed high prevalence in studies based on systematic echocardiographic screening, reaching approximately 70% to 80% in healthy neonates, whereas lower frequencies were reported in population registries. Small defects, especially those measuring less than 3 mm, usually remained stable or closed spontaneously during follow-up. Larger defects tended to increase in size initially, although subsequent spontaneous closure was reported when a flap valve was present. Higher frequency was observed in association with prematurity, low birth weight, and maternal diabetes. Differences across studies were influenced by diagnostic criteria, population characteristics, and timing of echocardiographic evaluation. **Conclusion:** Patent foramen ovale is common in neonates and, in most cases, represents a transient physiological finding related to postnatal hemodynamic adaptation. A structured echocardiographic assessment and selective follow-

up may help distinguish benign transitional variants from clinically relevant pathology.

Session Title:	**Friday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	THE MYOCARDIAL INFARCTION IMPOSTOR: PARANEOPLASTIC EOSINOPHILIC MYOCARDITIS IN T-CELL LYMPHOMA
Author Block:	Jose B. Bacca, Juan Pablo Cardenas, Puentes Jose, Natalia Figueroa-Aguirre, Andrea García Olarte, Juana Figueroa-Aguirre, Juan M. Vasquez, DANIEL ISAZA, SR, Fundacion Cardioinfantil - La Cardio, Bogotá, Colombia
Abstract Body:	**Background:** Eosinophilic myocarditis (EM) can mimic acute coronary syndrome (ACS). It is a rare paraneoplastic phenomenon associated with cutaneous T-cell lymphoma (CTCL). **Case:** A 64-year-old male with weight loss and skin lesions presented with chest pain. ECG showed ST-segment depression (V5-V6) and positive Troponin I. Coronary angiography ruled out obstructive disease. Labs revealed hyperleukocytosis with hypereosinophilia and elevated proBNP. Cardiac MRI (CMR) showed myocardial edema, subendocardial late gadolinium enhancement, and a right ventricular apical thrombus, confirming thrombotic EM. PET/CT demonstrated diffuse myocardial hypermetabolism. Skin and bone marrow biopsies diagnosed Stage IV Mycosis Fungoides, identifying the lymphoma as the driver of the hypereosinophilic syndrome. **Decision-making:** EM progresses from acute necrosis to thrombotic and fibrotic stages. This case illustrates the thrombotic phase, where eosinophil degranulation causes endocardial damage and a hypercoagulable state. CMR and PET/CT are essential non-invasive diagnostic tools when coronary arteries are normal. Methylprednisolone pulses achieved rapid clinical remission. **Conclusion:** EM is a critical CTCL complication. Advanced imaging enables

early diagnosis and timely immunosuppression.



Session Title:	**Friday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	PROGNOSTIC IMPACT OF IRON DEFICIENCY ON 5 YEAR MORTALITY IN CHRONIC HEART FAILURE
Author Block:	ANA MARIA GARCIA JAGUA, JUAN FERNANDO CARVAJAL ESTUPIÑAN, MARIO ALEJANDRO BUITRAGO GOMEZ, ANGELA MARIA PEÑA CASTELLANOS, MIGUEL ENRIQUE OCHOA VERA, MARIA LUCRECIA LUNA GONZALEZ, Universidad Autónoma de Bucaramanga, Bucaramanga, Colombia, Instituto del Corazón de Bucaramanga, Colombia
Abstract Body:	**Background:** Iron deficiency (ID) is highly prevalent in patients with heart failure (HF) and has been associated with reduced functional capacity, poorer quality of life, and adverse clinical outcomes. However, the independent impact of ID on long-term mortality remains uncertain, particularly after adjustment for disease severity and associated comorbidities. **Methods:** We analyzed a retrospective cohort of 414 patients with chronic HF evaluated between 2015 and 2019 at a specialized cardiology center, with 5-year follow-up. ID was defined according to ESC criteria as ferritin <100 ng/mL, or ferritin 100-299 ng/mL with transferrin saturation <20%. Kaplan-Meier survival curves and multivariable Cox proportional hazards regression models were used to evaluate associations with all-cause and cardiovascular mortality. **Results:** Median age was 68 years (IQR 60-77), and 56.3% were men. ID prevalence was 39.6%, including absolute deficiency in 30.9% and functional deficiency in 8.5%. At 5 years, overall mortality was 38.2%, with 59.5% corresponding to cardiovascular deaths. Estimated overall survival at 5 years was 62%, while cardiovascular survival reached 75%. Patients with ID were older and more frequently female, with a higher prevalence of advanced NYHA functional class. After multivariable adjustment, ID was not independently associated with all-cause mortality (HR 1.02; 95% CI 0.68-1.52) or cardiovascular mortality (HR 1.08; 95% CI 0.64-1.82). In contrast, anemia (HR 1.49; 95% CI 1.06-2.11), NYHA III functional class (HR 2.09; 95% CI 1.07-4.09), peripheral arterial disease (HR 3.48; 95% CI 1.69-7.16), diuretic use (HR 2.26),

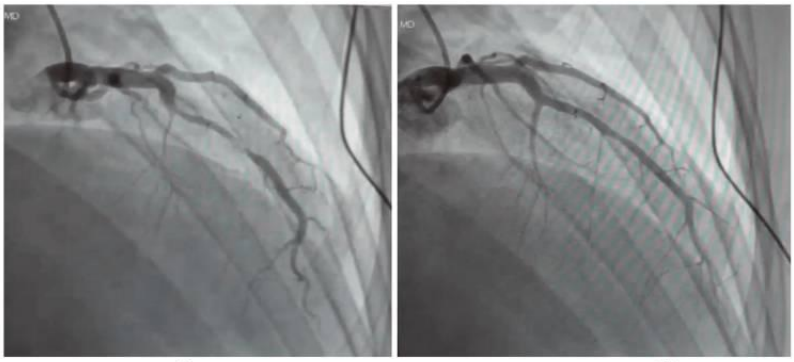
and digoxin use (HR 2.11) were independently associated with mortality.
Conclusion: In this cohort of patients with chronic HF, ID was highly prevalent but was not an independent predictor of long-term mortality after multivariable adjustment. Mortality was primarily associated with markers of disease severity, anemia, and cardiovascular comorbidity.

Session Title:	**Friday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	ETIOLOGY SPECIFIC 5 YEAR SURVIVAL IN CHRONIC HEART FAILURE: A COLOMBIAN COHORT
Author Block:	ANA MARIA GARCIA JAGUA, MARIO ALEJANDRO BUITRAGO GOMEZ, JUAN FERNANDO CARVAJAL ESTUPIÑAN, ANGELA MARIA PEÑA CASTELLANOS, MIGUEL ENRIQUE OCHOA VERA, MARIA LUCRECIA LUNA GONZALEZ, Universidad Autónoma de Bucaramanga, Bucaramanga, Colombia, Instituto del Corazón de Bucaramanga, Colombia
Abstract Body:	**Background:** Heart failure (HF) prognosis may differ according to underlying etiology, particularly in Latin America, where ischemic and Chagas-related cardiomyopathy coexist. However, long-term survival data from Colombian cohorts remain limited. **Methods:** We analyzed a retrospective cohort of 414 adults with chronic HF evaluated at a specialized cardiology center in northeastern Colombia between 2015 and 2019, with 5-year follow-up. HF etiology was classified as ischemic, Chagas-related, or non-ischemic non-Chagas. Survival was estimated using Kaplan-Meier curves, and mortality patterns were compared across etiologic groups. **Results:** The most frequent etiologies were ischemic cardiomyopathy (35.5%), idiopathic cardiomyopathy (22.2%), Chagas disease (13.8%), valvular disease (12.8%), hypertensive cardiomyopathy (5.8%), and other causes (5.1%). At 5 years, all-cause mortality was 38.2%. Estimated overall survival was lowest in Chagas-related HF, approximately 57%, compared with 61% in ischemic HF and 64% in non-ischemic non-Chagas HF. For cardiovascular mortality, Chagas-related HF also showed the steepest decline, with an estimated 5-year cardiovascular survival of approximately 68%, compared with 74% in ischemic HF and 76% in other etiologies. Differences did not reach statistical significance. **Conclusion:** In this Colombian HF cohort, Chagas-related cardiomyopathy showed a numerically worse 5-year survival profile, although differences were

not statistically significant. These findings support the need for larger Latin American studies evaluating etiology-specific risk stratification in chronic HF.

Session Title:	**Friday Morning Poster Session**
Topic 1:	Interventions and Ischemic Heart Diseases
Publishing Title:	UNSTABLE ANGINA WITH ZERO CALCIUM SCORE: MYOCARDIAL BRIDGING AS AN UNDERRECOGNIZED CAUSE OF ISCHEMIA
Author Block:	Alvaro Taveras, Perla Garcia, Nicole Baldera-Rodriguez, katherine ayleen minaya, Omarlyn Ruiz, Christopher Enrique Flores, Lissette Haydee García-Mena, Rogers de Jesus Echavarria Uceta, Eliscer Guzman, Cardiology Unlimited, Tenares, Dominican Republic, UConn Health, Farmington, CT, USA
Abstract Body:	**Background:** A zero coronary artery calcium (CAC) score is often associated with low atherosclerotic risk; however, non-atherosclerotic causes of ischemia may still be clinically significant. **Case:** A 54-year-old woman presented with typical chest pain concerning for unstable angina. ECG and biomarkers were unremarkable. CAC score was 0. Due to persistent symptoms, a nuclear stress test demonstrated severe perfusion defects in multiple territories, including regions not supplied by the LAD. Coronary angiography revealed myocardial bridging of the mid-LAD with dynamic systolic compression. **Decision-making:** Persistent angina despite CAC=0 prompted invasive evaluation, confirming myocardial bridging. Beta-blocker therapy (metoprolol) was initiated to reduce heart rate and systolic compression, resulting in symptom improvement. Nitrates were avoided due to risk of worsening systolic narrowing. Calcium channel blockers were considered as adjunct therapy. Revascularization strategies, including stenting or surgical myotomy, were deferred given clinical stability. **Conclusion:** Myocardial bridging is an underrecognized cause of ischemia in patients with CAC=0. Recognition of this entity is essential to guide appropriate

medical therapy and avoid misclassification of low-risk patients.



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Session Title:	**Friday Morning Poster Session**
Topic 1:	Interventions and Ischemic Heart Diseases
Publishing Title:	FRAILTY AS A STRONG PREDICTOR OF IN-HOSPITAL COMPLICATIONS AND MORTALITY IN ELDERLY PATIENTS WITH ACUTE CORONARY SYNDROME: INSIGHTS FROM HOSPITAL ROOSEVELT GUATEMALA
Author Block:	Jose Emmauel Flores Solis, Pablo Esteban Perez Pinetta, RODOLFO Gutiérrez, Gustavo Sotomora, Hospital Roosevelt, Guatemala, GA, Guatemala
Abstract Body:	**Background:** Frailty is an emerging predictor of adverse outcomes in acute coronary syndrome (ACS), yet data from Latin America remain limited. **Methods:** A prospective, analytical, cross-sectional study was conducted at Hospital Roosevelt, Guatemala, including patients ≥65 years with acute coronary syndrome (ACS) (n=80). Frailty was assessed using the FRAIL scale. Clinical characteristics, in-hospital management, and complications were analyzed using descriptive and inferential statistics. **Results:** Frailty was present in 23.8% (frail) and 30% (pre-frail). Frail patients were older (p=0.019), more frequently female (p=0.005), and had lower BMI (p<0.001). They showed higher creatinine (1.35 vs 1.06 mg/dL, p=0.045) and BUN (33.7 vs 16.9 mg/dL, p=0.007), more complex coronary disease (p=0.04), and received less reperfusion (thrombolysis and catheterization, p<0.05). Frail patients required more oxygen (p=0.025) and vasopressors (p=0.028), developed more total complications (p=0.042) particularly septic shock (p=0.022) and bleeding (p=0.002) and had longer median hospital stay (7 [5-10] vs 5 [3-7] days, p=0.017). In-hospital mortality was markedly higher in frail patients (50% vs 16.7% in robust, p=0.033) **Conclusion:** Frailty was strongly associated with higher rates of in-hospital complications, prolonged stay, and mortality in elderly ACS patients, despite similar comorbidity burden.

PANEL A

Sociodemographic Characteristics by Frailty Status

	Robust		Pre-frail		Frail		
	f	%	*f*	%	*f*	%	P value
Age groups							
60–64 years	13	61.9%	7	33.3%	1	4.8%	
65–69 years	7	38.9%	5	27.8%	6	33.3%	
70–74 years	11	47.8%	7	30.4%	5	21.7%	
75–79 years	6	60.0%	3	30.0%	1	10.0%	
80–84 years	0	0.0%	2	40.0%	3	60.0%	
85–89 years	0	0.0%	0	0.0%	3	100.0%	0.019
Sex							
Female	8	25.3%	12	37.5%	12	37.5%	
Normal	9	27.3%	8	24.2%	7	48.5%	0.005
Overweight	23	60.5%	12	31.6%	3	7.9%	
Class I Obesity	5	55.6%	4	44.4%	0	0.0%	<.001

PANEL B

Complications by Frailty Status

	Robust		Pre-frail		Frail		P
	f	%	*f*	%	*f*	%	value
Number of complications							
None	22	59.5%	8	21.6%	7	18.9%	
1–3	12	40.0%	13	43.3%	5	16.7%	
4–6	2	25.0%	2	40.5%	2	40.0%	0.042
Type of complications							
Heart failure	11	47.8%	7	30.4%	5	21.7%	0.999
Acute pulmonary edema	5	50.0%	3	30.0%	2	20.0%	0.999
Ventricular aneurysm	1	100.0%	0	0.0%	0	0.0%	0.999
Papillary muscle rupture	0	0.0%	0	0.0%	1	100.0%	0.238
Ventricular septal defect	1	25.0%	2	50.0%	1	25.0%	0.588
Cardiogenic shock	3	27.3%	3	27.3%	5	45.5%	0.195
Bleeding	0	0.0%	2	28.6%	5	71.4%	0.002

PANEL C

Length of stay by Frailty Status

	Robust (n = 37)	Pre-frail (n = 24)	Frail (n = 19)	P value
	Median (Q1,Q3)	*Median (Q1,Q3)*	*Median (Q1,Q3)*	
Length of stay	5 (3–7)	5.5 (4–7)	7 (5–10)	0.017

PANEL D

In-hospital mortality and cause of death by Frailty Status

	Robust		Pre-frail		Frail		P
	f	%	*f*	%	*f*	%	value
In- mortality	2	16.7%	4	33.3%	6	50.0%	0.033
hospital Cause of death							
Respiratory failure	0	0.0%	1	50.0%	1	50.0%	
Ventricular tachycardia	1	100.0%	0	0.0%	0	0.0%	
Subarachnoid hemorrhage	0	0.0%	0	0.0%	1	100.0%	
Respiratory failure and shock	0	0.0%	1	50.0%	1	50.0%	
Septic shock	0	0.0%	1	33.3%	2	66.7%	
Cardiogenic shock	0	0.0%	1	100.0%	0	0.0%	
Atrial fibrillation	1	100.0%	0	0.0%	0	0.0%	
Diabetic ketoacidosis	0	0.0%	0	0.0%	1	100.0%	0.913

Session Title:	**Friday Morning Poster Session**
Topic 1:	Interventions and Ischemic Heart Diseases
Publishing Title:	SAFETY OF EARLY DISCHARGE AFTER STEMI: REAL-WORLD PROSPECTIVE EVIDENCE FROM LATIN AMERICA
Author Block:	Adrian Sotelo, Marco Antonio Ponce-Gallegos, Jorge A. Ortega-Hernández, Francisco Bolaños Prats, MARTIN ESQUIVEL PELAYO, Daniel Paulino González, Rodrigo Gopar-Nieto, Alexandra Arias-Mendoza, Instituto Nacional de Cardiologia Ignacio Chavez, Ciudad de Mexico, Mexico
Abstract Body:	**Background:** Early discharge after ST-segment elevation myocardial infarction (STEMI) may optimize healthcare resource utilization, but evidence supporting its safety in Latin America remains limited. **Methods:** We conducted a prospective observational study of 515 STEMI patients in 2025. Patients were stratified by length of stay (≤3 vs ≥4 days). The primary endpoint was 90-day MACE (death, reinfarction, or rehospitalization); secondary endpoints were mortality and emergency visits. Multivariable adjustment, inverse probability of treatment weighting (IPTW), and hierarchical win-ratio analyses were performed. **Results:** Patients with longer hospitalization were older, with more chronic kidney disease, lower ejection fraction, higher GRACE scores, and more multivessel disease; reperfusion strategy and ischemic time were similar. At 90 days, MACE and emergency visits were similar. Lower mortality in the early discharge group likely reflected baseline risk differences. After adjustment, early discharge was not associated with higher MACE (OR 0.66; 95% CI 0.26-1.68) or emergency visits (OR 1.07; 95% CI 0.64-1.80). IPTW and win-ratio analyses were consistent. **Conclusion:** Among selected patients with STEMI in routine clinical practice, early discharge was not associated with increased 90-day adverse outcomes, supporting its feasibility as a management strategy. **$$MISSING OR BAD GRAPHIC SPECIFICATION (F25E4FC2-3988-4B07-8D41-A5A2353B628E) $$** **$$MISSING OR BAD GRAPHIC SPECIFICATION (313D84FA-4587-43CF-BBEE-**

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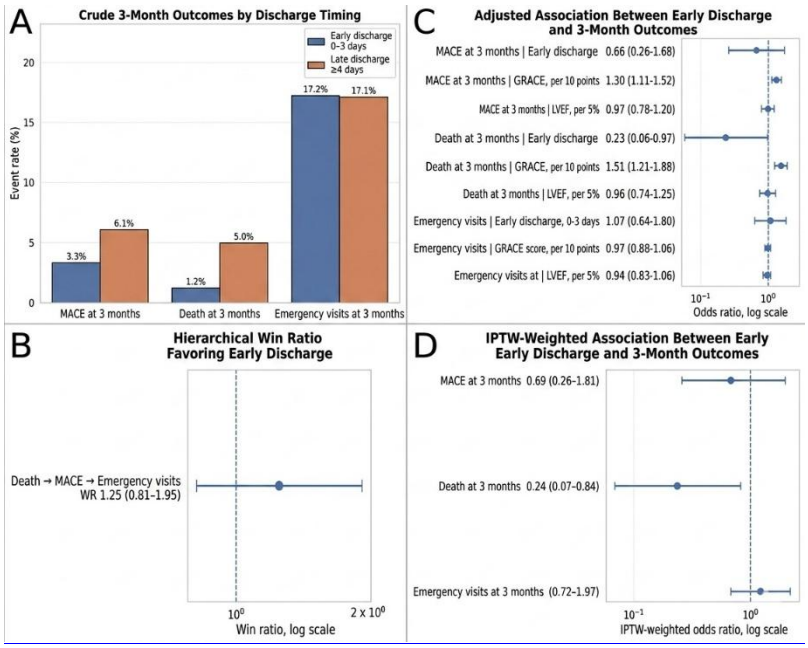


Session Title:	**Friday Morning Poster Session**
Topic 1:	Interventions and Ischemic Heart Diseases
Publishing Title:	TIMING OF PERCUTANEOUS CORONARY INTERVENTION IN LATE PRESENTING MYOCARDIAL INFARCTION: A SYSTEMATIC REVIEW OF EARLY VS DELAYED STRATEGIES
Author Block:	Carlos Umaña, Loreanna Y. Prada, Diana Gomez Sanchez, Alan J. Nava, Valentina Manosalva Chacon, Alejandra Diosdado Sánchez, Iván C. Escalera Rosso, Catherine F. del Cid Torres, Inés Rodríguez Becker, Jessica B. Bocardo Galván, José M. Sánchez Ramírez, Mariana Olvera, Jose Flores Valdés, Universidad Autonoma de Guadalajara, Guadalajara, Mexico
Abstract Body:	**Background:** Primary percutaneous coronary intervention (PCI) is the preferred reperfusion strategy for patients with ST-segment elevation myocardial infarction (STEMI) within 12 hours of symptom onset; however, many patients miss this window. In these cases, delayed PCI has emerged as an alternative, although the optimal timing for deferred intervention remains unclear. The objective of this review is to compare long-term clinical outcomes between early delayed PCI and late deferred PCI strategies in hemodynamically stable STEMI patients who did not undergo timely primary PCI. **Methods:** A systematic review was conducted according to PRISMA 2020 guidelines. Randomized controlled trials and cohort studies evaluating STEMI patients treated with drug-eluting stents beyond 12 hours after symptom onset were included. Early delayed PCI was defined as 3-14 days and late deferred PCI as >14 days. The primary outcome was major adverse cardiovascular events (MACE). Secondary outcomes included mortality, recurrent myocardial infarction, heart failure, and repeat revascularization. Risk of bias was assessed using the Newcastle-Ottawa Scale. The review was registered in the PROSPERO database with number: CRD420261364998 **Results:** Three cohort studies (n=13,383; Wen 2017, Wu 2019, Xue 2021) were included and rated high quality (NOS 8-9/9). In-hospital MACE was similar across groups (0.7-1.1%). At 1 year, PCI at 8-14 days was associated with lower MACE vs 2-7 days (5.6% vs 7.1%; HR 0.769, 95% CI 0.592-0.998) and reduced

repeat revascularization (HR 0.640, 95% CI 0.463-0.883). At 5 years, mortality did not differ between groups (p=0.512). One study showed lower reinfarction with >14 days vs 3-14 days (HR 3.83, 95% CI 1.91-8.82). Overall, results suggest a non-linear relationship, with best outcomes in the 8-14-day window. **Conclusion:** In stable STEMI patients who miss the primary PCI window, delayed PCI appears to be safe and feasible. PCI performed in the second week may provide the best balance of intermediate outcomes, while very late PCI may reduce reinfarction risk. These findings support individualized decision-making and highlight the need for randomized trials to define optimal timing.

Session Title:	**Friday Morning Poster Session**
Topic 1:	Interventions and Ischemic Heart Diseases
Publishing Title:	ACCELERATED ATHEROSCLEROSIS ASSOCIATED WITH NILOTINIB PRESENTING AS CRITICAL LEFT MAIN DISEASE
Author Block:	Rodrigo Antonio Bonilla, Kevin J. Acevedo Gomez, Freddy Javier Medina Santos, Saul Yair Guillot Castillo, Rafael Esparza, Gladis Faustino Maravilla, Centro Medico Nacional "20 de Noviembre" ISSSTE, CIUDAD DE MEXICO, Mexico
Abstract Body:	**Background:** Nilotinib, a second-generation tyrosine kinase inhibitor (TKI), has been associated with accelerated atherosclerosis and ischemic cardiovascular events. Critical left main coronary artery (LMCA) disease is rarely reported **Case:** A 61-year-old man with chronic myeloid leukemia treated with TKIs since 2007, including nilotinib since 2023 after dasatinib-related toxicity, presented with exertional angina. He had no traditional cardiovascular risk factors. Electrocardiogram showed diffuse subendocardial ischemia with ST elevation in aVR. Coronary angiography demonstrated critical bifurcation LMCA stenosis and proximal left anterior descending artery disease. Intravascular ultrasound identified fibrolipidic plaque. Percutaneous coronary intervention with drug-eluting stents was performed successfully. Echocardiography showed preserved left ventricular ejection fraction. Nilotinib was discontinued after cardio-oncology discussion. **Decision-making:** Nilotinib has been associated with endothelial dysfunction and accelerated atherosclerosis, increasing cardiovascular risk even in patients without traditional risk factors. Critical LMCA involvement highlights the importance of cardiovascular surveillance in cardio-oncology patients. **Conclusion:** Critical LMCA disease represents a severe manifestation of nilotinib-associated accelerated atherosclerosis, reinforcing cardiovascular assessment in patients receiving second-generation TKIs.

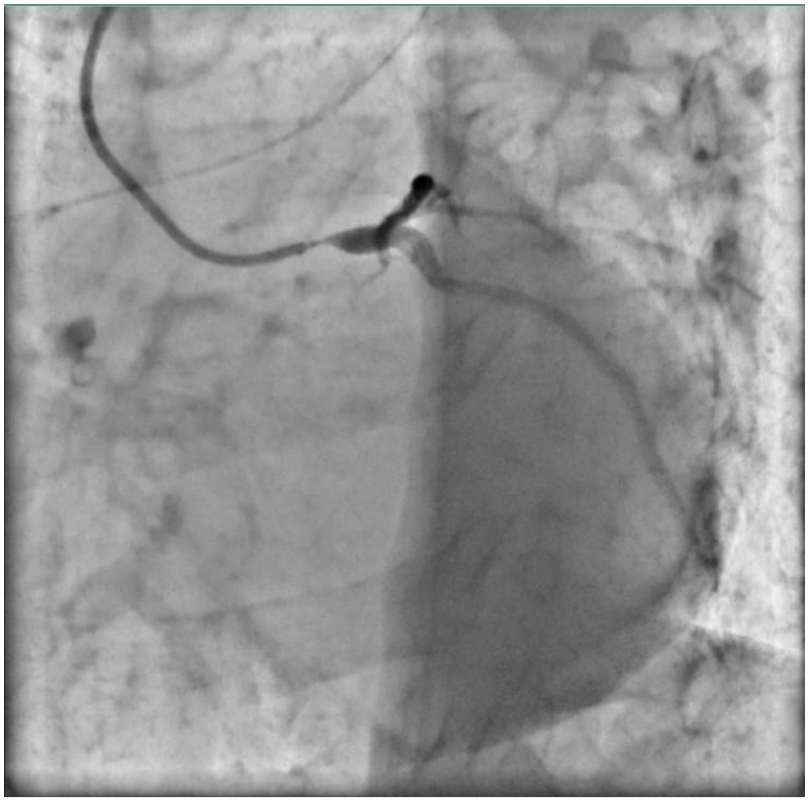
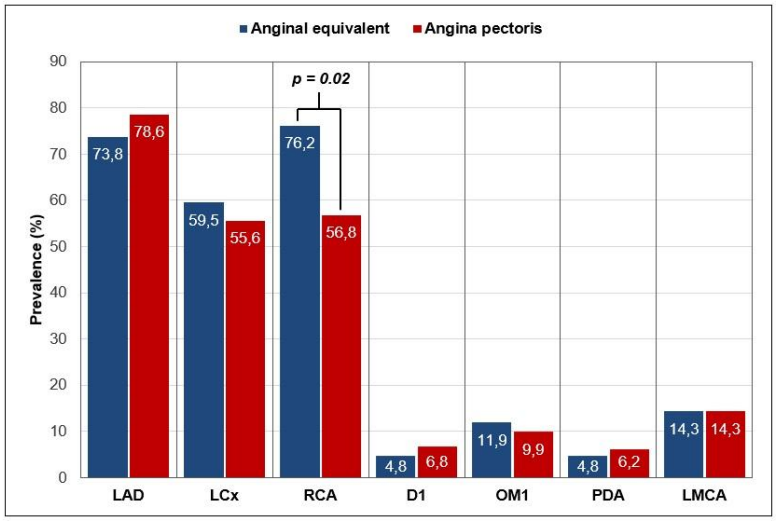


IMAGE 1: Critical LMCA stenosis

Session Title:	**Friday Morning Poster Session**
Topic 1:	Interventions and Ischemic Heart Diseases
Publishing Title:	ANGINAL EQUIVALENTS IDENTIFY A HIGH-RISK CLINICAL-ANGIOGRAPHIC PHENOTYPE IN ACUTE CORONARY SYNDROME
Author Block:	Rafael Guillermo Betancurt Mendoza, Jesús D. Bello Simanca, Loraine Quintana Pájaro, José A. Correa Guerrero, Samuel A. Barreto De La Hoz, Leman Corpus, Andrés F. Arias Mendoza, Santiago R. Quintana Insignares, Ariel Bello Espinoza, Paula A. Sandoval Paez, ESE Hospital Universitario del Caribe, Cartagena, Colombia, Neurodinamia, Cartagena, Colombia
Abstract Body:	**Background:** Patients with acute coronary syndrome (ACS) often present with anginal equivalents. The angiographic features of this presentation remain undercharacterized in Latin America. **Methods:** This cross-sectional study evaluated patients with ACS and obstructive coronary artery disease (CAD) confirmed by angiography at a Colombian hospital. Investigators excluded pregnant women, non-diagnostic angiograms, and Killip class III/IV. Variables were compared between patients presenting with anginal equivalents (dyspnea, nausea, diaphoresis, or extrathoracic pain) and angina pectoris using multivariable logistic regression. **Results:** Among 364 patients, 42 presented with anginal equivalents and 322 with angina. The anginal equivalents group was older (76.2% aged ≥65 years versus 51.2%; $p<0.01$) and had higher Global Registry of Acute Coronary Events (GRACE) scores ≥110 (88.1% versus 65.8%; $p=0.01$). Right coronary artery (RCA) obstruction was more frequent in the equivalents group (76.2% versus 56.8%; $p=0.02$). In multivariable analysis, anginal equivalents were independently associated with RCA obstruction (OR 2.78; 95% CI 1.20 to 6.43) and a GRACE score ≥110 (OR 9.00; 95% CI 2.10 to 38.58).

Figure 1. Association between anginal equivalent and obstructed coronary artery*

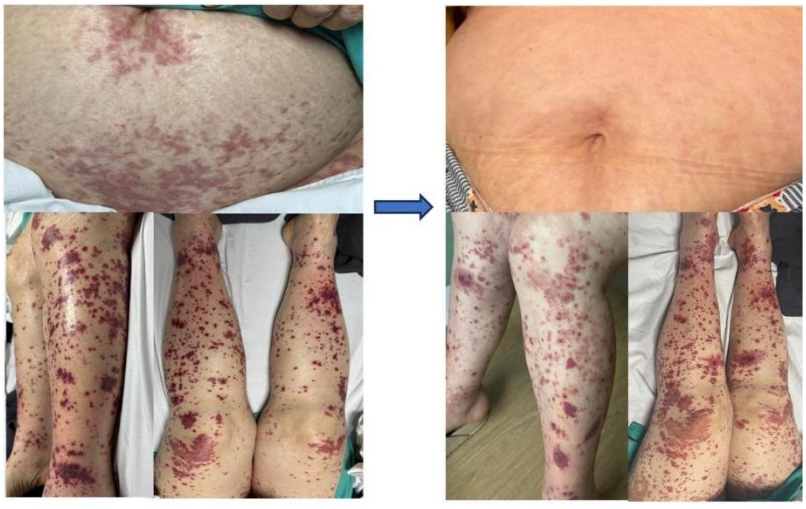


*: Defined as stenosis ≥50% in the LMCA or ≥70% in other coronary vessels.
LAD: left anterior descending; **LCx:** left circumflex; **RCA:** right coronary artery; **D1:** first diagonal; **OM1:** first obtuse marginal; **PDA:** posterior descending artery; **LMCA:** left main coronary artery.

Conclusion: In ACS, anginal equivalents are independently associated with RCA involvement and elevated GRACE scores, identifying a high-risk clinical-angiographic phenotype requiring prioritized stratification.

Session Title:	**Friday Morning Poster Session**
Topic 1:	Interventions and Ischemic Heart Diseases
Publishing Title:	CLOPIDOGREL-ASSOCIATED SMALL VESSEL VASCULITIS IN ACUTE CORONARY SYNDROME: A DIAGNOSTIC AND THERAPEUTIC CHALLENGE
Author Block:	Juanita Velasquez-Ospina, Jorge Alejandro Pamplona-Tobón, Natalia Mejía-Zapata, Santiago Patiño-Giraldo, Maria Clara Gaviria-Aguilar, Jaime Alberto Gomez-Rosero, Universidad CES, Medellín, Colombia
Abstract Body:	**Background:** Clopidogrel, used in acute coronary syndrome (ACS), may rarely trigger type III hypersensitivity reactions such as leukocytoclastic vasculitis (LCV), creating therapeutic challenges **Case:** An 87-year-old woman with atrial fibrillation underwent percutaneous coronary intervention for unstable angina. One month after starting clopidogrel, she developed palpable purpura of the lower extremities without systemic involvement. Clopidogrel-induced LCV was suspected based on temporal association and clinical findings; skin biopsy was deferred due to clear temporary link. Clopidogrel was discontinued and corticosteroids initiated. Antithrombotic therapy was modified to direct oral anticoagulation and aspirin. Lesions resolved within 20 days, with no recurrence at 1-month follow-up **Decision-making:** Clopidogrel-associated LCV is an uncommon complication of antiplatelet therapy. Because hypersensitivity may represent a class effect, switching to another P2Y12 inhibitor carries cross-reactivity risk. Prompt drug withdrawal is essential. In this patient, anticoagulation allowed transition to direct oral anticoagulation plus aspirin, minimizing hypersensitivity recurrence and stent thrombosis risk **Conclusion:** Early recognition of clopidogrel-associated LCV is critical after ACS. Management requires individualized antithrombotic strategies balancing hypersensitivity risk and stent thrombosis prevention when standard P2Y12

inhibition cannot be maintained



Session Title:	**Friday Morning Poster Session**
Topic 1:	Interventions and Ischemic Heart Diseases
Publishing Title:	FACTORS ASSOCIATED WITH CARDIOVASCULAR READMISSION AFTER PERCUTANEOUS CORONARY INTERVENTION FOR ACUTE CORONARY SYNDROME
Author Block:	Mario Buitrago, Javier Ricardo Beltrán, Alejandro Sanchez, Miguel Enrique Ochoa, ANA MARIA GARCIA JAGUA, Mariana Beltran, Universidad Autónoma de Bucaramanga, Bucaramanga, Colombia, Los Comuneros Hospital Universitario de Bucaramanga, Bucaramanga, Colombia

Abstract Body:

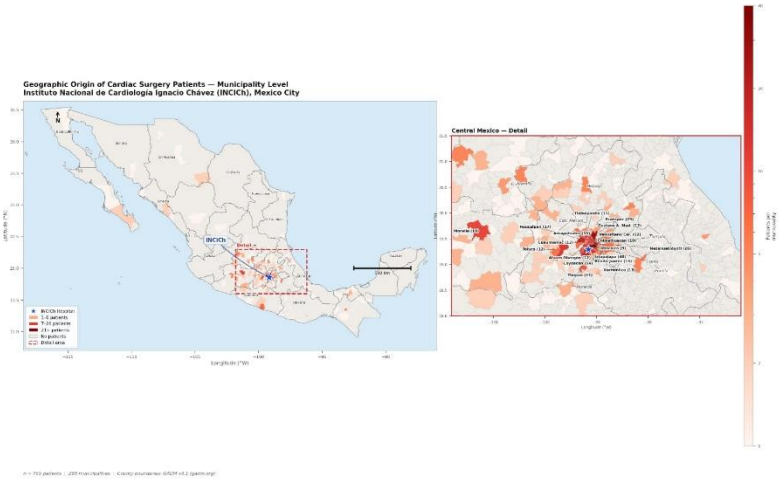
Background: Background: Hospital readmission after percutaneous coronary intervention (PCI) for acute coronary syndrome (ACS) increases morbidity and care costs. Latin American data are scarce and existing risk models do not incorporate angiographic features. We aimed to identify factors associated with cardiovascular readmission within 90 days after PCI for ACS at a Colombian referral center.

Methods: Methods: Single-center ambispective cohort of adults with ACS treated with PCI between January-March 2023 and May-November 2025. The outcome was cardiovascular readmission (recurrent ACS, unplanned revascularization, decompensated heart failure or atrial fibrillation requiring admission) within 90 days post-discharge. Sociodemographic, clinical, biomarker, echocardiographic and angiographic variables were analyzed. Risk Ratios (RR) with 95% confidence intervals were estimated by binomial regression; the final model was chosen by parsimony, biological plausibility and bivariate significance.

Results: Results: 154 patients were included (median age 67.5 years; 66.2% male; 73.1% with hypertension; 49.4% multivessel disease). Cumulative incidence of cardiovascular readmission was 4.5% at 30 days (median 8 days to event) and 9.7% at 90 days (overall median 34 days). In the multivariate model, coronary ectasia (RR 4.67; 95% confidence interval 2.05-10.6; $p<0.001$), admission systolic blood pressure (RR 1.023 per mmHg; $p=0.005$) and intensive care unit length of stay (RR 1.274 per day; $p=0.001$) were independently associated with readmission. Subsidized or special insurance

regime was protective (RR 0.22; p=0.019). Charlson index >3 was not significant.
Conclusion: Conclusion: Coronary ectasia, elevated admission systolic blood pressure and prolonged intensive care unit stay were independently associated with 90-day cardiovascular readmission after PCI for ACS in a Colombian cohort, while subsidized or special insurance was protective. These findings generate hypotheses for tailored secondary prevention and support inclusion of angiographic substrate in future readmission risk models for Latin American populations.

Session Title:	**Friday Morning Poster Session**
Topic 1:	Interventions and Ischemic Heart Diseases
Publishing Title:	REGIONALIZATION OF HEALTHCARE SYSTEMS AND ITS IMPACTS ON OUTCOMES AFTER CARDIAC SURGERY: A SINGLE INSTITUTION STUDY
Author Block:	Saul Favila Lira, Daniel Manzur Sandoval, Rodrigo Gopar-Nieto, Pablo Martínez-Amezcua, Yiyang Cai, Instituto Nacional de Cardiología Ignacio Chávez, Mexico City, Mexico, Johns Hopkins Bloomberg School of Public Health, MD, USA
Abstract Body:	**Background:** Despite the success of specialized care centers, healthcare fragmentation and access barriers persist in Latin America. It remains unclear whether geographical origin impacts postoperative outcomes for cardiac surgery patients at a national referral center. **Methods:** An observational, analytical, retrospective study was conducted on 771 patients from a single center who underwent cardiac surgery between 2022 and 2024. A comparative analysis of clinical, surgical, and sociodemographic outcomes was performed, categorizing the population into eight groups based on their mesoregion of origin. **Results:** Among the intraoperative variables evaluated, the median EuroSCORE II was 2. Aortic valve replacement was the most frequently performed cardiac procedure. No statistically significant differences were found in the occurrence of postoperative complications across mesoregions. Regarding sociodemographic characteristics and follow-up, 14.41% of patients originated from rural areas, and 71.82% were from states with high-specialty hospitals.



Conclusion: Our study confirms that post-surgical outcomes in patients undergoing cardiac surgery are independent of their mesoregion of origin, likely due to the standardization of care processes. Nevertheless, sociodemographic analysis reveals persistent barriers within the national health system, highlighting that most of the population treated at our center lives in vulnerable conditions.

Session Title:	**Friday Morning Poster Session**
Topic 1:	Interventions and Ischemic Heart Diseases
Publishing Title:	ECTASIA INDUCED MYOCARDIAL INFARCTION: PKD1 DRIVEN CORONARY VASCULOPATHY PRESENTING AS ELECTRICAL STORM AND TYPE 2 MI
Author Block:	Loreanna Y. Prada, Habsler Herrera, Daniel C. Namen, Carlos Mogollon, Diana Denisse Garcia, JR, Lempira A. Guevara, Vargas Hospital in Caracas, Caracas, Mexico, UNAM, Internal Medicine, Mexico
Abstract Body:	**Background:** Autosomal dominant polycystic kidney disease (ADPKD) driven by PKD1 mutations compromises vascular integrity globally. Coronary ectasia represents a non-atherosclerotic substrate prone to thrombosis. We present PKD1-driven vasculopathy triggering electrical instability and myocardial infarction without obstructive coronary disease **Case:** A 60 year old male with refractory hypertension (180/110 mmHg), 20 pack-year smoking history, and metabolic syndrome presented with 6 hours of severe chest pain. At admission, he was in electrical storm: six episodes of sustained ventricular tachycardia requiring three 200-joule cardioversions and IV amiodarone. ECG showed inferoposterior ST-elevation. Troponin I 40 ng/mL. Acute kidney injury: creatinine 3.58 mg/dL, eGFR 17.4 mL/min/1.73m^2. Coronary angiography revealed no plaque rupture. Right coronary artery showed severe ectasia (Markis III) with impaired flow (TIMI 2). Echocardiography: LVEF 48%. Genetic testing confirmed heterozygous PKD1 mutation (Sanger sequencing). Bilateral polycystic kidney disease confirmed **Decision-making:** Angiographic findings established Type 2 myocardial infarction secondary to coronary ectasia. PKD1 mutation explained vascular fragility. We shifted from revascularization toward myocardial stabilization and cardiorenal protection. Management: dual antiplatelet therapy (PRECISE-DAPT 32), beta-blockers, amiodarone, strict blood pressure control, and conservative cardiorenal management without intervention **Conclusion:** PKD1 mutations drive global vascular compromise, making coronary ectasia a critical driver of infarction and electrical instability. Coronary phenotyping must extend beyond plaque exclusion

Session Title:	**Friday Morning Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	REAL-WORLD DIAGNOSTIC AND CLINICAL IMPACT OF CORONARY CT ANGIOGRAPHY COMPARED WITH INVASIVE CORONARY ANGIOGRAPHY IN STABLE CHEST PAIN EXPERIENCE AT A HIGH-COMPLEXITY REFERRAL CENTER IN BOGOTÁ, COLOMBIA
Author Block:	Azucena Martinez, Daniel Palacios Astorquiza, Laura Peña, Angel Moreno, Daniela Solarte, Lia Pantoja, Alexandra Porras, Diego Jaramillo, Adriana Torres, Los Cobos Medical Center, BOGOTA D.C., Colombia
Abstract Body:	**Background:** Coronary computed tomography angiography (CCTA) is increasingly used as a first-line strategy for evaluating stable chest pain because of its high negative predictive value and ability to guide downstream invasive testing. However, real-world data from Latin America comparing CCTA findings with invasive coronary angiography (ICA) remain limited. **Methods:** We conducted a retrospective observational study including consecutive adults undergoing CCTA for stable chest pain or suspected coronary artery disease at a high-complexity referral center in Bogotá, Colombia. Demographic data, cardiovascular risk factors, CCTA findings, subsequent ICA, management decisions, and clinical outcomes were collected from electronic records. **Results:** A total of 336 patients were included (mean age 60.2 years, 50.2% male), predominantly evaluated in the outpatient setting (79.6%) with low pre-test probability of coronary artery disease (56.4%). The main indication for CCTA was evaluation of asymptomatic individuals (35.5%), followed by typical angina (27.4%) and atypical presentations. Cardiovascular risk factors were frequent, including hypertension (53.6%), obesity (37.3%) and diabetes (17%), with preserved ventricular function in most cases. A moderate correlation was observed between CCTA and invasive angiography for disease extent (r=0.37), with stronger association for coronary calcium score (r=0.61) and weaker for CAD-RADS (r=0.18). During follow up, 1 year survival was 98.7% and 5 year survival 64.7%. MACE occurred in 17% of patients, mainly driven by myocardial infarction (>70%), while 93.4% remained event-free. Obstructive CAD was

associated with a ~4.8-fold increased mortality risk.
Conclusion: CCTA demonstrated consistent correlation with invasive angiography for the assessment of coronary disease extent and provided robust prognostic stratification. Coronary calcium showed the strongest association with disease burden, while obstructive CAD identified a subgroup with significantly increased risk of mortality and adverse cardiovascular events.

Session Title:	**Friday Morning Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	CARDIAC MANIFESTATION OF CHRONIC CHLOROQUINE AND HYDROXYCHLOROQUINE TOXICITY A CASE REPORT
Author Block:	Carlos Hernan Calderon, Diego A. Pérez, Maria C. Bernal, Diego A. Ortega, Cristian O. Porras, Edward Caceres Mendez, Laura Omaña Alvarez, Alejandro Mariño Correa, Angel A. Garcia Peña, Universidad Pontificia Javeriana, Bogotá, CO, Colombia, Hospìtal San Ignacio, CO
Abstract Body:	**Background:** Cardiotoxicity associated with Chloroquine and Hydroxychloroquine is an uncommon but potentially life-threatening complication of long-term therapy in autoimmune diseases such as Systemic Lupus Erythematosus. Its clinical presentation often mimics myocarditis or lupus-related cardiac involvement, leading to diagnostic delay and worse outcomes. **Case:** A 53-year-old woman with a 15-year history of SLE on prolonged CQ/HCQ therapy presented with progressive dyspnea, pleuritic chest pain, and complex ventricular arrhythmias. Laboratory testing revealed markedly elevated troponin and NT-proBNP levels. Despite significant cardiac involvement, lupus activity was low (SLEDAI-2K = 2). Echocardiography showed left ventricular ejection fraction of 44%, global hypokinesia, and severe functional mitral regurgitation. Coronary angiography excluded obstructive coronary disease. Cardiac magnetic resonance demonstrated biventricular dysfunction and a mixed nonischemic late gadolinium enhancement pattern without myocardial edema. **Decision-making:** The discordance between severe cardiac findings and inactive SLE, combined with absence of edema on cardiac magnetic resonance, supported a toxic rather than inflammatory etiology. Chronic CQ/HCQ exposure, known to induce lysosomal phospholipidosis and myocardial fibrosis, was identified as the most likely cause. Prompt discontinuation of the offending agent and initiation of guideline-directed heart failure therapy were undertaken. **Conclusion:** In patients with clinically stable SLE presenting with heart failure

or arrhythmias, antimalarial cardiotoxicity should be actively considered. Multimodality imaging, particularly cardiac magnetic resonance, is essential for differentiation from myocarditis. Early recognition and drug withdrawal are critical to improve clinical outcomes.

Session Title:	**Friday Morning Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	INTERVENTRICULAR SEPTAL ANEURYSM AS A CARDIOEMBOLIC SOURCE IN A YOUNG ADULT: CASE REPORT
Author Block:	Aylin Sabina Garcia Flores, Ray Erik Coutiño De Avila, Instituto Mexicano del Seguro Social, HGR 1, Queretaro, Mexico

Abstract Body:

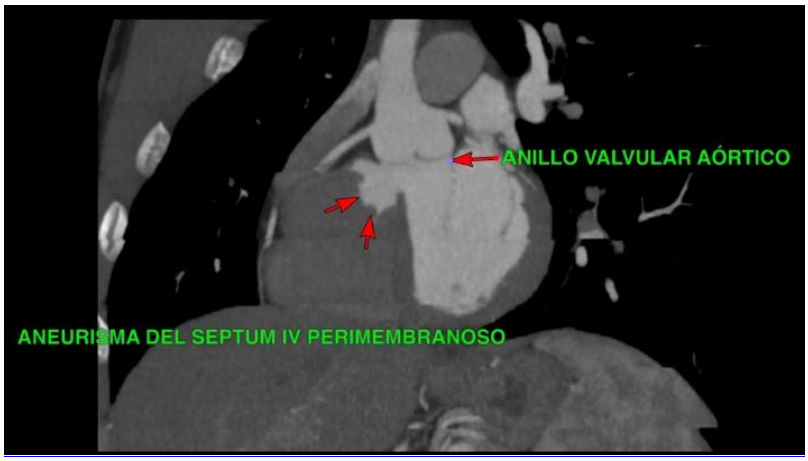
Background: Ischemic stroke in young adults accounts for 10 to15% of cases, with many remaining cryptogenic. Rare structural cardiac abnormalities are increasingly recognized as potential cardioembolic sources through multimodality imaging.

Case: A 32-year-old man with no prior history presented with sudden-onset aphasia, and brain MRI reported a right frontal ischemic stroke, prompting further etiologic evaluation. A 24-hour Holter monitor demonstrated sinus rhythm without arrhythmias, while CT angiography of the supra-aortic vessels revealed no vascular malformations or carotid disease. Subsequent transthoracic and transesophageal echocardiography suggested a right coronary sinus of Valsalva aneurysm, which was further characterized by cardiac CT angiography as a 13 × 12 mm perimembranous interventricular septal aneurysm without shunt.

Decision-making: With no alternative etiology, the structural abnormality was considered the most likely embolic source. This case highlights the challenge of differentiating sinus of Valsalva aneurysm from interventricular septal aneurysm and underscores the value of multimodality imaging. Recognition is crucial, as these entities may represent underdiagnosed embolic sources influencing risk stratification and prevention.

Conclusion: Interventricular septal aneurysm should be considered in cryptogenic stroke in young adults. Multimodality imaging is key for diagnosis

and prevention of recurrence.

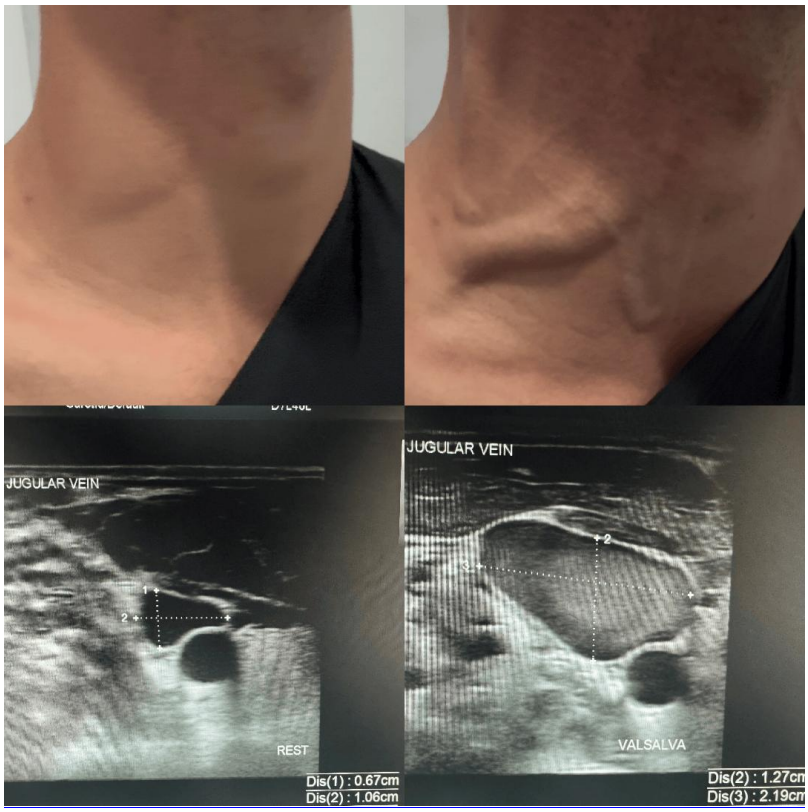


Session Title:	**Friday Morning Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	HEART FAILURE REFERRAL UNMASKS A RARE VENOUS DIAGNOSIS: INTERNAL JUGULAR VEIN PHLEBECTASIA
Author Block:	Andrew Engel-Rodriguez, Francis Cartagena, Natalie Engel, Robert Engel-Rodriguez, Mariella Pappaterra-Rodriguez, Robert A. Engel-Ramos, San Juan Bautista School of Medicine, Caguas, PR

Abstract Body:

Background: Internal jugular vein (IJV) phlebectasia is a rare venous dilation usually seen in children. Among 247 reported cases, only 41 involve adults. It presents as a soft, intermittent neck swelling that enlarges with the Valsalva maneuver. Adult cases can be misdiagnosed as cardiovascular disease.
Case: A 29-year-old male with no systemic illness was referred for cardiology evaluation due to a new right-sided neck swelling which concerned his primary care provider for early-onset heart failure. Evaluation included physical exam, neck Doppler ultrasound, transthoracic echocardiography, and contrast-enhanced CT.
Decision-making: Examination revealed a soft, non-pulsatile, compressible right neck mass that enlarged with Valsalva. Echocardiography showed normal cardiac structure and function. Doppler ultrasound confirmed right IJV enlargement with Valsalva and no thrombosis. CT ruled out mass effect, aneurysm, laryngocele, cystic hygroma, or AV fistula. The diagnosis of isolated IJV phlebectasia was made. Given lack of symptoms or cosmetic concern, conservative management was pursued.
Conclusion: IJV phlebectasia is a rare diagnosis in adults and its presentation may prompt referral for heart failure evaluation. Accurate identification with noninvasive imaging prevents unnecessary interventions. Awareness of this entity is essential in differentiating benign vascular anomalies from clinically

significant cardiac conditions.



Session Title:	**Friday Morning Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	INTRACARDIAC EXTENSION OF RENAL CELL CARCINOMA MIMICKING A RIGHT ATRIAL MYXOMA
Author Block:	Jose Alejandro Gasca, Nelson Eduardo Murillo, SR, Jacobo Cardona, Angela Rodriguez, Mario C. Torres, Bruce Gomez, Sebastian Cordoba, Universidad Santiago de Cali, Cali, Colombia, Angiografía de Occidente, Cali, Colombia
Abstract Body:	**Background:** Renal cell carcinoma (RCC) frequently invades the venous system; however, extension into the right atrium is rare and may mimic primary cardiac tumors, posing diagnostic and therapeutic challenges. **Case:** A middle-aged male presented with progressive dyspnea and constitutional symptoms. Transthoracic echocardiography revealed a large right atrial mass initially suggestive of myxoma. Further evaluation with cardiac magnetic resonance demonstrated a heterogeneous intracardiac mass with continuity into the inferior vena cava (IVC). Computed tomography confirmed a right renal mass with extensive tumor thrombus involving the renal vein and IVC, extending into the right atrium. The patient underwent surgical resection of the intracardiac mass due to high embolic risk. Histopathology revealed metastatic clear cell RCC. Postoperatively, the course was complicated by ischemic stroke and pericardial effusion. Given advanced disease and extensive venous involvement, no further surgical intervention was pursued. The patient was managed with anticoagulation and initiated on immunotherapy. **Decision-making:** Intracardiac extension of RCC occurs in <1% of cases and can mimic primary cardiac tumors, leading to potential misdiagnosis. Multimodal imaging is essential for differentiating tumor thrombus from primary cardiac masses. Management depends on disease extent and surgical risk. While aggressive surgical resection may be considered in selected patients, systemic therapy is often preferred in advanced or metastatic disease. **Conclusion:** This case highlights the importance of considering secondary cardiac involvement in patients with right atrial masses. Accurate diagnosis

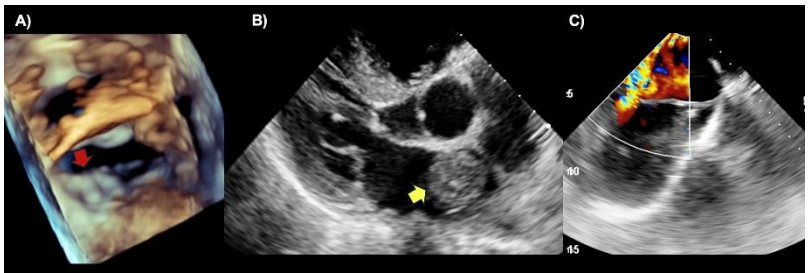
using multimodal imaging is critical to guide appropriate management and avoid unnecessary interventions.

Session Title:	**Friday Morning Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	CLINICAL CHALLENGE OF ANOMALOUS ORIGIN OF THE RIGHT CORONARY ARTERY: IMPACT OF HIGH RISK ANATOMY AND ISCHEMIA ON DECISION-MAKING
Author Block:	Mauricio Manrique, FERNAN DEL CRISTO MENDOZA, CARLOS FUENTES, EDGAR HURTADO, Diana Bohorquez, hugo alvarado, Federico Núñez Ricardo, Oscar Edinson Sánchez, Juan Fernando Parra Correa, Daniel Forero, Fundación Clínica Shaio, Bogotá, Colombia
Abstract Body:	**Background:** Anomalies of the aortic origin of the coronary arteries (AAOCA) are rare (0.2-0.5%) and vary considerably in terms of anatomy, clinical presentation, and optimal treatment. AAOCA of the right coronary artery (ARCA) is the most common entity, and is often associated with myocardial ischemia and sudden cardiac death, particularly when dynamic compression during exertion and high-risk anatomical features are present **Case:** Case Series: We present three adults with ARCA.Case 1: A 37-year-old woman presented with non-ST-elevation myocardial infarction and no obstructive coronary disease. Coronary CT angiography demonstrated ARCA with high-risk features, including an interarterial course, a 5 mm intramural segment, and an acute takeoff angle.Case 2: A 63-year-old woman presented with unstable angina and transient left ventricular dysfunction. Invasive angiography showed no atherosclerotic disease but confirmed ARCA; CT imaging demonstrated an interarterial course, a 2 mm intramural segment, and an acute takeoff angle. Case 3: A 56-year-old man had a 20-year history of atypical chest pain with preserved functional capacity and repeatedly negative imaging ischemia testing, however, the cardiopulmonary exercise test was substantially abnormal and demonstrated ischemia. Coronary CT angiography revealed an 7 mm intramural segment with proximal compression, interarterial course, and an acute takeoff angle **Decision-making:** Despite heterogeneous clinical presentations and variable ischemic burden, all patients shared high-risk anatomical features associated with adverse outcomes. Multimodal imaging was essential for anatomical

characterization and risk stratification. Coronary artery reimplantation was performed in two of three patients with excellent results.
Conclusion: In patients with ARCA and high-risk anatomical features, surgical correction should be considered, particularly when ischemia is demonstrated. Multimodal imaging and cardiopulmonary exercise testing play a critical role in diagnosis, risk stratification, and guiding timely intervention to prevent sudden cardiac death

Session Title:	**Friday Morning Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	THE THREE-HEADED MONSTER: THREE SIMULTANEOUS CARDIOEMBOLIC SOURCES IN A PATIENT WITH ISCHEMIC STROKE
Author Block:	Kenyi Kuratomi, Luis Armando Velasquez Trujillo, Sebastian Ayala, Oscar Emilio Diaz Portilla, Mauricio Murillo, Alvaro Herrera, Universidad del Valle, Cali, Colombia, Hospital universitario del Valle Evaristo Garcia, Cali, Colombia
Abstract Body:	**Background:** Cardioembolic ischemic stroke (IS) accounts for 20-30% of all strokes. The coexistence of three independent cardioembolic sources in a single patient has not been previously reported in the literature. **Case:** A 77-year-old male with no prior cardiovascular history presented with IS in the left middle cerebral artery territory beyond the thrombolytic window. Transesophageal echocardiography (TEE) revealed a 30×30 mm mass suggestive of myxoma and a 10×16 mm vegetation on the posterior mitral leaflet with perforation and severe valvular regurgitation. New-onset atrial fibrillation (AF) was also identified. Infective endocarditis (IE) was diagnosed according to the 2023 Duke criteria despite negative blood cultures, supported by systemic septic embolism. Surgical resection of the tumor and mitral valve replacement were performed. Histopathology confirmed the presence of myxoma, after special staining and molecular tests, Mycobacterium tuberculosis was isolated in the mass and valvular tissue. **Decision-making:** TEE was decisive in detecting embolic mechanisms, guiding urgent surgical intervention. In culture-negative IE, molecular testing of excised tissue is essential, particularly in tuberculosis-endemic settings. **Conclusion:** The coexistence of three simultaneous cardioembolic sources represents an exceptional entity with highly complex diagnostic and

therapeutic implications.



A) Three-dimensional transesophageal echocardiography reconstruction of the mitral valve demonstrating irregular thickening of the posterior leaflet with an image suggestive of vegetation (red arrow), consistent with infective endocarditis. B) Parasternal long-axis view showing a 30×30 mm hyperechogenic mass lesion in the left atrium (yellow arrow), with morphology suggestive of left atrial myxoma. C) Color Doppler demonstrating a severe eccentric mitral regurgitation jet, secondary to posterior leaflet perforation due to infectious process.

Session Title:	**Friday Morning Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	METASTATIC JOURNEY TO THE HEART: UNUSUAL CARDIAC INVOLVEMENT IN HEPATOCELLULAR CARCINOMA
Author Block:	Karla Fabiola Quintana, Maria del Mar Burgos, Francisco J. Cordova, VA Caribbean Healthcare System, San Juan, PR, USA
Abstract Body:	**Background:** Secondary malignant cardiac tumors are more prevalent than primary cardiac neoplasms. Cardiac metastasis from hepatocellular carcinoma (HCC) is uncommon, typically manifesting in advanced stages and often involving the right atrium via invasion through the inferior vena cava. Left atrial metastasis—facilitated by an interatrial shunt—is an unusual manifestation of advanced HCC. Manifestations may include congestive heart failure (CHF), arrhythmias or embolic events, but most patients remain asymptomatic until late stages. **Case:** A 78-year-old male with history of CHF, atrial fibrillation on intermittent anticoagulation due to gastrointestinal arteriovenous malformations, and cirrhosis due to hepatitis C, was undergoing evaluation for a left atrial appendage (LAA) occlusive device. Transesophageal echocardiography (TEE) showed a LAA thrombus versus mass. Despite one month of continuous anticoagulation, a repeat TEE revealed an increased LAA mass size, with contrast injection showing an interatrial shunt. PET/CT scan revealed a hypermetabolic lesion with central necrosis within the LAA and a severe hypermetabolic lesion on the left hepatic lobe suggesting HCC with highly aggressive histology. **Decision-making:** HCC with cardiac metastasis represents a rare and late-stage complication. Diagnosis relies on high clinical suspicion and appropriate imaging. **Conclusion:** This case illustrates the clinical utility of TEE and PET/CT scan in

the assessment of intracardiac masses.

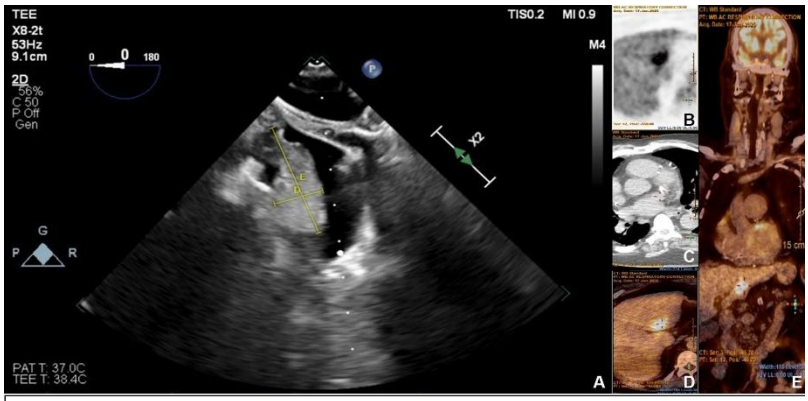
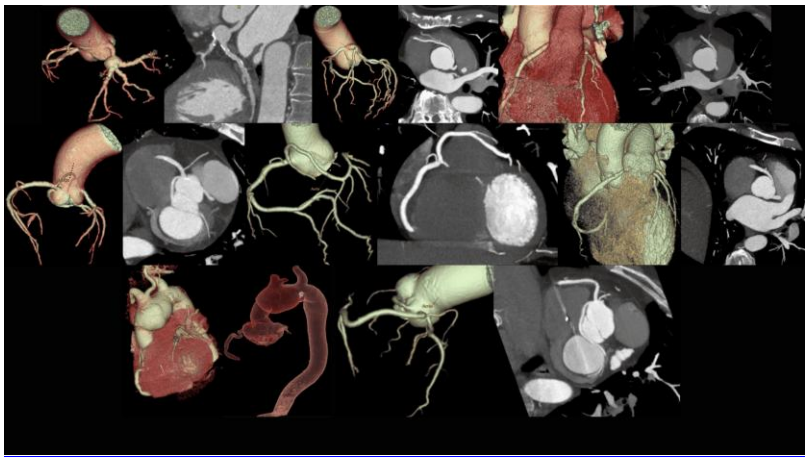


Figure 1. (A) TEE and (C) axial view of CT scan demonstrating a left atrial mass. (B, D) Axial views of PET scan demonstrating a severe hypermetabolic lesion on the left hepatic lobe suggesting hepatocellular carcinoma with a highly aggressive histology. (E) Coronal view of PET scan demonstrating a hypermetabolic lesion in the left atrium and left hepatic lobe.

Session Title:	**Friday Morning Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	BEYOND AN INCIDENTAL FINDING: CLINICAL AND TOMOGRAPHIC CHARACTERIZATION OF CORONARY ARTERY ANOMALIES IN ADULTS FROM A HIGH-COMPLEXITY CARDIOVASCULAR CENTER.
Author Block:	Daniel Palacios Astorquiza, Azucena Martinez, Maria Bru, Diego Jaramillo, Adriana Torres, Los Cobos Medical Center, BOGOTA D.C., Colombia
Abstract Body:	**Background:** Coronary artery anomalies are uncommon congenital defects associated with ischemia, arrhythmias, and sudden cardiac death. Their detection has increased with coronary computed tomography angiography (CCTA). However, data from Latin American populations remain limited. **Methods:** We conducted a retrospective observational study including patients diagnosed with coronary artery anomalies at a tertiary cardiovascular center. Clinical records, invasive coronary angiography, and CCTA studies were reviewed. Anatomical characteristics, high-risk features, clinical presentation, and outcomes were descriptively analyzed. **Results:** 11 patients were included, with a mean age of 58.6 years and male predominance (72.7%). Hypertension and dyslipidemia were the most frequent comorbidities (54.5%). The indication for CCTA was high probability cardiac chest pain. Clinical presentation included typical angina (36.4%) and incidental findings (18.2%). The most frequent anomaly was anomalous origin of the right coronary artery from the left coronary sinus with interarterial course. High risk anatomical variants were identified in 81.8% of patients, while interarterial trajectories were present in 54.5%. **Conclusion:** Coronary artery anomalies are frequently associated with high-risk anatomical features. CCTA provides accurate noninvasive characterization and plays a central role in risk stratification and clinical decision-making.



Session Title: **Friday Morning Poster Session**

Topic 1: Multimodal Imaging

Publishing Title: MULTIMODAL IMAGING IN ISOLATED CARDIAC SARCOIDOSIS PRESENTING AS ABORTED SUDDEN CARDIAC DEATH

Author Block: Juan Carlos Duarte Vasquez, Clara Ines Inés Saldarriaga Giraldo, Carlos Galeano, Juan D. Orozco Burbano, Luisa Durango, Universidad Pontificia Bolivariana, Medellín, Colombia, Clínica Cardio VID, Medellín, Colombia

Abstract Body:

Background: Cardiac sarcoidosis may present as malignant ventricular arrhythmias without systemic disease.
Case: A 42-year-old man, presented with aborted sudden cardiac death due to ventricular fibrillation. Echocardiography showed left ventricular systolic dysfunction. Coronary angiography demonstrated normal coronary arteries. Cardiac magnetic resonance revealed non-ischemic late gadolinium enhancement and septal inflammation suggestive of sarcoidosis. FDG-PET showed isolated septal inflammatory uptake without extracardiac involvement.

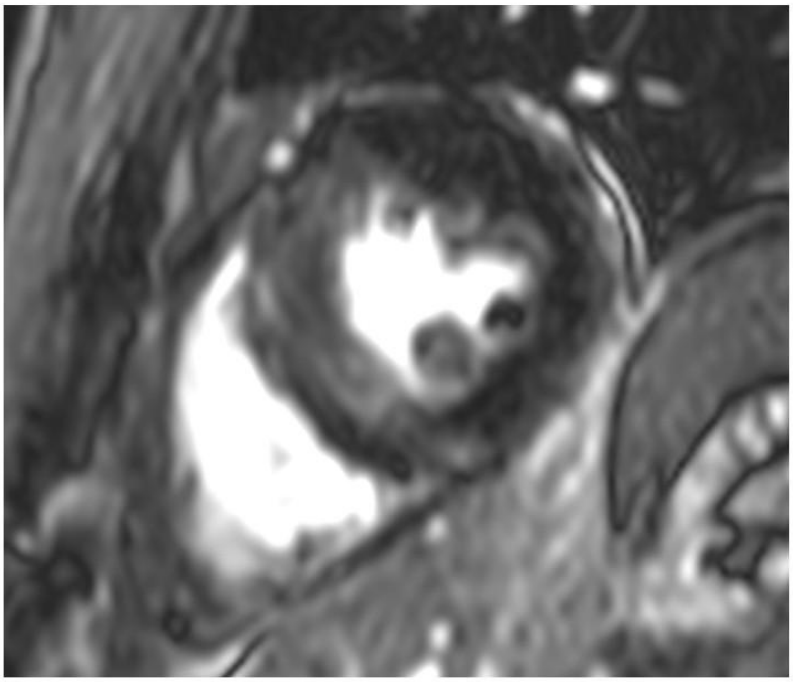


Figure 1. Cardiac magnetic resonance imaging shows patchy non-ischemic late gadolinium enhancement in the interventricular septum.

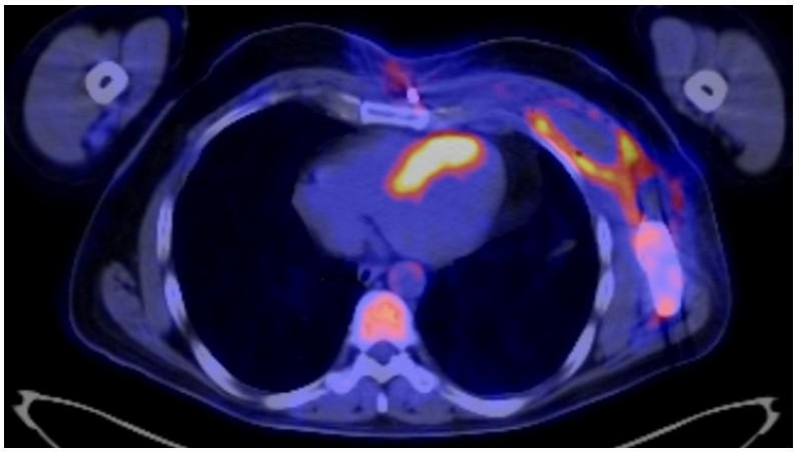


Figure 2. FDG-PET CT fusion image showing increased metabolism of the interventricular septum, consistent with late gadolinium enhancement on CMRI. Collection in the left anterior hemithorax, with increased metabolism in the periphery, related to hematoma.

Decision-making: Findings fulfilled 2016 Japanese Circulation Society criteria for isolated cardiac sarcoidosis.

Conclusion: Multimodal imaging established the diagnosis and guided the initiation of immunosuppressive therapy.

Session Title:	**Friday Morning Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	FROM THE PELVIS TO THE HEART: MULTIMODALITY DIAGNOSIS OF INFERIOR VENA CAVA TUMOR THROMBUS WITH EXTENSION INTO THE RIGHT HEART CHAMBERS
Author Block:	Samuel Bencosme, Katihurca Almonte Montes de Oca, Cleysi Galva, Edgar D. Cadena Barranco, Maria Natividad Diaz Estrella, Ana Jessica Santos Rondon, Oscar Ortega, Jennifer Lugo, Grace Paredes, Jonathan Rodríguez, José Acevedo, Maykel Tapia, SR, José Ramón Kahdafi Rivera Acosta, Génesis Massiel Espinal, Katerin Sánchez Jiménez, Alexander Valentin Nova Torres, ASOCIACION INSTITUTO DOMINICANO DE CARDIOLOGIA, Santo Domingo, Dominican Republic
Abstract Body:	**Background:** Right intracardiac masses are uncommon and may represent thrombi, primary tumors, or tumor extension through the venous system. Multimodality imaging is essential for diagnosis. **Case:** A 76 year old woman with hypertension and cervical cancer presented with fever, erythema, warmth, and edema of the right lower extremity. Physical examination revealed a systolic murmur radiating to the carotids. Electrocardiogram showed sinus rhythm, premature ventricular complexes, and complete right bundle branch block. Chest radiography demonstrated mild cardiomegaly with pulmonary congestion. Transesophageal echocardiography revealed a large heterogeneous partially calcified right atrial mass extending from the inferior vena cava, associated with a second mobile mass suggestive of tumor involvement. Cardiac magnetic resonance confirmed a right intracardiac mass in continuity with the inferior vena cava, suggestive of thrombus, associated with mild right ventricular systolic dysfunction. **Decision-making:** Differential diagnosis included thrombus in transit and tumor thrombus. Multimodality imaging guided management. **Conclusion:** This case highlights the value of multimodality imaging and the importance of considering tumor thrombus in extensive right-sided cardiac

masses.

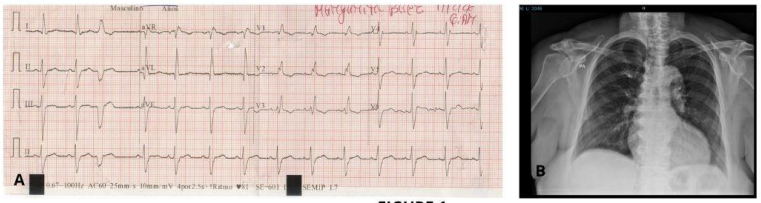


FIGURE 1

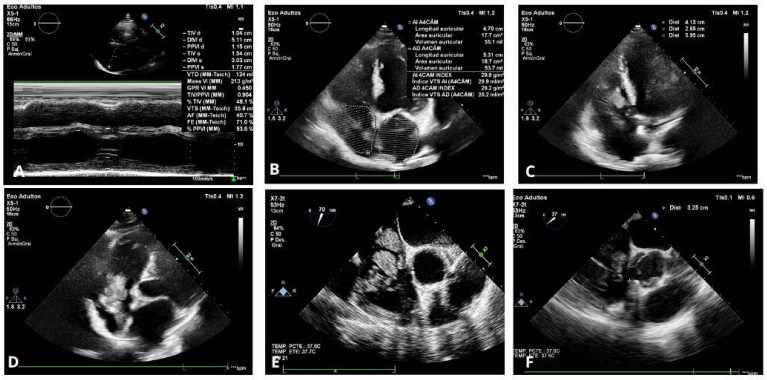


FIGURE 2

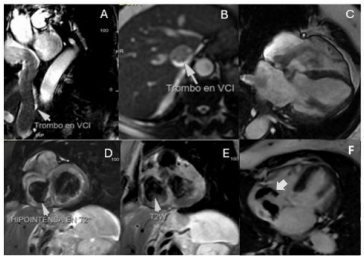
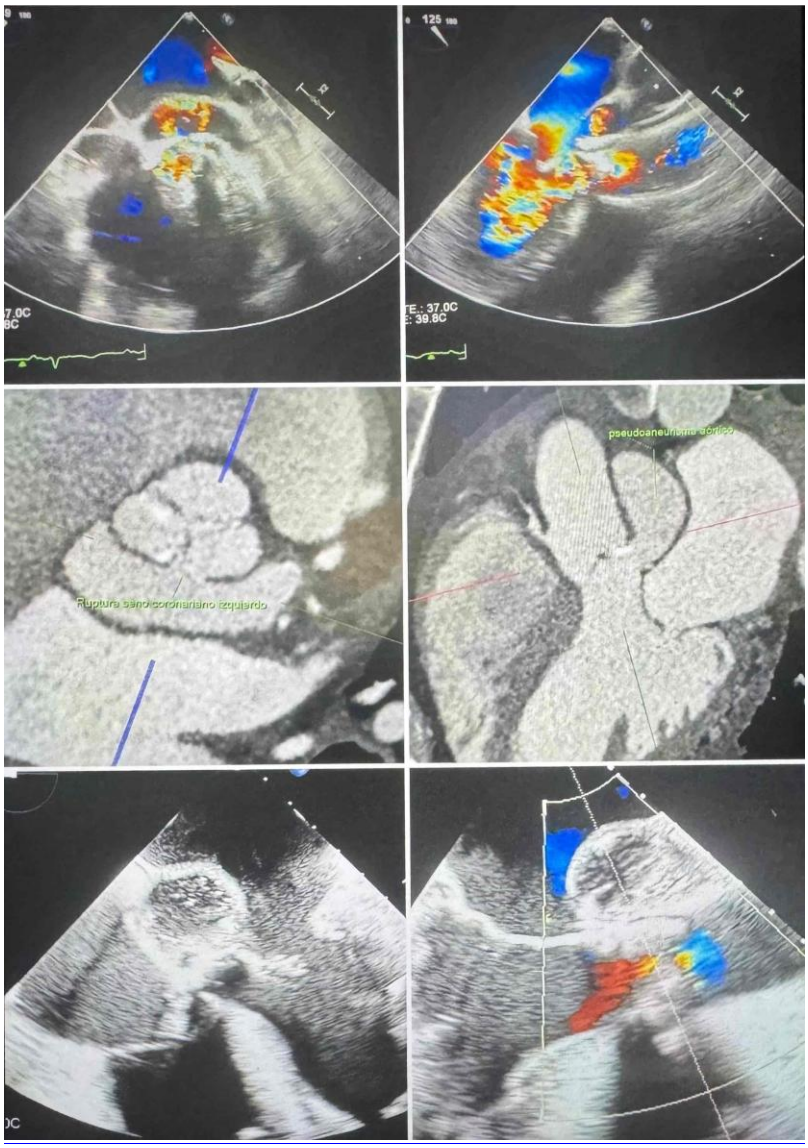


FIGURE 3

FIGURE 1. A. Electrocardiogram showing sinus rhythm, premature ventricular complexes, and complete right bundle branch block. **B.** Chest radiograph demonstrating mild cardiomegaly with cardiothoracic index of 0.52, aortic elongation, and pulmonary vascular congestion**. FIGURE 2. A**. Transthoracic echocardiogram (M-mode) demonstrating a nondilated left ventricle with concentric hypertrophy (indexed LV mass 213 g/m²) and preserved systolic function with left ventricular ejection fraction of 71%, without evident regional wall motion abnormalities. **B.** Apical four-chamber (A4C) view demonstrating right atrial enlargement with increased right atrial volume (53.7 mL) and elevated atrial index. Left atrium was within normal size limits. **C.** A4C apical view showing intracavitary mass dimensions of approximately 4.13 × 2.65 × 5.95 cm measured in the longitudinal, transverse, and major axes. **D.** Apical or subcostal view demonstrating protrusion of the mass into the right ventricle without significant interference with ventricular inflow or outflow. **E**. Transesophageal echocardiogram at 70° demonstrating a lobulated right atrial mass with well-defined borders and heterogeneous appearance**. F.** Transesophageal echocardiographic view at 37° demonstrating a multilobulated, mobile, friable mass arising from the inferior vena cava with continuous extension into the right atrium.

FIGURE 3.A-B. Cardiac magnetic resonance, sagittal and axial views, demonstrating a hypointense filling defect extending from the inferior vena cava into the right atrium**. C.** Four-chamber cine sequence showing extension of the mass lesion into the right ventricle**. D.** T2-weighted sequence demonstrating a hypointense lesion suggestive of hemosiderin deposition. **E.** T2-weighted sequence without evidence of hyperintensity. **F.** Four-chamber late gadolinium enhancement image demonstrating absence of delayed enhancement after gadolinium administration.

Session Title:	**Friday Morning Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	LEFT SINUS OF VALSALVA PSEUDOANEURYSM - A RARE SEQUELAE OF A STREPTOCOCCUS DYSGALACTIAE NATIVE AORTIC VALVE INFECTIVE ENDOCARDITIS
Author Block:	Alexander Murillo, D.A. Avila-Sanchez, Hospital San Juan de Dios, San Jose, Costa Rica, Hospital Rafael Angel Calderon Guardia, San Jose, Costa Rica
Abstract Body:	**Background:** Perivalvular complications of infective endocarditis (IE) may present late after incompletely investigated bacteraemia. **Case:** A 70-year-old man with dyslipidaemia presented with New York Heart Association III dyspnoea and chest pain. Four months earlier he had Streptococcus dysgalactiae bacteraemia treated with intravenous penicillin. Examination revealed a new diastolic murmur. Transthoracic echocardiography (TTE) showed left ventricular ejection fraction (LVEF) 45%, moderate aortic stenosis, and eccentric aortic regurgitation. Transoesophageal echocardiography (TOE) demonstrated severe aortic regurgitation and a pulsatile perivalvular echo-free cavity adjacent to the left and non-coronary sinuses. Urgent cardiac computed tomography (CT) confirmed a large pseudoaneurysm arising from rupture of the left coronary sinus with moderate pericardial effusion, without evidence of acute aortic dissection. **Decision-making:** Findings suggested delayed pseudoaneurysm formation secondary to previously unrecognized IE. Multimodality imaging was crucial to differentiate pseudoaneurysm from acute type A dissection. Following Heart Team discussion, the patient underwent urgent surgical aortic valve replacement and repair of the left coronary sinus defect. **Conclusion:** Delayed aortic root pseudoaneurysm is a rare but life-threatening complication of IE. TOE and cardiac CT provide complementary diagnostic information critical for prompt surgical planning.


125
Ruptura seno coronariano izquierdo
pseudoaneurisma aórtico

Session Title:	**Friday Morning Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	SILENT PULMONARY ARTERY ANEURYSM INCIDENTALLY DETECTED ON MUGA SCAN: A MULTIMODALITY IMAGING CLUE TO A RARE VASCULAR FINDING
Author Block:	Ivan Rafael Figueroa Baez, Andrew Engel-Rodriguez, Porfirio E. Diaz-Rodriguez, Francisco J. Cordova, Giovanni Rivera, Jose Irizarry, San Juan City Hospital, San Juan, PR, USA, VA Caribbean Healthcare System, San Juan, PR, USA
Abstract Body:	**Background:** Pulmonary artery aneurysm (PAA), defined as main pulmonary artery diameter ≥40 mm, is a rare vascular abnormality frequently discovered incidentally. Multimodality imaging is essential for diagnosis and characterization. **Case:** A 64-year-old man with hypertension undergoing oncologic follow-up had a multigated acquisition scan showing an unexpected prominent vascular structure near the pulmonary artery. He denied dyspnea, chest pain, syncope, or hemoptysis. Non-contrast chest CT confirmed aneurysmal dilation of the main pulmonary artery measuring 45 mm, with right and left pulmonary arteries measuring 32.1 mm and 25.3 mm, respectively. Multiple calcified pulmonary granulomas were also identified. **Decision-making:** PAA etiologies include pulmonary hypertension, congenital disease, vasculitis, connective tissue disorders, and infection. In this case, the absence of pulmonary hypertension together with calcified granulomas suggested a chronic post-inflammatory granulomatous process as a possible contributor. The transition from incidental nuclear imaging finding to confirmatory CT emphasizes the value of multimodality imaging in identifying rare vascular abnormalities. **Conclusion:** This case highlights incidental detection of an asymptomatic PAA and underscores the importance of careful image interpretation and multimodality imaging in evaluating uncommon pulmonary vascular lesions.

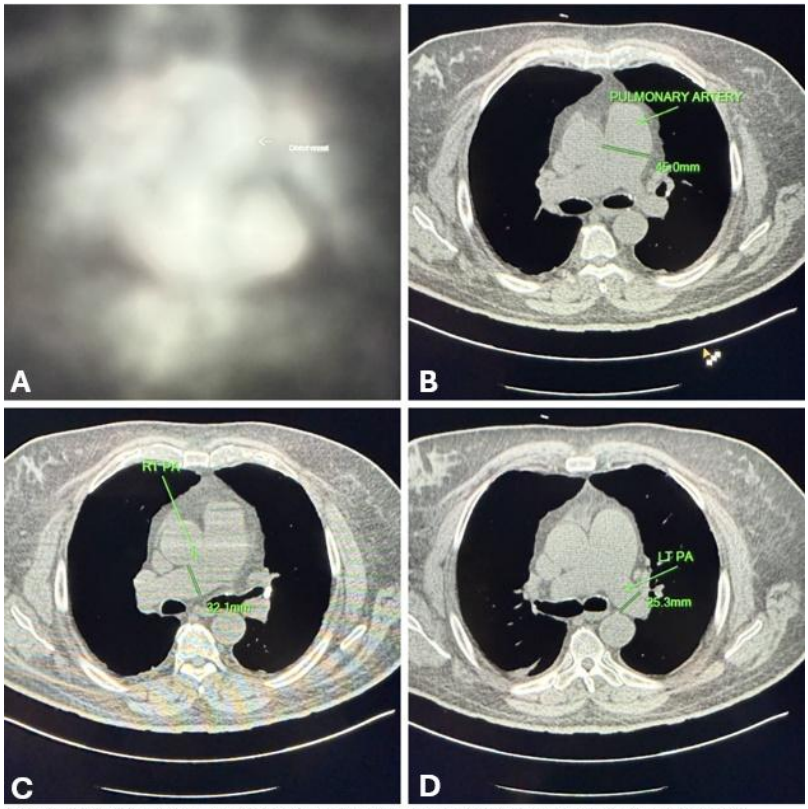


Image A: MUGA scan showing a prominent major vessel, that could represent the ascending thoracic aorta or pulmonary trunk. Images B, C and D: Chest CT scan without contrast axial view revealing a main pulmonary artery aneurysm measuring 45mm, dilated right pulmonary artery measuring 32.1mm, and dilated left pulmonary artery measuring 25.3mm, respectively.

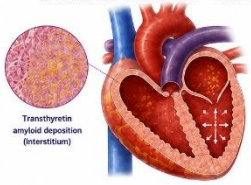
Session Title:	**Friday Morning Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	INTEGRATED ASSESSMENT OF VENTRICULAR STIFFNESS AND LONGITUDINAL DEFORMATION IN TRANSTHYRETIN CARDIAC AMYLOIDOSIS
Author Block:	Katihurca Almonte Montes de Oca, Rosa Noemi Cueto Payano, Luz Del Alba Javier, Natividad diaz Estrella, Josue Pichardo, Sara Divanne González, Luis Alberto Castillo, Oscar Ortega, Maria Eugenia Linares, Wilnelia Acosta, Nelson Acosta, ASOCIACION INSTITUTO DOMINICANO DE CARDIOLOGIA, SANTO DOMINGO, Dominican Republic
Abstract Body:	**Background:** Cardiac amyloidosis transthyretin ATTR-CM is characterized by progressive myocardial infiltration leading to increased ventricular stiffness and restrictive physiology.The relationship between ventricular stiffness, global longitudinal strain (GLS), filling pressures, and biomarkers remains incompletely defined. **Methods:** 29 patients with ATTR-CM underwent echocardiography speckle-tracking analysis.GLS and E/e' ratio was measured. Left ventricular stiffness index (LVSI) was calculated as:LVSI=GLS|E/e'Associations between LVSI, GLS, filling pressures, NT-proBNP, and NYHA functional class were analyzed. **Results:** The cohort has preserved mean left ventricular ejection fraction (61.9 ± 17.1%) impaired myocardial deformation (GLS 10.0 ± 3.2%) and elevated filling pressures (E/e' 24.2 ± 9.9). Mean LVSI was 2.76 ± 2.35, ventricular functional stiffness. LVSI showed a strong positive correlation with E/e' ($r = 0.80$, $p < 0.001$) and NT-proBNP ($r = 0.72$, $p < 0.001$), close association with hemodynamic burden and neurohormonal activation. GLS was correlated with NYHA functional class ($\rho = -0.46$, $p = 0.013$). **Conclusion:** In ATTR-CM, left ventricular functional stiffness is strongly associated with filling pressures and NT-proBNP, reflecting hemodynamic consequences. In contrast, GLS more closely to clinical status, suggesting that myocardial deformation and ventricular stiffness capture distinct physiological domains.

Left Ventricular Functional Stiffness in Transthyretin Cardiac Amyloidosis: Relationship With GLS, Filling Pressures, and NT-proBNP

COHORT

- 29 patients with ATTR
- 65.5 % MALE
- Atrial fibrillation 48.3 %
- Comprehensive echocardiography with speckle-tracking

ATTR AMYLOID INFILTRATION → STIFF HEART PHENOTYPE



Amyloid deposition
Fibrosis
Myocyte dysfunction
↓
↑ Ventricular stiffness (Diastolic stiffness)
↓
↑ Filling pressures (E/e')
↓
Neurohormonal activation
↓
↑ NT-proBNP

LEFT VENTRICULAR STIFFNESS INDEX (LVSI)

$$LVSI = \frac{E/e'}{|GLS|}$$

Integrates filling pressure (E/e') and myocardial deformation (GLS) to reflect ventricular functional stiffness

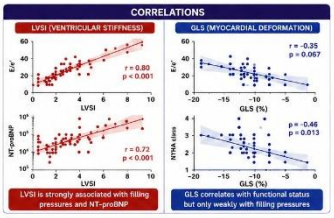
E/e' (Filling pressures) → Ventricular stiffness (LVSI) ← |GLS| (Myocardial deformation)

COHORT CHARACTERISTICS (n = 29)

Age, years	77.2 ± 9.7
Male sex, n (%)	19 (65.5%)
Atrial fibrillation, n (%)	14 (48.3%)
LVEF, %	61.9 ± 17.1
E/e' ratio	24.2 ± 9.9
Global longitudinal strain (GLS), %	-10.0 ± 3.2
NT-proBNP, pg/mL	2547 ± 4536
NYHA functional class	2.52 ± 0.99

Preserved LVEF with impaired deformation, elevated filling pressures and high NT-proBNP consistent with ATTR phenotype.

CORRELATIONS



LVSI is strongly associated with filling pressures and NT-proBNP

GLS correlates with functional status but only weakly with filling pressures

KEY MESSAGE

Ventricular stiffness and myocardial deformation provide complementary and non-equivalent information in transthyretin cardiac amyloidosis.

CONCLUSION: In ATTR cardiac amyloidosis, left ventricular functional stiffness (LVSI) is strongly related to filling pressures and NT-proBNP, whereas global longitudinal strain is more closely associated with functional capacity, highlighting distinct but complementary domains of disease expression.

ATTR = transthyretin amyloidosis; GLS = global longitudinal strain; LVSI = left ventricular stiffness index; E/e' = ratio of early transmitral flow velocity to early diastolic mitral annular velocity; NT-proBNP = N-terminal pro–B-type natriuretic peptide; NYHA = New York Heart Association.

Session Title:	**Friday Morning Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	REAL-WORLD REPRODUCIBILITY OF CHAMBER-SPECIFIC STRAIN USING TOMTEC SOFTWARE
Author Block:	Juan Felipe Vasquez, Raul Eduardo Reyes Toledo, David-Gabriel David Pardo, Claudia Patricia Jaimes-Castellanos, Carlos-Eduardo Guerrero-Chálela, Yeisson Avila, Ramón Medina, SR, Gabriel Salazar, Carolina Idrovo Turbay, Fundacion Cardioinfantil - Instituto de Cardiologia, Bogota DC, Colombia

Abstract Body:

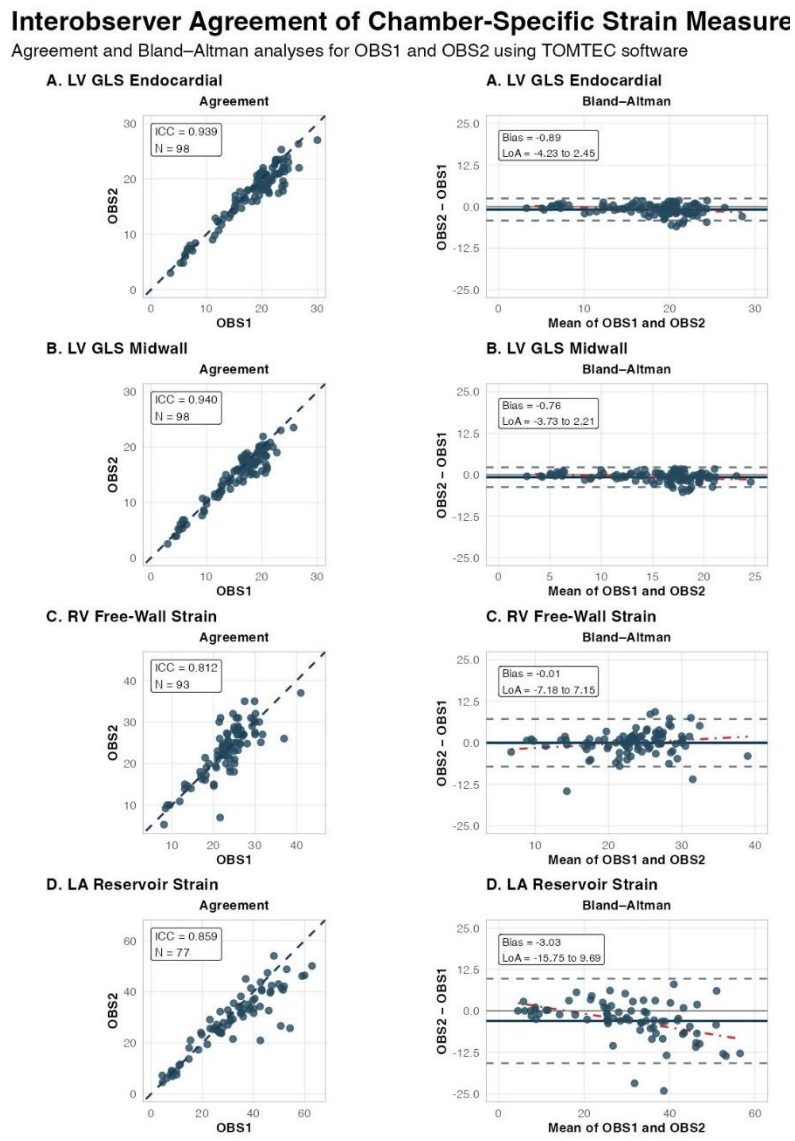
Background: Chamber-specific strain is increasingly used for diagnosis and serial follow-up. However, the comparative real-world reproducibility of left ventricular, right ventricular, and atrial strain measures remains less well characterized

Methods: We studied 100 participants, including healthy individuals and patients with structural or functional heart disease. Two observers measured endocardial global longitudinal strain (GLS), midwall GLS, right ventricular free-wall strain (FWS), and left atrial reservoir strain using TOMTEC. Agreement was assessed using intraclass correlation coefficients (ICC), bias, 95% limits of agreement (LoA), and relative mean error (RME). Intraobserver repeatability was assessed in 30 participants

Results: Interobserver agreement was excellent for endocardial GLS (ICC, 0.939; bias, -0.89; LoA, -4.23 to 2.45) and midwall GLS (ICC, 0.940; bias, -0.76; LoA, -3.73 to 2.21), with RME values of 7.14% and 7.03%. FWS showed lower agreement (ICC, 0.812; LoA, -7.18 to 7.15; RME, 7.91%). Left atrial reservoir strain showed greater bias and dispersion (ICC, 0.859; bias, -3.03; LoA, -15.75 to 9.69; RME, 10.6%). Intraobserver repeatability was favorable for GLS, whereas FWS was more observer-dependent

Conclusion: In a real-world TOMTEC workflow, left ventricular GLS showed the most robust reproducibility. FWS and left atrial reservoir strain showed greater dispersion and should be interpreted cautiously in serial follow-up or cross-

observer comparison

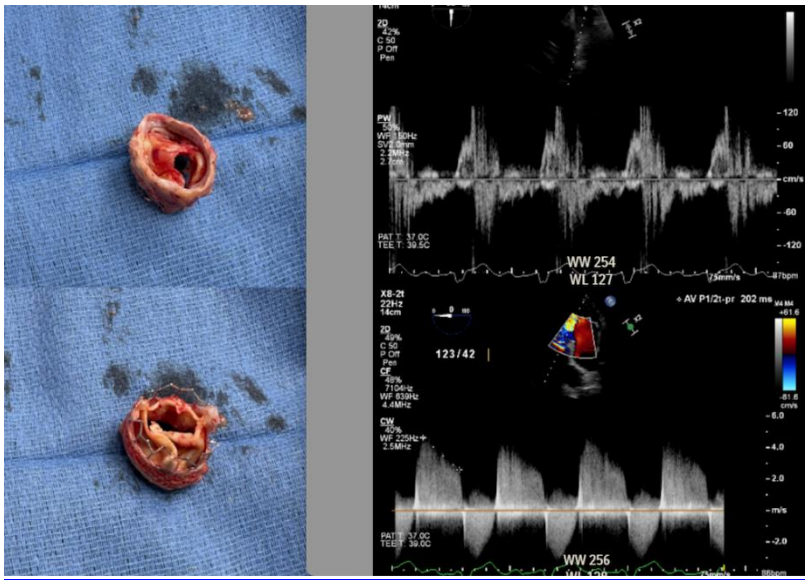


Session Title:	**Friday Morning Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	INADVERTENT LEFT VENTRICULAR CONDUCTION SYSTEM PACING LEAD PLACEMENT THROUGH AN ATRIAL SEPTAL DEFECT UNCOVERED AFTER SYNCOPE
Author Block:	Salomón Giraldo, Kunal Shah, Ana Cristina Garcia, Carla Castillo, Roger G. Carrillo, Palmetto General Hospital, Miami, FL, USA
Abstract Body:	**Background:** Accidental left-sided pacemaker lead placement is an uncommon but important complication of transvenous device implantation. When conduction system pacing (CSP) leads are involved, the expected pacing morphology may not clearly indicate an abnormal trajectory making lead recognition more difficult. **Case:** A 66-year-old man with hypertension, diabetes, chronic lymphocytic leukemia, and a prior dual-chamber pacemaker with a CSP 3830 lead presented after a syncopal episode. Although the syncope itself did not appear to be caused by device malfunction, neurologic workup demonstrated multiple transient ischemic attacks (TIAs), prompting investigation for an embolic source. Transthoracic echocardiography showed the atrial/CSP lead traversing an ostium secundum atrial septal defect (ASD), entering the left atrium, crossing the mitral valve, and terminating in the left ventricle. Cardiac CT confirmed the aberrant lead course. Given the concern for ongoing systemic embolization and potential valvular injury, isolated transvenous extraction was considered unsafe. **Decision-making:** A multidisciplinary heart team proceeded with minimally invasive right mini-thoracotomy extraction under peripheral cardiopulmonary bypass, achieving complete hardware removal and surgical ASD closure. After stabilization, a leadless Micra pacemaker was implanted via femoral access with stable pacing and sensing parameters. The patient recovered without residual shunt, valvular dysfunction, or additional neurologic events. **Conclusion:** Syncope may be the clinical event that initiates workup, even when unrelated to pacemaker function. TIAs in this setting should raise suspicion for a malpositioned left-sided lead. Multimodality imaging plays a

central role in establishing the diagnosis, while definitive management often requires coordinated surgical extraction, intracardiac repair, and leadless pacing. Routine post-implant imaging remains an essential safeguard to prevent this rare but clinically significant complication.

Session Title:	**Friday Morning Poster Session**
Topic 1:	Valvular Diseases
Publishing Title:	A HIDDEN STONE, A LOST VALVE: THE OVERLOOKED RISK OF RETAINED URINARY CALCULI IN TAVR PATIENTS
Author Block:	Andrew Engel-Rodriguez, Diego Ortiz-Mendiguren, Giovanni Rivera Colon, Maria del Mar Burgos, Jose Irizarry, Ivan Rafael Figueroa Baez, Eric D. Aviles Rivera, Gonzalo Gonzalez-Stawinski, Jose J. Acevedo, VA Caribbean Healthcare System, San Juan, PR
Abstract Body:	**Background:** Prosthetic valve endocarditis (PVE) is a rare but life-threatening complication of transcatheter aortic valve replacement (TAVR), with mortality rates up to 47%. Retained urologic pathology, such as bladder calculi, may serve as undetected foci for infection and valve seeding. **Case:** A 70-year-old male with nephrolithiasis, prior left nephrectomy, and TAVR presented with left flank pain and intermittent fevers. Endorsed recent treatment for a urinary tract infection. CT revealed infarcts in the spleen/left kidney, and a large bladder stone. Blood and urine cultures grew *Enterococcus faecalis*. Echocardiography showed elevated transvalvular gradients and severe aortic regurgitation. TEE revealed a 1.5 × 1 cm vegetation on the TAVR prosthesis. **Decision-making:** While on IV antibiotics, the patient developed acute decompensated heart failure and underwent urgent TAVR explantation, aortic valve replacement, and root reconstruction with autologous pericardium. Cystolitholapaxy followed to eliminate the infectious nidus. **Conclusion:** This case highlights the importance of identifying and addressing genitourinary sources in prosthetic valve patients. The untreated bladder stone likely served as a nidus for persistent E. faecalis bacteremia, leading to preventable PVE. This case illustrates how overlooked urologic pathology can undermine valve durability and escalate to surgical emergencies in an

otherwise stable TAVR patient.



Session Title:	**Friday Morning Poster Session**
Topic 1:	Valvular Diseases
Publishing Title:	FROM WHEELCHAIR-BOUND TO AMBULATORY: PROPHYLACTIC INTRA-AORTIC BALLOON PUMP-SUPPORTED TAVR IN SEVERE AORTIC STENOSIS AND TRIPLE-VESSEL DISEASE
Author Block:	Alejandro Araujo Adams, Matteo Sturla, Daniel Arroyo, Carlos Matos, Bryan Velez, Andrea Scotti, Montefiore Einstein Center for Heart & Vascular Care, Bronx, NY, USA
Abstract Body:	**Background:** Emerging evidence suggests that transcatheter aortic valve replacement (TAVR) with staged percutaneous coronary intervention (PCI) may be a safer option for high-risk patients with severe aortic stenosis and concomitant coronary artery disease. Yet, in frailty and advanced clinical decline, procedural risks may outweigh benefits, making Heart Team evaluation essential. **Case:** A 72-year-old man with no past medical history presented with one month of chest pain and dyspnea. Transthoracic echocardiography (TTE) showed a left ventricular ejection fraction (LVEF) of 50% and an aortic valve mean gradient of 36 mmHg. Left heart catheterization revealed an aortic valve mean gradient of 45 mmHg and severe left main, left anterior descending, left circumflex, and right coronary artery disease. The patient was advised coronary artery bypass surgery (CABG) plus surgical aortic valve replacement (SAVR), but was lost to follow-up. Four years later, he presented in a wheelchair with acute decompensated heart failure. TTE revealed global left ventricular hypokinesis with an LVEF of 15% and aortic valve mean gradient of 45 mmHg, prompting admission. Coronary angiogram showed severe multivessel disease. **Decision-making:** The Heart Team discussed CABG plus SAVR, PCI plus TAVR, aortic valvuloplasty, and palliative care. He was deemed not a surgical candidate; given favorable TAVR anatomy and high gradient despite low LVEF, staged PCI after TAVR was selected. He was medically optimized. Two weeks later, he underwent TAVR with a Sapien 3 Ultra Resilia valve and prophylactic

intra-aortic balloon pump support. Post-procedure, aortic valve mean gradient decreased to 5 mmHg and LVEF improved to 40%. At 30-day follow-up, symptoms improved and repeat TTE showed LVEF 65%. After two months, he underwent PCI of the ostial left main, followed by staged PCI of the ostial and mid-right coronary artery. At follow-up, he was ambulatory and in rehabilitation.

Conclusion: This case highlights a scenario with limited evidence. Despite rapid decline, a mean gradient of 45 mmHg suggested potential for myocardial recovery after TAVR, supporting that such cases should not be deemed futile and warrant Heart Team discussion.

Session Title:	**Friday Morning Poster Session**
Topic 1:	Valvular Diseases
Publishing Title:	AT THE FOREFRONT OF STRUCTURAL INTERVENTIONS: FIRST CASE OF TRANSCATHETER PULMONARY VALVE IMPLANTATION
Author Block:	Abdiel Demera, Jaime R. Dutary, JR, Pedro Echeverria, CENACET (National Specialized Cardiovascular and Thoracic Center), Panama, Panama
Abstract Body:	**Background:** Since the first in human implantation performed at Necker Hospital (Paris, France, in 2000), percutaneous pulmonary valve replacement has marked a paradigm shift in structural interventional cardiology, opening a new horizon in the treatment of congenital heart disease. We are honored to present the first case of percutaneous pulmonary valve implantation performed in Panama. **Case:** 37 year old female with history of tetralogy of Fallot and pulmonary valve agenesis (treated in 2014 with a valved conduit placement and a ventricular septal defect patch repair). She presented with a two week history of fever and productive cough, leading to a diagnosis of community acquired pneumonia. On physical examination, grade III/VI crescendo decrescendo midsystolic murmur was noted at the second left parasternal space. Given this finding, an echocardiogram was performed, revealing an image suggestive of a periprosthetic lesion (vegetation, pannus or thrombus). **Decision-making:** To further elucidate these findings, a gated CT angiography was performed, revealing a lesion with variable densities in the middle third of the pulmonary artery, causing postvalvular stenosis. This was subsequently confirmed by cardiac magnetic resonance imaging, which demonstrated postvalvular stenosis of the main pulmonary artery with wall thickening, without enhancement following contrast administration. A percutaneous pulmonary valve implantation (27.5 mm Myval) was successfully performed following balloon predilation (12 Fr) of the aforementioned stenosis. **Conclusion:** While the literature has predominantly focused on devices such as the Melody and Edwards SAPIEN valves, the use of next generation balloon expandable platforms, like the Myval valve, represents an emerging and innovative trend (as utilized in our patient). Several recent case reports and

case series highlight that the Myval valve offers competitive advantages by allowing for more precise and customized anchoring (oversizing) in dilated or morphologically complex conduits, achieving the abolition of the obstructive gradient with excellent immediate hemodynamic and angiographic outcomes.

Session Title:	**Friday Morning Poster Session**
Topic 1:	Valvular Diseases
Publishing Title:	REGENERATIVE THERAPIES WITH MESENCHYMAL STEM CELL-DERIVED EXOSOMES TO PREVENT POST-VALVULOPLASTY RESTENOSIS IN CONGENITAL MITRAL STENOSIS A SYSTEMATIC REVIEW OF PRECLINICAL EVIDENCE
Author Block:	Jorge Eduardo Zapata Arango, Universidad Cooperativa de Colombia, Medellín, Colombia
Abstract Body:	**Background:** Congenital mitral stenosis (CMS) has a 40-60% post-valvuloplasty restenosis rate, driven by TGF-β/SMAD-mediated valvular interstitial cell activation. Mesenchymal stem cell-derived exosomes (MSC-Exo) offer a promising acellular therapy to prevent this fibrotic remodeling. **Methods:** Systematic review following PRISMA 2020. Searches in PubMed, Google Scholar, ArXiv (2015-2025) for preclinical studies evaluating MSC-Exo in cardiovascular fibrosis, restenosis, or pediatric models. Two reviewers screened 254 records; 30 studies were included. Quality assessed with SYRCLE; data extracted on models, administration, efficacy, safety, and mechanisms. **Results:** Most studies used adult rodent arterial injury or myocardial infarction models - no CMS or valvular restenosis models were found. Only one pediatric study (fetal sheep) reported 100% mortality after intracoronary administration. MSC-Exo consistently reduced neointimal hyperplasia (45-60%), increased reendothelialization (60-90%), decreased fibrosis (20-45%), and improved LVEF (10-15%). Key mechanisms: miR-125b, miR-21, miR-29b, TGF-β/SMAD3 modulation, M2 polarization. Safety was favorable in adults. For pediatric/human applicability, standardization of dose by particle count (vs protein content) and use of local delivery (intrapericardial/hydrogels) are essential to avoid toxicity. These strategies achieve >70% local retention and sustained release (7-14 days), directly translatable to post-valvuloplasty settings. **Conclusion:** MSC-Exo show robust efficacy in adult non-valvular models. Despite the lack of CMS-specific pediatric models, the availability of safe,

standardized local delivery routes (intrapericardial/hydrogels) and immediate post-procedure timing (0-24h) provides a clear translational pathway. Priority should be given to juvenile large-animal CMS studies using particle-based dosing and local administration. With these optimizations, MSC-Exo therapy is highly promising for preventing post-valvuloplasty restenosis in pediatric CMS.

Session Title:	**Friday Morning Poster Session**
Topic 1:	Valvular Diseases
Publishing Title:	TRICUSPID ATRESIA ASSOCIATED WITH ABSENT PULMONARY VALVE: AN EXCEPTIONAL COMBINATION OF INFLOW AND OUTFLOW DEFECTS IN A NEWBORN
Author Block:	Carlos Gonzalez, laura ospina, Cesar Cely, Juan Velez, Fundación Valle del Lili, Cali, Colombia

Abstract Body:

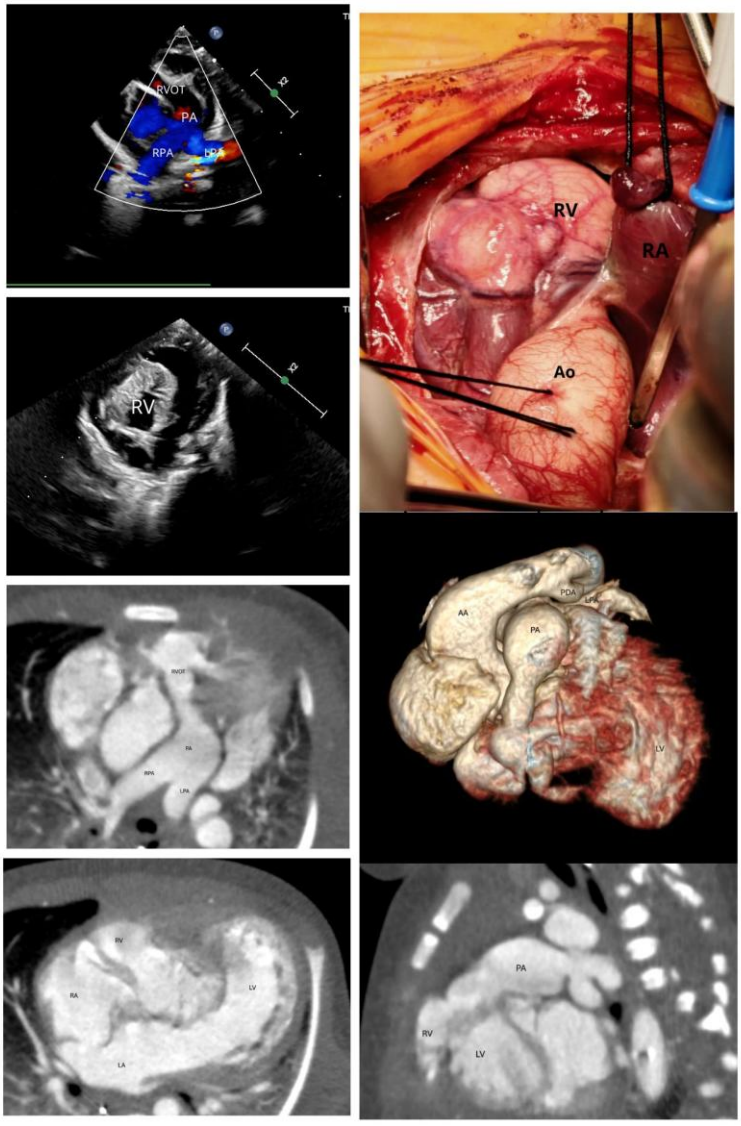
Background: Tricuspid atresia (TA) and absent pulmonary valve (APV) rarely occur in tandem. This combination creates a unique hemodynamic environment characterized by inflow obstruction and massive outflow regurgitation within the univentricular heart spectrum.

Case: Female newborn with postnatal echocardiography and Computed Tomography Angiography (CTA) confirmed:classic TA, ostium secundum atrial septal defect (ASD) and VSD, both with right-to-left shunts. The right ventricle (RV) was severely hypoplastic with aneurysmal basal anterior dilation. Total APV was confirmed, associated with a dilated pulmonary trunk and a patent ductus arteriosus (PDA) with left-to-right shunt.

Decision-making: At day 10, she underwent surgical palliation. A dilated pulmonary trunk connected to an RV featuring "arterial-like," pulsatile, and lobulated walls was observed. Procedures performed: Ligation of the pulmonary trunk, a 3.5mm modified Blalock-Taussig (BTT) shunt, and ligation of the PDA.

Conclusion: Pulmonary trunk ligation is a critical maneuver to prevent volume overload, preserving the pulmonary bed for a future Fontan circuit. This case highlights the unique hemodynamic challenges and surgical strategies necessary for managing concurrent inflow/outflow right tract anomalies. Early morphological characterization and staged palliation starting with a systemic-to-pulmonary shunt with pulmonary trunk ligation are essential to ensure long-

term univentricular survival.

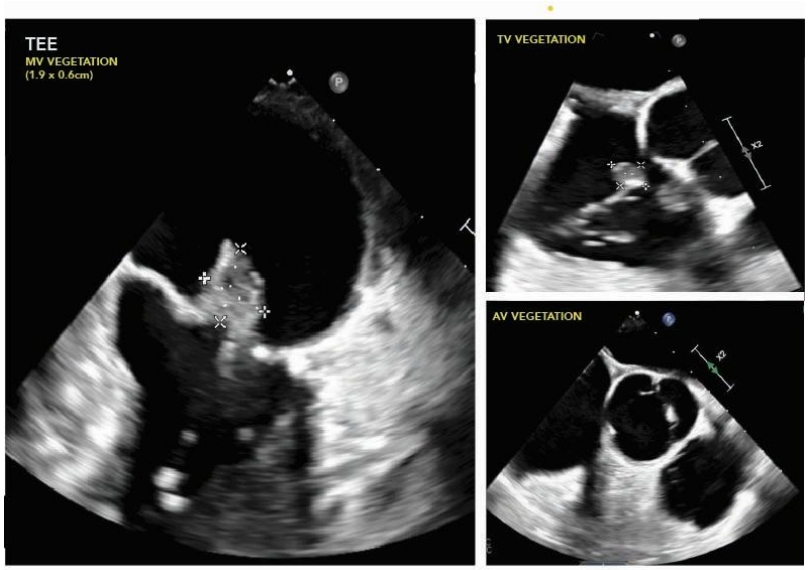


Session Title:	**Friday Morning Poster Session**
Topic 1:	Valvular Diseases
Publishing Title:	SURGICAL TIMING DILEMMA IN PROSTHETIC VALVE ENDOCARDITIS PRESENTING WITH RECURRENT ISCHEMIC STROKE
Author Block:	Jose Alejandro Gasca, Nelson Eduardo Murillo, SR, Jacobo Cardona, Angela Rodriguez, Mario C. Torres, Bruce Gomez, Sebastian Cordoba, Universidad Santiago de Cali, Cali, Colombia, Angiografía de Occidente, Cali, Colombia
Abstract Body:	**Background:** Prosthetic valve endocarditis (PVE) complicated by paravalvular abscess carries a high risk of systemic embolization and often requires urgent surgery; however, recent ischemic stroke introduces a major therapeutic dilemma due to the risk of hemorrhagic transformation. **Case:** A 30-year-old male with systemic lupus erythematosus, end-stage renal disease on hemodialysis, atrial fibrillation, and a mechanical aortic valve presented with an acute ischemic stroke. Initial evaluation suggested cardioembolism in the setting of subtherapeutic anticoagulation. Despite medical management, he developed recurrent ischemic strokes in the same vascular territory, raising concern for an alternative embolic source. Further workup revealed prosthetic valve endocarditis complicated by a paravalvular abscess and Staphylococcus epidermidis bacteremia. Given persistent embolic events and structural complications, surgical intervention was indicated. However, recent and recurrent strokes posed a significant risk of hemorrhagic transformation, creating a complex decision regarding surgical timing. The patient ultimately underwent valve replacement with a complicated postoperative course, including further neurologic events and sepsis, followed by clinical stabilization. **Decision-making:** This case highlights the challenge of managing PVE with neurologic complications. While abscess formation and recurrent embolization strongly favor early surgery, recent stroke increases perioperative neurologic risk. Current guidelines support individualized decision-making based on stroke severity and urgency of infection control. **Conclusion:** Recurrent stroke in patients with prosthetic valves should prompt

evaluation for infective endocarditis. Surgical timing in this setting remains a critical and complex clinical decision requiring multidisciplinary assessment.

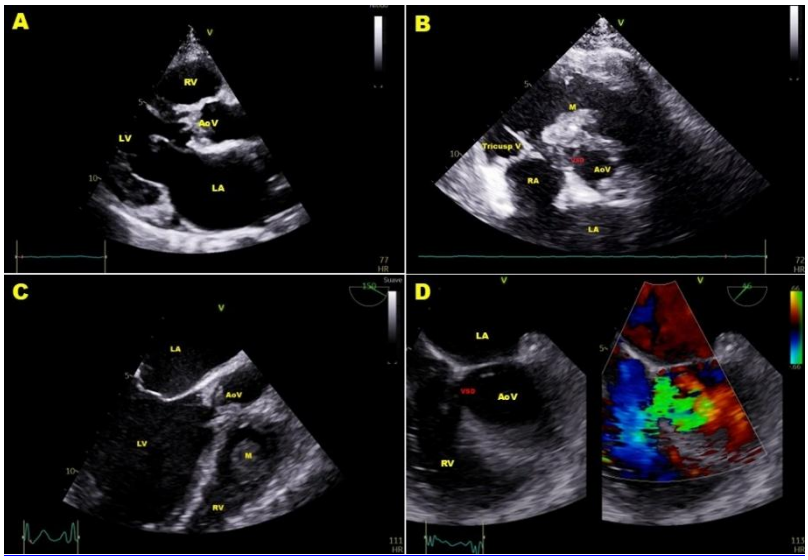
Session Title:	**Friday Morning Poster Session**
Topic 1:	Valvular Diseases
Publishing Title:	TRIPLE-VALVE *ENTEROCOCCUS FAECALIS* INFECTIVE ENDOCARDITIS IN A DIALYSIS-DEPENDENT PATIENT COMPLICATED BY MULTIFOCAL ISCHEMIC STROKE
Author Block:	Andres Figueroa Quast, Iqra Bhatti, Tony Hiran, Farrin Manian, Mercy Hospital, St louis, MO, USA
Abstract Body:	**Background:** Triple-valve infective endocarditis (IE) due to *Enterococcus faecalis* is exceedingly rare; hemodialysis patients are at particular risk due to intravascular access and impaired immunity. **Case:** A 78-year-old woman with end-stage renal disease on hemodialysis, atrial fibrillation (not anticoagulated), and diabetes presented with fever and hypotension. Blood cultures grew ampicillin-susceptible *E. faecalis*. Transesophageal echocardiography (TEE) revealed IE of the mitral (MV), tricuspid, and aortic valves with large MV vegetation (1.9x0.6 cm) and catheter tip vegetation. Surgery was prohibitive. She initially improved with catheter exchange and antibiotics; however, she later developed facial droop, weakness, and somnolence. MRI confirmed multifocal ischemic infarcts. Thrombolytics were contraindicated. She died in hospice. **Decision-making:** *E. faecalis* preferentially affects dialysis patients via intravascular access, enabling multivalvular seeding. Multivalvular IE carries higher embolization and mortality versus single-valve disease. Guidelines recommend early surgery for large vegetations; prohibitive risk precluded it, underscoring multidisciplinary and palliative care needs. Active IE and hemorrhagic risk render thrombolytics contraindicated in stroke. **Conclusion:** This case is among the few reported triple-valve *E. faecalis* IE in dialysis patients. When surgery is not feasible, goals of care discussions are

essential to avoid futile interventions.



Session Title:	**Friday Morning Poster Session**
Topic 1:	Valvular Diseases
Publishing Title:	COMPLEX AORTIC VALVE ENDOCARDITIS IN PREGNANCY: WHEN CARDIAC SURGERY CANNOT WAIT
Author Block:	Luisser Dainner Saavedra Cordova, Karen Alayo Rojas, Wilfredo Velezmoro, Jeferson Cortelezzi, Javier Torres, Hospital Edgardo Rebagliati Martins, Lima, Peru
Abstract Body:	**Background:** Bacterial endocarditis during pregnancy occurs in 1:100,000 pregnancies. Current guidelines do not recommend antibiotic prophylaxis for dental procedures in patients with acyanotic unrepaired congenital heart disease. **Case:** A 33-year-old secundigravida with known ventricular septal defect (VSD) presented at 33 weeks gestation with 2-week history of dyspnea and fever. Four weeks prior, she underwent dental extraction without prophylaxis. Echocardiography revealed thickened aortic valve leaflets with severe aortic regurgitation and a 25x15mm right ventricular mass. Transesophageal echocardiography confirmed vegetation attached to the aortic valve extending through the perimembranous VSD into the right ventricle. Blood cultures grew Streptococcus mitis/oralis. **Decision-making:** Given maternal hemodynamic compromise and infection severity, pregnancy was terminated at 33 weeks. Five days later, the patient underwent successful aortic valve replacement and VSD closure **Conclusion:** This case highlights a potential gap in current prophylaxis guidelines. The temporal relationship between dental extraction and endocarditis in an unrepaired VSD patient suggests consideration for expanding antibiotic prophylaxis recommendations, particularly in pregnant patients

where consequences may be more severe



Session Title:	**Friday Morning Poster Session**
Topic 1:	Valvular Diseases
Publishing Title:	MICROBIOLOGICAL SPECTRUM AND THERAPEUTIC RESOLUTION OF INFECTIVE ENDOCARDITIS AT A TERTIARY CARE CENTER: A 16-PATIENT CASE SERIES FROM AN INTERNAL MEDICINE SERVICE (2021-2025)
Author Block:	David Villanueva, Amanda Carreón-Simental, Maricela Escarela-Serrano, José A. Sánchez-Aguirre, Centro Médico Nacional "20 de Noviembre", ISSSTE, Mexico City, Mexico, National Autonomous University of Mexico, Mexico City, Mexico
Abstract Body:	**Background:** Contemporary infective endocarditis (IE) management demands integration of evolving microbiology with multidisciplinary source control. We characterized the microbiology and therapeutic resolution of IE at a Latin American tertiary cardiovascular center. **Methods:** Retrospective review of 16 consecutive adults with modified Duke-criteria IE (2021-2025). **Results:** Mean age 60.5 y (38-84); 62.5% male. Native valve 62.5%, prosthetic/device 31.3%, mixed 6.3%. Cultures positive in 87.5%: S. aureus 4 (one methicillin-resistant [MRSA]), S. epidermidis 2, E. faecalis 3, vancomycin-resistant E. faecium 1, S. mitis/oralis 1, multidrug-resistant (MDR) P. aeruginosa 1, extended-spectrum β-lactamase (ESBL) E. coli 1, Achromobacter xylosoxidans 1, polymicrobial 2; 2 culture-negative. Every gram-negative isolate occurred in patients with prosthetic vascular material or end-stage renal disease. Portals: hemodialysis 31.3%, urological 18.8%, surgical/abdominal 18.8%, dental 6.3%, aortic endograft 6.3%. Antibiotic patterns: vancomycin→linezolid (staphylococcal), ampicillin-based (enterococcal/streptococcal), carbapenem±aminoglycoside or ceftazidime (MDR gram-negatives). Bacteriological clearance 78.6%. Non-cardiac source control (splenic-abscess drainage, laminectomy with epidural-abscess evacuation, catheter retrieval, cholecystectomy, damage-control laparotomy) was decisive in 5 patients. Valve surgery: 8/16 (50%) at a median of 13 d (range 11-54); 6 biological, 2 mechanical prostheses; one TAVI explantation. In-hospital mortality 37.5% (6/16); 75% of non-operated patients discharged alive

on tailored therapy plus source control.
Conclusion: Half of contemporary IE cases were caused by resistant or non-classical organisms. Resolution depended on susceptibility-driven antibiotics, timely extracardiac source control and Heart-Team surgical timing rather than any single agent. Routine inclusion of infectious-disease specialists in IE Heart Teams and reinforced dental antibiotic prophylaxis are actionable findings.

Session Title:	**Friday Morning Poster Session**
Topic 1:	Valvular Diseases
Publishing Title:	HEYDE SYNDROME: A RARE CASE OF GASTROINTESTINAL BLEEDING IN A PATIENT WITH AORTIC STENOSIS
Author Block:	Vitor Scalone Netto, Guilherme Silva Mendes Gaia, Jackelline Preto, Leticia Pereira, Universidade Federal de São Paulo - UNIFESP, São Paulo, Brazil

Abstract Body:

Background: Heyde syndrome is characterized by the association between severe aortic stenosis and gastrointestinal bleeding secondary to angiodysplasia, related to acquired von Willebrand factor deficiency caused by increased shear stress across the stenotic valve.

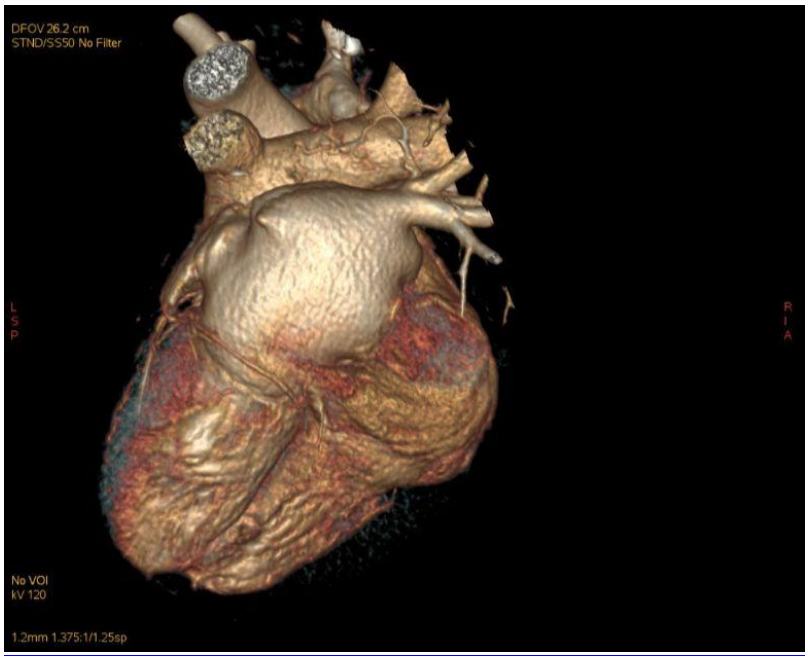
Case: A 69-year-old man from Pernambuco, living in São Paulo for 50 years, was admitted with a 15-day history of melena, asthenia, and fatigue beginning five days after rivaroxaban initiation for deep vein thrombosis. Six months earlier, he had experienced gastrointestinal bleeding requiring hospitalization and blood transfusion, with unremarkable esophagogastroduodenoscopy (EGD) and colonoscopy. Medical history included hypertension, diabetes mellitus, dyslipidemia, chronic alcohol use, and prior smoking. On admission, blood pressure was 95/55 mmHg and cardiac auscultation revealed a systolic murmur radiating to the carotids. Repeat investigation included EGD, colonoscopy, abdominal imaging, capsule endoscopy, and transthoracic echocardiography. EGD demonstrated erosive esophagitis, gastritis, and duodenitis, while colonoscopy was normal. Echocardiography revealed severe calcific aortic stenosis with valve area of 0.9 cm^2, mean gradient of 56 mmHg, and peak velocity of 4.6 m/s.

Decision-making: Because the bleeding source remained unclear, capsule endoscopy was performed and identified a 4-mm duodenal angiodysplasia. The lesion was treated with argon plasma coagulation; however, recurrent melena and progressive hemoglobin decline persisted. Considering the coexistence of severe aortic stenosis and gastrointestinal angiodysplasia, Heyde syndrome was diagnosed. Definitive valve intervention was considered by the Heart Team, but the patient died during hospitalization due to complications of severe aortic stenosis.

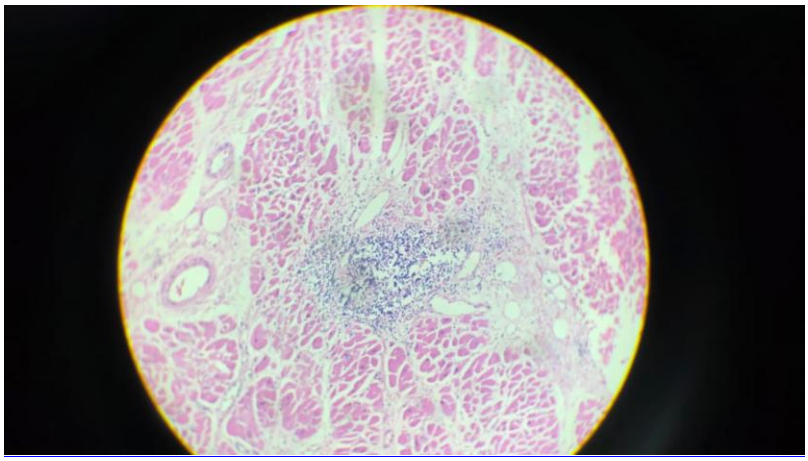
Conclusion: Heyde syndrome should be suspected in patients with severe aortic stenosis and recurrent gastrointestinal bleeding, particularly when endoscopic treatment fails. Early recognition may allow timely valve replacement, the only therapy capable of addressing the underlying pathophysiological mechanism and reducing recurrent bleeding.

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Cardiac Arrhythmias
Publishing Title:	BEYOND THE LUNGS: A RARE CASE OF PULMONARY VEIN STENOSIS AFTER MULTIPLE ABLATIONS DUE TO ATRIAL FIBRILLATION
Author Block:	Nestor Barinas, Ramón Romano, Tanya Massiel Mateo Garcia, Ana Joubert, Joyne Peralta, Yulissa Hernandez, Gabriel Smester, Jhan Gonzalez, CEDIMAT, Santo Domingo, Dominican Republic, John H. Stroger Jr. Hospital, Cook County Health & Hosp Sys, Chicago, IL, USA
Abstract Body:	**Background:** Pulmonary vein stenosis (PVS) is a rare yet serious complication of radiofrequency ablation for atrial fibrillation (AF), caused by thermal injury leading to fibrosis and vein narrowing, which can result in complete blockage. PVS can cause major cardiopulmonary issues and is often diagnosed late due to nonspecific symptoms. **Case:** We report a case of a 59-year-old man with hypertension and recurrent symptomatic AF. The patient underwent pulmonary vein (PV) isolation, which was unsuccessful, and subsequently had a radiofrequency ablation due to AF recurrence. After multiple cardioversions, pharmacological rhythm and rate control, he progressively developed exertional dyspnea, pleuritic chest pain, cough, and intermittent hemoptysis over subsequent years. His symptoms were initially attributed amiodarone-induced pneumonitis, delaying definitive diagnosis. **Decision-making:** CTPA demonstrated complete occlusion of the left superior and left inferior PV with associated chronic pulmonary parenchymal changes, consistent with severe post-ablation PVS. Due to the chronicity and extent of the lesions, PV angioplasty or stenting was not feasible. The patient was managed conservatively with rate-control therapy and symptom-directed treatment. **Conclusion:** Persistent respiratory symptoms following PV isolation should prompt early imaging evaluation, as delayed diagnosis may lead to irreversible

PV occlusion and limited therapeutic options.



Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Cardiac Arrhythmias
Publishing Title:	INCESSANT VENTRICULAR TACHYCARDIA: THE ARRHYTMIC FACE OF ACUTE CELLULAR REJECTION IN THE CARDIAC GRAFT
Author Block:	Luis Emilio Bautista Torres, Alexandra Arias-Mendoza, Daniel Sierra Lara Martinez, Ana M. Coeto, Alan Garcia Jimenez, National Institute of Cardiology "Ignacio Chávez", Mexico City, Mexico
Abstract Body:	**Background:** A heart transplant recipient presented with 2 weeks of palpitations, dyspnea, lower limb edema and syncope. **Case:** Admission ECG showed sinus tachycardia. Laboratory tests revealed AKI (Cr 2.15 mg/dL), elevated hs-cTnT (63.1 ng/L), and NT-proBNP (19,545 pg/mL). POCUS demonstrated biventricular dysfunction with LVEF 20%, TAPSE 11 mm. Acute graft rejection complicated by SCAI Stage D cardiogenic shock was suspected. **Decision-making:** Management included loop diuretics and levosimendan. The patient developed ES with recurrent polymorphic VT/TdP requiring repeated 200-J defibrillations, airway support, and antiarrhythmic therapy with amiodarone and lidocaine. Methylprednisolone pulses were started for suspected rejection. Due to worsening instability, an IABP and temporary pacemaker were implanted. Coronary angiography and IVUS excluded obstructive coronary disease and allograft vasculopathy. The patient progressed to vasoplegic shock and further electrical instability. VF developed despite advanced support. The patient died after unsuccessful prolonged resuscitation. An autopsy with histopathological study was requested. **Conclusion:** Late acute rejection should be suspected in transplant recipients with new-onset heart failure and electrical instability. Refractory ventricular arrhythmias in the context of rejection carry a high mortality and require a combined approach of mechanical support, antiarrhythmics, and immunosuppression.



Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Cardiac Arrhythmias
Publishing Title:	PARADOXICAL PROARRHYTHMIA: A RARE CASE OF FLECAINIDE-INDUCED VT IN A STRUCTURALLY NORMAL HEART
Author Block:	Julian Jose Rubio Gil de Lamadrid, Julio David Vega-Torres, Rafael J. Cummings-Lopez, Nicole M. Vazquez Morales, Mariella Pappaterra-Rodriguez, Andrew Engel-Rodriguez, Francisco J. Cordova, Veterans Affairs Caribbean Healthcare System, San Juan, PR, USA
Abstract Body:	**Background:** Flecainide is an effective class IC antiarrhythmic for atrial arrhythmias but carries a risk of proarrhythmic complications, particularly in patients with chronic or recurrent atrial flutter or fibrillation. Although uncommon, malignant ventricular arrhythmias may occur even in structurally normal hearts. **Case:** A 60-year-old man with long-standing atrial flutter, post multiple electrophysiologic interventions, on outpatient flecainide therapy, presented after persistent heart rates >120 bpm at home. Despite taking flecainide and diltiazem as prescribed, he developed sudden weakness and dyspnea. Telemetry captured a wide-complex tachycardia >200 bpm that terminated spontaneously, revealing atrial flutter followed by atrial fibrillation with rapid ventricular response. **Decision-making:** Post-conversion ECG demonstrated anterolateral ST-segment and T-wave depressions, raising concern for ischemia. Prior perfusion imaging was normal, but the dynamic changes prompted coronary angiography, which revealed normal coronary arteries and normal LVEDP (Left Ventricle End-Diastolic Pressure). The repolarization abnormalities were attributed to cardiac memory after abnormal ventricular activation. Flecainide-related proarrhythmia was deemed the cause of the ventricular tachycardia. Despite temporary control with IV Diltiazem, he developed recurrent tachyarrhythmia requiring Amiodarone infusion and ultimately synchronized cardioversion. Flecainide was discontinued, and he was transitioned to oral Amiodarone and Metoprolol. **Conclusion:** This case demonstrates malignant ventricular arrhythmia

triggered by Flecainide in a patient with a structurally normal heart, with subsequent cardiac memory mimicking ischemia. Class IC agents require vigilant monitoring in patients with complex atrial arrhythmias. Transient repolarization changes after ventricular tachycardia may resemble ischemia, prompting careful evaluation. Antiarrhythmic strategies must be continually reassessed as rhythm patterns evolve

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Cardiac Arrhythmias
Publishing Title:	ZERO-FLUOROSCOPY CATHETER ABLATION OF INCESSANT ATRIAL TACHYCARDIA DURING PREGNANCY USING THREE-DIMENSIONAL ELECTROANATOMIC MAPPING: A CASE SERIES
Author Block:	Víctor Manuel Posadas Posadas, Selma Andrade Alle, Luz Ivonne Arriola Gonzalez, Ulises Rojel Martinez, Electrophysiology and Pacing Service. Hospital General Dr. Eduardo Vazquez N. IMSS Bienestar, Puebla, Mexico
Abstract Body:	**Background:** Management of incessant atrial tachycardia during pregnancy represents a therapeutic challenge due to limited antiarrhythmic options and concerns regarding fetal radiation exposure. **Case:** We present three pregnant women with incessant atrial tachycardia refractory to antiarrhythmic drugs and electrical cardioversion in the absence of structural heart disease or significant comorbidities. All presented dyspnea and palpitations. Electrocardiographic findings suggested a right atrial tachycardia origin (fig. 1A-C). Electrophysiological study guided by three-dimensional (3D) electroanatomic mapping was performed in all patients. Activation mapping localized the ectopic focus to the lower crista terminalis in two cases and to the upper crista terminalis in one case (fig. 1D-F). Zero-fluoroscopy ablation achieved successful elimination of the arrhythmia without maternal or fetal complications. **Decision-making:** Catheter ablation during pregnancy is generally reserved for highly symptomatic or drug-refractory arrhythmias. The use of 3D electroanatomic mapping systems allows accurate localization of arrhythmogenic substrates while completely avoiding fluoroscopic exposure. **Conclusion:** Zero-fluoroscopy catheter ablation guided by 3D electroanatomic mapping appears to be a safe and effective therapeutic strategy for pregnant patients with incessant atrial tachycardia, minimizing fetal radiation exposure.

while providing definitive arrhythmia control.

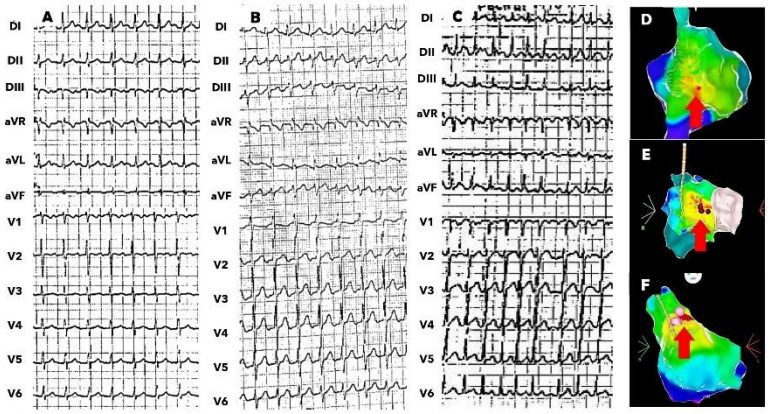


Figure 1. 12-lead electrocardiograms and 3D electroanatomic maps from the three cases. (A, B, C). ECG showing negative P waves in V1, DII, DIII, and aVF, consistent with a right atrial origin near the crista terminalis. **(D, E, F).** three-dimensional reconstructions of the right atrium. Red arrows indicate the site of earliest activation corresponding to the ectopic tachycardia focus.

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Cardiac Arrhythmias
Publishing Title:	LEFT BUNDLE BRANCH PACING IN PATIENTS WITH COMPLETE AV BLOCK AS A FIRST-LINE TREATMENT: SHORT-TERM RESULTS
Author Block:	Selma Andrade, Arturo Enríquez, CARLOS DE LA FUENTE, Karla Bozada, Víctor Manuel Posadas Posadas, Luz I. Arriola, Ulises Rojel, Electrophysiology and Pacing Service. Hospital Dr. Eduardo Vázquez N. IMSS Bienestar, PUEBLA, Mexico
Abstract Body:	**Background:** Complete atrioventricular (AV) block is a bradyarrhythmia that requires permanent pacemaker implantation as definitive treatment. Left bundle branch area pacing (LBBAP) has emerged as a more physiological alternative to conventional right ventricular pacing by preserving intraventricular synchrony and has been associated with better clinical outcomes, including reduced QRS duration, improved left ventricular ejection fraction (LVEF), and lower rates of hospitalization for heart failure. **Methods:** An observational, longitudinal, ambispective descriptive cohort study was conducted. Patients older than 18 years with complete AV block who underwent initial LBBAP pacemaker implantation between August 2021 and January 2026 were included. Demographic, electrocardiographic (QRS duration, left ventricular activation time [RWPT], RV6-RV1 interval), and echocardiographic (LVEF) variables were analyzed on the day of implantation and at one month. Statistical analysis was performed using normality tests and paired comparisons, considering statistical significance at $p < 0.05$. **Results:** A total of 78 patients were included, with a mean age of 72.9 ± 10.6 years; 55.1% were women. A reduction in QRS duration was observed post-implantation (median 123 ms vs. 100 ms; $p < 0.001$), which was maintained at one month. The mean LVEF prior to implantation was 62%, and at one month it was 60% ($p = 0.73$). There were no major complications during the implantation or throughout the one-month follow-up. **Conclusion:** LBBAP as a first-line option in patients with complete AV block is safe and feasible. It was associated with a significant reduction in QRS

duration, which may be related to improved electrical synchrony. No deterioration of LVEF was observed in the short term with this type of pacing.

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Cardiac Arrhythmias
Publishing Title:	PERCUTANEOUS LEFT ATRIAL APPENDAGE CLOSURE VERSUS ANTICOAGULATION IN OLDER ADULTS WITH ATRIAL FIBRILLATION AND HIGH FALL RISK: A SYSTEMATIC REVIEW
Author Block:	Jorge Eduardo Zapata Arango, Universidad Cooperativa de Colombia, Medellín, Colombia
Abstract Body:	**Background:** Atrial fibrillation (AF) is common in older adults with high fall and bleeding risk. Percutaneous left atrial appendage closure (LAAC) is an alternative to direct oral anticoagulants (DOACs), but evidence for patients ≥75 years, CHA_2DS_2-VASc ≥4, HAS-BLED ≥3, and documented falls is limited. **Methods:** Systematic review following PRISMA 2020. Searched six databases (2010-2025). Included studies comparing LAAC (Watchman/Amplatzer) vs. DOACs in the target population. Outcomes: major bleeding (especially fall-related), ischemic stroke, QALYs, HRQoL, costs. Risk of bias and GRADE certainty assessed. **Results:** Twenty studies (25,094 elderly patients). Procedural success >96%. LAAC reduced fall-related major bleeding by 30-36% (HR 0.64-0.70). HRQoL improved (SF-36 PCS +3.9 points). Cost-effective/cost-saving from years 5-8 post-procedure. NNT to prevent one fall-related bleeding = 9. No dedicated RCT. Certainty: moderate for bleeding and cost-effectiveness; low for HRQoL and stroke. **Conclusion:** LAAC appears safe, effective, and cost-effective in selected older adults (≥75 years) with non-valvular AF, high stroke/bleeding risk, and fall history. Reduction in fall-related major bleeding (NNT=9) is clinically meaningful. However, lack of dedicated RCTs for this geriatric population is a major gap; a prospective cohort study with propensity matching is warranted. Frailty should not categorically exclude patients from LAAC.

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Cardiovascular Disease Prevention
Publishing Title:	DECODING RESIDUAL CARDIOVASCULAR RISK IN POSTMENOPAUSAL WOMEN: THE ROLE OF LIPOPROTEIN(A) AND CIRCADIAN BLOOD PRESSURE PATTERNS IN A VENEZUELAN COHORT
Author Block:	Loreanna Y. Prada, Habsler Herrera, Lempira A. Guevara, Carlos Mogollon, Vargas Hospital in Caracas, Caracas, Venezuela

Abstract Body:

Background: Postmenopausal women carry an increased burden of cardiovascular risk factors. However, Venezuela lacks data integrating emerging biomarkers, 24 hour ambulatory blood pressure monitoring, and contemporary risk stratification tools.

Methods: We enrolled 704 women (620 postmenopausal, 84 premenopausal) evaluated in a cardiology department between 2025 and 2026. Complete lipid panel, lipoprotein(a), 24 hour ABPM, PREVENT-ASCVD, and SCORE2/SCORE2-OP were assessed. Associations were evaluated using logistic regression with 95% CI, adjusted for age, BMI, and smoking. Age-matched subgroup analysis was performed.

Results: Postmenopausal women showed higher prevalence of hypertension (79.7% vs 59.5% OR 2.67 95% CI: 1.65-4.30 $p<0.001$), dyslipidemia (39.0% vs 19.0% OR 2.72, $p<0.001$) and heart failure (11.9% vs 2.4% OR 5.56 $p=0.005$). SCORE2 was seven times higher (3.14% vs 0.43% $p<0.001$). The atherogenic index was significantly elevated (standardized mean difference 0.69, $p<0.001$), as was pulse pressure (56.6±11.8 vs 51.3±11.3 mmHg, $p<0.001$). One in four had Lp(a) >50 mg/dL. Abnormal circadian patterns were present in 74.8% (non-dippers 48.9%, risers 25.9%). Only 38.7% of borderline-risk patients received statin therapy. In an age matched subgroup (50-55 vs 45-49 years), dyslipidemia was 6.71 times more frequent in postmenopausal women ($p=0.0004$), suggesting the association is not exclusively driven by aging.

Conclusion: Postmenopausal women carry a substantial lipid burden and higher cardiovascular risk than their premenopausal counterparts. What stands out: one in four have Lp(a) >50 mg/dL a genetic ceiling that statins cannot touch and three-quarters show aberrant blood pressure patterns at

night. Yet fewer than 4 in 10 borderline-risk women receive statin therapy. These gaps in recognition and treatment make comprehensive cardiovascular assessment essential.

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Cardiovascular Disease Prevention
Publishing Title:	ULTRA-PROCESSED FOOD CONSUMPTION AND INCIDENT CARDIOVASCULAR DISEASE: AN UPDATED DOSE-RESPONSE METAANALYSIS WITH FOOD SUBCATEGORY RISK STRATIFICATION
Author Block:	Loreanna Y. Prada, Lempira A. Guevara, Carlos Mogollon, Habsler Herrera, Daniel Namen, Bryan E. Rudas, Diana Denisse Garcia, JR, Central University of Venezuela, Caracas, Venezuela, National University of San Marcos, Research Group, Peru
Abstract Body:	**Background:** Cardiovascular disease causes 17.9 million deaths annually. Latin America is undergoing accelerated nutritional transition, with growing ultra-processed food (Nova group 4) intake and limited cardiovascular surveillance. Prior meta-analyses pool all ultra-processed foods without discriminating risk by subcategory, and four recent cohorts with hard endpoints, including multiethnic MESA, had not been included in any combined analysis **Methods:** Systematic review and meta-analysis of 18 prospective cohorts. Search through May 2026 in PubMed, Embase, CENTRAL, Web of Science, and LILACS. Synthesis by random-effects model with dose-response analysis and GRADE certainty appraisal **Results:** Highest versus lowest ultra-processed food intake was associated with 16% higher incident CVD (HR 1.16, 95% CI 1.07-1.27, p<0.001). Each 10% energy increment from ultra-processed foods corresponded to 8% higher cardiovascular risk (HR 1.08, 95% CI 1.04 -1.12, *p*<0.001), linear gradient with no threshold. Subcategory analysis revealed a clear hierarchy. Sugar-sweetened beverages carried the highest hazard (HR 1.14 -1.19, *p*<0.001), processed meats the largest effect for coronary heart disease (HR 1.18 - 1.24, *p*<0.05), ultra-processed bakery products intermediate risk (HR 1.08 - 1.11, *p*<0.05) and dairy desserts a similar magnitude (HR 1.11 -1.13, *p*<0.05). Snacks showed a weak association (HR 1.05 -1.06) and artificially sweetened beverages showed no independent effect after adjustment. Atrial fibrillation HR 1.13 (CI 1.02 -1.24), venous thromboembolism HR 1.15 (CI 1.05 -1.27),

incident hypertension HR 1.15 (CI 1.08 -1.23). GRADE certainty moderate
Conclusion: Sugar-sweetened beverages and processed meats concentrate the highest cardiovascular hazard among ultra-processed foods. The linear dose-response without threshold effect means any reduction in consumption carries real clinical impact

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Cardiovascular Disease Prevention
Publishing Title:	COGNITIVE IMPAIRMENT, CARDIOVASCULAR RISK, AND LIPIDIC GOALS: UNDERSTANDING THE LINK IN PRIMARY PREVENTION
Author Block:	Cristian Orlando Orlando Porras Bueno, Carlos Hernan Calderon Franco, Angel Alberto Garcia Peña, Pontifical Xavierian University, Bogotá, Colombia, Hospital Universitario San Ignacio, Bogotá, Colombia

Abstract Body:

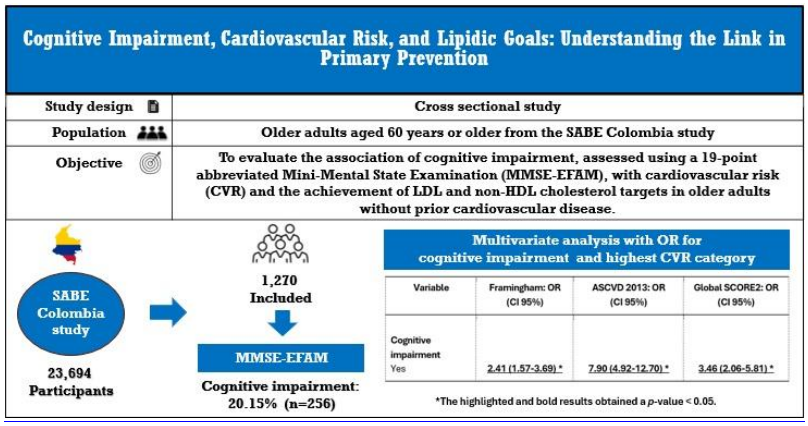
Background: Cognitive impairment is prevalent among older adults and has been linked to adverse outcomes, including cardiovascular disease (CVD). However, its relationship with cardiovascular risk (CVR) in primary prevention and the attainment of lipid targets remains insufficiently explored. We aimed to evaluate the association of cognitive impairment, assessed using a 19-point abbreviated Mini-Mental State Examination (MMSE-EFAM), with CVR and the achievement of LDL (LDL-C) and non-HDL (non-HDL-C) cholesterol targets in older adults without prior CVD.

Methods: Secondary analysis of adults aged ≥60 years from the SABE Colombia study (n=23,694). Cognitive impairment was defined as an MMSE-EFAM score ≤13. Associations with CVR and lipid target achievement were assessed using regression models.

Results: 1,270 individuals were included; 22,146 were excluded due to missing CVR data, and 278 for prior CVD. 20.15% had cognitive impairment. LDL-C goal achievement ranged from 0.72% to 3.93%, non-HDL-C was 9.60%. Cognitive impairment was associated with a high CVR category with an OR of 7.90 (95% CI 4.92-12.70, ASCVD 2013), a very high CVR category with an OR of 3.46 (95% CI 2.06-5.81, SCORE2) and a high CVR with an OR of 2.41 (95%CI 1.57-3.69, Framingham). Cognitive impairment was not linked to lipid target attainment.

Conclusion: Cognitive impairment was associated with higher CVR but not with lipid goal achievement, underscoring the need for targeted interventions in

this vulnerable group.



Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Cardiovascular Disease Prevention
Publishing Title:	METABOLIC SCORE FOR INSULIN RESISTANCE AS A MARKER OF CARDIOVASCULAR RISK: A SYSTEMATIC REVIEW AND META-ANALYSIS
Author Block:	Jose Alejandro Gasca, Mario C. Torres, Francisco Ramos, Arath Campos, Giselle Romero, Claudia Sanchez, Diana Blandon, Mauricio Gonzalez, Universidad Santiago de Cali, Cali, Colombia, Angiografía de Occidente, Cali, Colombia
Abstract Body:	**Background:** Insulin resistance is a key driver of atherosclerosis and cardiovascular events, yet its routine assessment remains limited by cost and accessibility. The metabolic score for insulin resistance (METS-IR) has emerged as a practical, non-insulin-based surrogate; however, its association with specific cardiovascular outcomes has not been comprehensively quantified. **Methods:** We conducted a systematic review and meta-analysis following PRISMA guidelines. PubMed, Scopus, Web of Science, and Cochrane Library were searched through May 2025. Observational studies evaluating METS-IR and cardiovascular outcomes were included. Effect estimates were pooled using random-effects models. Linear, non-linear dose-response, and categorical analyses were performed. **Results:** Ten studies, including 121,706 participants, were analyzed. Each 1-standard deviation increase in METS-IR was associated with a higher risk of major adverse cardiovascular events (HR 1.15; 95% CI 1.09-1.22; p<0.001) with no heterogeneity (I^2=0%). A significant non-linear association was observed (p=0.0176), demonstrating a steeper risk increase at higher METS-IR levels. Higher METS-IR was significantly associated with myocardial infarction (HR 1.63; 95% CI 1.24-2.14; p=0.0005), stroke (HR 1.19; 95% CI 1.13-1.26; p<0.00001), and all-cause mortality (RR 1.15; 95% CI 1.07-1.23; p=0.0001), while no significant association was observed for heart failure (HR 1.71; 95% CI 0.78-3.73; p=0.18). **Conclusion:** METS-IR is independently associated with increased cardiovascular risk across multiple clinically relevant outcomes, with a non-

linear risk gradient. Its simplicity and availability support its role as a scalable tool for cardiovascular risk stratification, particularly in resource-limited settings.

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Cardiovascular Disease Prevention
Publishing Title:	CIRCADIAN RHYTHM OF BLOOD PRESSURE IN SUSTAINED DIURNAL ARTERIAL HYP0TENSION
Author Block:	Roberto Antonio Ingaramo, Pueblo de Luis Cardiology Institute, Trelew, Argentina

Abstract Body:

Background: Mean arterial pressure (MAP) normally decreases by 10 to 20% during nighttime sleep. This lack of decrease is known as a non-deeper pattern or altered circadian rhythm (CR). Nocturnal cerebral hypoperfusion due to an excessive decrease in MAP during the night (>20%), called "over-deeper," is a risk factor for cardiovascular disease and optic lesions, among others. In hypertensive patients treated pharmacologically who develop sustained daytime hypotension (AH), the risks of treatment may outweigh the benefits by producing hypoperfusion of vital organs. Considering that patients with AH may continue to experience a dangerous nocturnal drop in blood pressure, following daytime values and jeopardizing the perfusion of vital organs, our objective was to evaluate the behavior of nocturnal blood pressure (BP) in hypertensive and normotensive patients with AH confirmed by ABPM.

Methods: Of the 12,540 ABPM retrospectively analyzed between January 2017 and July 2025, 184 studies (1.47%) presenting AH, defined as systolic BP values≤99 mmHg, were selected. 106 (57.6%) were from women; mean age 68.4 years. 85.9% were on antihypertensive treatment.

Results: 81.5% of the patients had an altered CR; 51.6% had a non-deeper pattern, 29.9% had a reversed deeper, and only 18.5% had a preserved CR. There were no statistically significant differences in circadian rhythm behavior according to sex (p=0.287) or season (p=0.613), but there were differences according to age (p=0.038), as those under 50 years of age were the most likely to maintain CR, while those over 80 were the most likely to experience alterations. Regarding the presence of hypertension, hypertensive and normotensive patients showed significant differences only with respect to age (p=0.005) and no statistically significant differences with respect to sex or CR (p=0.131 and 0.719, respectively).

Conclusion: Patients with sustained daytime hypotension, in the vast majority (81.5%), will show an altered CR, especially the elderly, preventing a dangerous nocturnal drop in blood pressure even within normal ranges, perhaps as a measure to avoid organ hypoperfusion, particularly of the brain, heart, and eyes.

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Cardiovascular Disease Prevention
Publishing Title:	SMOKING CESSATION IS ASSOCIATED WITH EARLY LEFT VENTRICULAR REVERSE REMODELING DESPITE WEIGHT GAIN: A PROSPECTIVE ECHOCARDIOGRAPHIC STUDY
Author Block:	Alvaro Taveras, Martín Durán, Rafael Paniagua, Luan Mieses, Alain Mieses, Ivan Rafael Figueroa Baez, Diana Durán, Eliscer Guzman, Pontifia Universidad Católica Madre y Maestra, Santiago de los Caballeros, Dominican Republic, Montefiore Medical Center, New York, NY, USA
Abstract Body:	**Background:** Smoking cessation is associated with weight gain, which may adversely affect cardiovascular risk. However, its short-term impact on cardiac structure and function remains incompletely defined, particularly in relation to competing metabolic changes. **Methods:** We conducted a prospective cohort study of 284 Hispanic adults in the Dominican Republic who achieved smoking cessation within a structured outpatient program. Clinical data, inflammatory biomarkers, and transthoracic echocardiography were obtained at baseline (active smoking) and at 6 months after cessation. Primary outcomes included changes in left ventricular ejection fraction (LVEF) and left ventricular (LV) mass index. Multivariable linear regression assessed predictors of cardiac remodeling. **Results:** At 6 months, patients experienced a mean weight increase of +2.8 ± 1.9 kg, more pronounced among women and heavy smokers ($p<0.01$). Despite weight gain, LVEF improved significantly (+3.6%, 95% CI +2.8 to +4.4; $p<0.001$) and LV mass index decreased (−6.2 g/m^2, $p=0.002$), consistent with early reverse remodeling. C-reactive protein declined (−1.4 mg/L, $p<0.001$), suggesting reduced systemic inflammation. In multivariable analysis, smoking cessation remained independently associated with improvement in LVEF (+2.9%, $p<0.001$), while weight gain was not negatively associated with cardiac function. **Conclusion:** Smoking cessation is associated with early improvements in cardiac structure and function despite modest weight gain. These findings suggest that the cardiovascular benefits of smoking cessation outweigh short-

term metabolic changes and support aggressive cessation strategies in high-risk populations.

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Cardiovascular Disease Prevention
Publishing Title:	WEIGHT GAIN AFTER SMOKING CESSATION DOES NOT OFFSET EARLY REDUCTIONS IN SYSTEMIC INFLAMMATION AND CARDIOVASCULAR RISK MARKERS
Author Block:	Alvaro Taveras, Martin Duran, Rafael Paniagua, Luan Mieses, Alain Mieses, Diana Durán, Ivan Rafael Figueroa Baez, Eliscer Guzman, Pontificia Universidad Católica Madre y Maestra, Santiago de los Caballeros, Dominican Republic, Montefiore Medical Center, New York, NY, USA
Abstract Body:	**Background:** Weight gain following smoking cessation is common and may attenuate perceived cardiovascular benefits. The interplay between post-cessation weight gain, systemic inflammation, and cardiovascular remodeling remains poorly characterized. **Methods:** We analyzed 284 Hispanic adults in the Dominican Republic who successfully quit smoking and completed 6-month follow-up in a structured smoking cessation program. Anthropometric data, inflammatory biomarkers (C-reactive protein), and echocardiographic parameters were assessed at baseline and follow-up. Patients were stratified by degree of weight gain (≥3 kg vs <3 kg). Multivariable regression evaluated associations with inflammatory and cardiac outcomes. **Results:** Overall, patients gained +2.8 ± 1.9 kg, with 46.1% gaining ≥3 kg. Despite this, CRP decreased significantly across the cohort (- 1.4 mg/L, $p<0.001$), with similar reductions observed in both weight gain groups. LVEF improved (+3.6%, $p<0.001$) and LV wall thickness decreased modestly (−0.7 mm, $p=0.01$). Importantly, greater weight gain was not associated with worsening inflammatory or cardiac parameters after adjustment. Female sex and higher baseline smoking intensity predicted greater weight gain ($p<0.05$). **Conclusion:** Post-cessation weight gain does not negate early improvements in systemic inflammation or cardiac structure. These findings challenge concerns regarding metabolic trade-offs and reinforce the net cardiovascular benefit of smoking cessation.

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	INITIAL REAL-WORLD EXPERIENCE WITH FINERENONE IN PATIENTS WITH HEART FAILURE AND PRESERVED EJECTION FRACTION
Author Block:	Francisco Sebastián Terán Ibarra, Juan David Castillo Peña, Andrés Felipe Martínez López, Paula Perez Henao, Gina Gonzales Robledo, Section of Cardiology, Fundación Santa Fe de Bogotá, Bogotá, Colombia, Bogota DC, Colombia, Schools of Medicine, Universidad de los Andes and Universidad El Bosque, Bogota DC, Colombia
Abstract Body:	**Background:** Real-world data on finerenone in heart failure with preserved ejection fraction (HFpEF) remain limited, particularly in Latin American populations. We aimed to characterize the clinical profile and early outcomes of patients with HFpEF treated with finerenone at a quaternary cardiovascular referral center. **Methods:** We conducted a retrospective descriptive study of consecutive patients with HFpEF treated with finerenone in Bogotá, Colombia. Demographic, clinical, laboratory, treatment-related, and 6-month outcome variables were obtained from electronic medical records. **Results:** Thirteen patients were included. The cohort showed high cardio-renal-metabolic burden, with frequent chronic kidney disease and type 2 diabetes mellitus, while most patients received concomitant sodium-glucose cotransporter-2 (SGLT2) inhibitor therapy. Baseline estimated glomerular filtration rate (eGFR) and potassium levels remained within clinically acceptable ranges. No deaths occurred during follow-up, and heart failure hospitalization was observed in 15.4% of patients at 6 months. **Conclusion:** In this preliminary real-world cohort of elderly patients with HFpEF and high cardiometabolic burden, finerenone showed feasible contemporary implementation and acceptable short-term tolerability, supporting its contemporary use within multidisciplinary cardio-renal-

metabolic care in underrepresented Latin American populations.

Table 1. Clinical characteristics and outcomes of patients treated with finerenone

Variable	N = 13
Age, years	81 (76 – 84)
Female sex	7 (53.8%)
Chronic kidney disease	10 (76.9%)
Type 2 diabetes mellitus	10 (76.9%)
Atrial fibrillation	2 (15.4%)
SGLT2 inhibitor therapy	11 (84.6%)
NT-ProBNP, pg/mL	1497 (1004 – 9235)
eGFR (CKD-EPI), mL/min/1.73m²	47 (32 – 58)
Potassium, mEq/L	4.7 (4.3 – 4.8)
All-cause mortality at 6 months	0 (0%)
HF hospitalization at 6 months	2 (15.4%)

Data are presented as median (Q1–Q3) or n (%).

HF = heart failure

eGFR = estimated glomerular filtration rate

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	A RARE CULPRIT IN CARDIOGENIC SHOCK: EPSTEIN-BARR MYOCARDITIS WITH REVERSIBLE BIVENTRICULAR FAILURE
Author Block:	Julian Jose Rubio Gil de Lamadrid, Julio David Vega-Torres, Rafael J. Cummings-Lopez, Nicole M. Vazquez-Morales, Mariella Pappaterra-Rodriguez, Andrew Engel-Rodriguez, Francisco J. Cordova, Veterans Affairs Caribbean Healthcare System, San Juan, PR, USA
Abstract Body:	**Background:** Epstein-Barr virus (EBV) myocarditis is an uncommon cause of acute heart failure in older adults. When multiorgan dysfunction obscures early findings, distinguishing myocarditis from ischemic cardiomyopathy requires careful clinical and hemodynamic assessment. **Case:** A 69-year-old man developed progressive dyspnea following a viral illness and arrived with marked volume overload, worsening fatigue, and new renal dysfunction. Exam revealed elevated jugular venous distention, cool extremities, and tachypnea, raising concern for evolving shock. Laboratory studies showed acute kidney injury and significant transaminitis suggestive of hypoperfusion related hepatic injury. Echocardiography demonstrated new severe biventricular dysfunction (EF 15-20%) with global hypokinesis. Over hours he deteriorated into cardiogenic shock with hypotension, rising lactate, and evidence of multiorgan hypoperfusion. Dobutamine and norepinephrine were initiated with rapid improvement in blood pressure, lactate clearance, and end-organ parameters. Viral studies supported EBV myocarditis as the likely etiology. Once renal function permitted contrast exposure, coronary angiography revealed nonobstructive coronary disease, reducing concern for ischemic cardiomyopathy and reinforcing a primary inflammatory process. **Decision-making:** Invasive hemodynamics confirmed congestive shock with markedly elevated filling pressures, guiding targeted diuresis, volume optimization, and thoughtful weaning of vasoactive therapy. Following intensive care unit discharge, A MUGA scan revealed EF 21%, prompting initiation of a wearable cardioverter-defibrillator for early arrhythmic protection. Follow-up imaging months after this event, demonstrated EF

recovery to 55%, consistent with reversible viral myocarditis.
Conclusion: EBV myocarditis can precipitate profound biventricular failure and shock in older adults. Hemodynamics clarified physiology, excluded ischemia, and guided therapy, highlighting the potential for full myocardial recovery when prompt supportive management is provided.

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	ACUTE ENDOTHELIAL AND TISSUE SATURATION RESPONSES TO HIGH-INTENSITY NORDIC WALKING WITH REMOTE ISCHEMIC PRECONDITIONING IN HEART FAILURE WITH REDUCED EJECTION FRACTION - A STUDY PROTOCOL FOR A RANDOMIZED TRIAL
Author Block:	John Anthony Sayson, Vitória Lini, Emmanuel Ciolac, Universidade Estadual Paulista, Bauru-SP, Brazil
Abstract Body:	**Background:** High-intensity interval training (HIIT) has been shown to improve endothelial function, while remote ischemic preconditioning (RIPC) attenuates skeletal muscle dysfunction in patients with heart failure with reduced ejection fraction (HFrEF). The aim of this randomized trial is to investigate the acute effects of combining HIIT and RIPC on endothelial function and tissue oxygenation in HFrEF patients. **Methods:** The study uses a prospective, parallel-group trial design with two arms: HFrEF patients and an age-matched healthy control group. Individuals aged 40-79 years with HFrEF and a left ventricular ejection fraction of less than 50% will be recruited. The control group will have no history of cardiac or vascular disease. Based on a previous study, the estimated sample size is 12 participants for each group. All participants will undergo a single-session intervention comprising three 5-minute cycles of RIPC, followed by four 4-minute intervals of high-intensity Nordic walking (NW). During RIPC, a pneumatic cuff set at 50 mmHg above systolic pressure will be applied to both forearms. Participants will perform a cardiopulmonary exercise test to determine peak oxygen consumption, which will inform the intensity of the HIIT session. Pre- and post-intervention assessments of brachial artery flow-mediated dilation, carotid-femoral pulse wave velocity, and tissue oxygenation at the thenar eminence and vastus lateralis using near-infrared spectroscopy will be compared, as will the outcomes between the two groups. This study has been approved by the institutional research ethics board (CAAE 94073025.6.0000.5398). **Results:** This outlines an ongoing randomized controlled trial examining the

acute effects of HIIT with RIPC in HFrEF patients.
Conclusion: The study's findings will determine whether RIPC+HIIT provides supporting evidence for a long-term intervention strategy to improve peripheral endothelial and skeletal muscle dysfunction in HFrEF.

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	INTERMITTENT LEVOSIMENDAN AS PALLIATIVE THERAPY FOR REFRACTORY GRAFT DYSFUNCTION AFTER ANTIBODY-MEDIATED REJECTION
Author Block:	Cesar Andres Marriaga Zarate, Erwing Vargas Saenz, Maria Fernanda Marin Betancourt, WIlliam Achury Mancera, Fundacion Clinica Shaio, Bogota, Colombia
Abstract Body:	**Background:** Antibody-mediated rejection (AMR) is a major cause of chronic graft dysfunction after heart transplantation. Patients with advanced heart failure who are not candidates for retransplantation or mechanical support have limited treatment options. Intermittent levosimendan may improve symptoms and quality of life, although evidence in post-transplant patients remains limited. **Case:** A 37-year-old man underwent orthotopic heart transplantation in September 2024 for advanced heart failure secondary to probable viral myocarditis. Initial post-transplant evolution was favorable, with preserved biventricular function. During follow-up, endomyocardial biopsy showed acute cellular rejection grade 2R with diffuse C4d positivity, consistent with AMR. Despite optimized immunosuppressive therapy, he developed progressive chronic graft dysfunction with recurrent decompensated heart failure. Echocardiography revealed severe biventricular dysfunction with left ventricular ejection fraction (LVEF) reduced to 16%. NT-proBNP remained elevated, with persistent NYHA class III symptoms. **Decision-making:** Given the absence of candidacy for retransplantation or mechanical circulatory support, a palliative strategy with intermittent levosimendan infusion was initiated in a day-hospital program. Follow-up over 3 months demonstrated symptomatic improvement, no new heart failure hospitalizations, reduced NT-proBNP levels, and improved quality of life assessed by the Kansas City Cardiomyopathy Questionnaire, with increases of 27.81 points in the Clinical Summary Score and 31.41 points in the Overall Summary Score. NYHA functional class improved after therapy, and current LVEF was 40%. Evidence for levosimendan in heart transplant recipients is

mainly limited to perioperative graft dysfunction and primary graft failure, with scarce data on long-term use in chronic graft dysfunction.
Conclusion: Intermittent levosimendan infusion may represent a feasible palliative therapeutic strategy to improve symptoms and quality of life in patients with refractory graft dysfunction following antibody-mediated rejection after heart transplantation.

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	LOW-COST ECG TRIAGE FOR CHAGAS-COMPATIBLE CARDIOMYOPATHY EVALUATION IN LATIN AMERICA
Author Block:	Claudio Aldahir Medina Angulo, ORIELE NOEMI FLORES HERNANDEZ, Universidad Nacional San Luis Gonzaga, Ica, Peru, Sociedad Cientifica de Estudiantes de Medicina de Ica (SOCEMI), Ica, Peru
Abstract Body:	**Background:** Chagas cardiomyopathy is a leading cause of heart failure in Latin America, but remains underdiagnosed where serologic confirmation and echocardiography are unavailable. Low-cost tools that prioritize patients for confirmatory testing could improve allocation of cardiology resources in endemic regions. We evaluated whether a frozen ECG foundation model (ECG-FM) supports patient-level triage for Chagas-compatible cardiomyopathy evaluation. **Methods:** We analyzed 80,001 ECGs from 71,351 patients in CODE-15, a Brazilian multicenter cohort with self-reported Chagas labels. ECG-FM embeddings fed regularized linear classifiers. Five non-overlapping folds split patients (not ECGs). The direct Chagas score was the out-of-fold prediction of the self-reported label; separate classifiers predicted six bridge phenotypes: atrial fibrillation, right bundle branch block, left bundle branch block, first-degree atrioventricular block, sinus bradycardia, and ST-segment abnormalities. Patient risk was the maximum exam-level Chagas score. We quantified risk-tier enrichment, positive predictive value (PPV), area under the receiver operating characteristic curve (AUROC), recall, and number needed to screen (NNS). **Results:** The proposed top 5% risk tier captured 39.7% of Chagas-labeled patients with NNS of 6.3, a 7.9-fold enrichment over baseline prevalence (2.0%); PPV was 15.7% and patient-level AUROC was 0.831. The top 1% tier reached PPV 36.3% (NNS 2.8, lift 18.3-fold), and the top 20% captured 66.0% of cases (NNS 15). All six bridge phenotypes achieved AUROC ≥0.98; conduction and rhythm anchors were enriched in top-risk tiers. Findings were robust to label-definition and aggregation variants.

Conclusion: ECG-FM supports low-cost ECG triage for Chagas-compatible cardiomyopathy evaluation in Latin American settings, reducing NNS from approximately 50 at baseline to 6 in the top-risk tier. Bridge phenotypes provide established electrocardiographic triage anchors. This approach does not replace serologic confirmation; it identifies patients who should be prioritized for confirmatory testing and cardiac evaluation.

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	CARDIOGENIC DEMENTIA: NEUROVASCULAR MECHANISMS OF COGNITIVE IMPAIRMENT ASSOCIATED WITH HEART FAILURE
Author Block:	María Isabel Rojas Romero, Adrian Coria Medrano, Carlos Sanchez Garibay, Citlaltepetl Salinas Lara, Coordination of Biomedical Sciences, FES Zaragoza, UNAM, México, Mexico, Neuropathology Department, Instituto Nacional de Neurología y Neurocirugía Manuel Velasco Suárez, México, Mexico
Abstract Body:	**Background:** Recent evidence has shown an association between heart failure, cognitive impairment, and dementia, possibly mediated by cerebral hypoperfusion, microvascular dysfunction, neuroinflammation, blood-brain barrier alterations, and progressive neuronal damage. **Methods:** A narrative review of the scientific literature was conducted using biomedical databases. Narrative reviews, systematic reviews, meta-analyses, and experimental studies published in recent years were prioritized, as well as classic articles relevant to the pathophysiological understanding of the heart-brain axis. **Results:** Heart failure is associated with cognitive impairment through hemodynamic, inflammatory, and neurovascular mechanisms. Reduced cardiac output promotes chronic cerebral hypoperfusion, microvascular alterations, and tissue hypoxia. In addition, neurohormonal activation, particularly mediated by angiotensin II, can increase blood-brain barrier permeability, activate microglia and astrocytes, and promote the release of cytokines and chemokines. These processes contribute to demyelination, synaptic dysfunction, microtubule alteration, neuronal apoptosis, and the progressive loss of neurons. In patients with heart failure, a global prevalence of cognitive impairment of 41.42% and dementia of 19.79% has been reported.

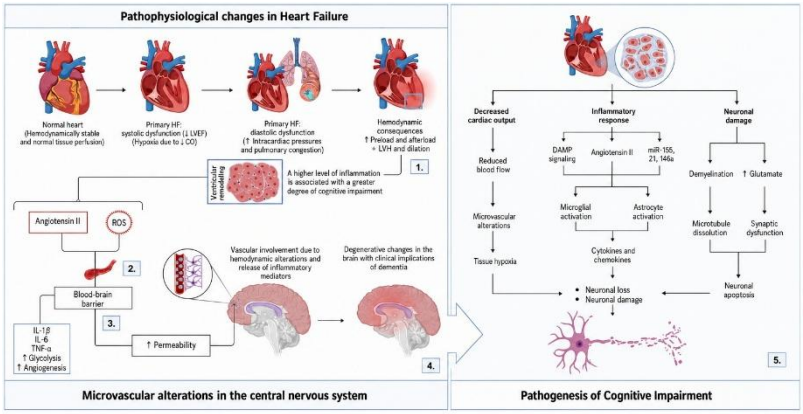
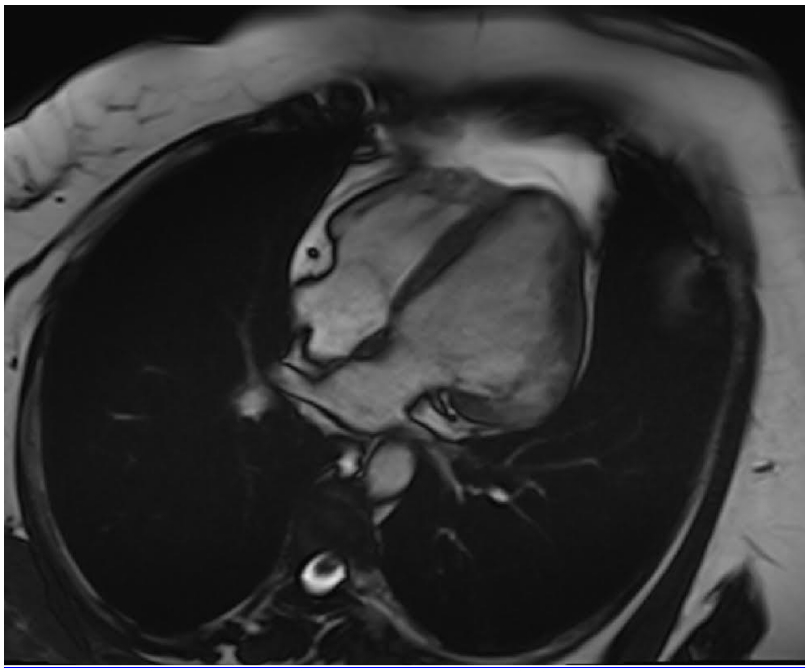


Figure 1. Pathophysiological mechanisms of neuroinflammation and neurodegeneration in chronic heart failure. Hemodynamic alterations caused by systolic or diastolic dysfunction in heart failure (1) induce an increase in the secretion of angiotensin II and reactive oxygen species (ROS), which reach the blood-brain barrier (BBB) systemically (2). This exposure promotes disruption of the BBB by increasing its permeability, facilitating the passage of proinflammatory cytokines such as IL-1β, IL-6, and TNF-α, as well as the activation of metabolic processes such as glycolysis and cerebral angiogenesis (3). These alterations promote neuronal damage through multiple pathways (4): decreased cardiac output with cerebral hypoperfusion and tissue hypoxia; inflammatory activation mediated by DAMPs, angiotensin II, and microRNAs (miR-155, miR-21, miR-146a), which stimulate microglia and astrocytes, generating the release of cytokines and chemokines that perpetuate inflammation locally. Finally, direct neuronal damage *includes demyelination, microtubule dissolution, glutamatergic excitotoxicity, and synaptic dysfunction, leading to apoptosis and neuronal loss (5). This pathophysiological process contributes to clinical manifestations such as cognitive impairment, anxiety, depression, and dementia associated with heart failure.*

Conclusion: Chronic cardiac dysfunction impairs cognition through hypoperfusion, neuroinflammation, and progressive neurovascular damage.

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	THE ARRHYTHMIC FACE OF CHAGASIC CARDIOMYOPATHY: A HIDDEN CAUSE OF HEART FAILURE
Author Block:	Jessica Loreley Lima Díaz, Jimena Alejandra Ramírez Hernández, Carlos Agenor García Rosales, Jose Raul Nieto-Saucedo, Rodrigo Soria García, María ESCALANTE, Enrique Alexander Berrios-Barcenas, SR, FRANCISCO JAVIER ROLDAN, Instituto Nacional de Cardiología "Ignacio Chávez", Ciudad de México, Mexico
Abstract Body:	**Background:** Chagas cardiomyopathy is an underdiagnosed cause of heart failure associated with a high arrhythmic risk and significant prevalence in Mexico **Case:** A 53-year-old woman, she had an onset of episodes of sustained monomorphic ventricular tachycardia in 2020 and 2024 requiring pharmacological and electrical cardioversion. Electrocardiography revealed ventricular bigeminy, QTc prolongation, and ST-segment depression, therefore Chagas serology was performed and returned positive. In 2026 she presented with progressive dyspnea, palpitations and chest pain in the setting of recurrent ventricular tachycardia. Cardiac magnetic resonance with Left Ventricular Ejection Fraction (LVEF) of 43%, inferolateral and anterolateral aneurysms, and extensive fibrosis 23.4%, native T1 value of 1041 ms, extracellular volume fraction 35% **Decision-making:** Chagasic cardiomyopathy carries a high risk of sudden cardiac death, therefore multimodality imaging and arrhythmic risk stratification were essential in guiding the decision to implant an implantable cardioverter-defibrillator (ICD) for secondary prevention **Conclusion:** This case highlights the heterogeneous presentation of Chagasic cardiomyopathy and the importance of early recognition in endemic populations of Latin American, particularly in patients presenting with ventricular arrhythmias. Timely implementation of life-saving therapies as ICD

implantation.

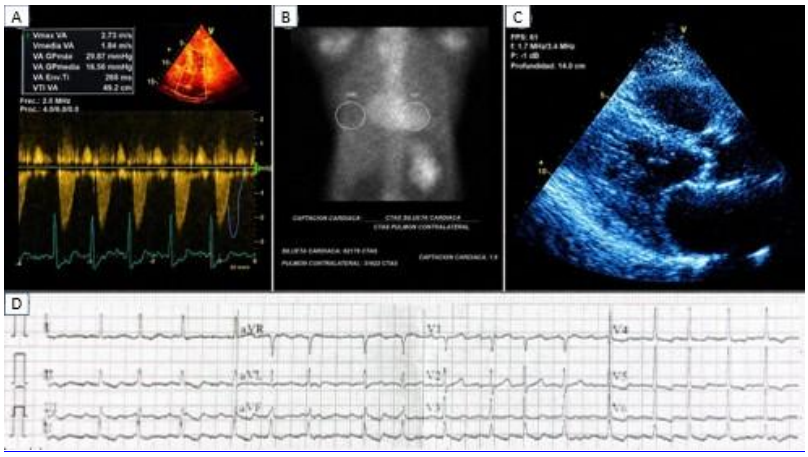


Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	FREQUENCY AND FACTORS ASSOCIATED WITH TYPE 1 CARDIO-RENAL SYNDROME IN A TERTIARY CARE CENTER IN CARTAGENA, COLOMBIA.
Author Block:	Alberto José Sanjuanelo Fontalvo, SR, Julian Cordoba Bertel, ESE HOSPITAL UNIVERSITARIO DEL CARIBE, CARTAGENA, Colombia
Abstract Body:	**Background:** Type 1 cardio-renal syndrome (CRS) is characterized by the rapid development of kidney injury due to acute cardiac dysfunction. This study aimed to determine the frequency and factors associated with type 1 CRS in patients from a tertiary care institution in Cartagena, Colombia. **Methods:** A retrospective observational study was conducted including patients over 18 years of age with acute heart failure admitted between January 2023 and January 2024, with at least two creatinine measurements. Patients with active infection, renal replacement therapy, specific types of shock, contrast agent use, or hematological neoplasms were excluded. A non-probabilistic, convenience sampling technique was used. **Results:** The study included 139 participants with a median age of 80 years, of which 59.7% were male. Hypertension was the most prevalent comorbidity (73.0%), and the frequency of type 1 CRS was 64.7%. Female sex was associated with a 34% reduction in the risk of type 1 CRS (p = 0.0037). The most frequent New York Heart Association (NYHA) functional class was NYHA III (49.6%), followed by NYHA IV (29%) and NYHA II (21%). This pattern was maintained in the CRS group, while in the non-CRS group, NYHA II was the second most common class, with statistically significant differences between groups. **Conclusion:** Type 1 CRS is a frequent clinical entity. Factors significantly associated with its occurrence include male sex and the NYHA functional class.

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	THE DARK HEART: SEVERE TRANSFUSIONAL CARDIAC SIDEROSIS PRESENTING AS ADVANCED CARDIOMYOPATHY IN A YOUNG WOMAN WITH SICKLE CELL DISEASE
Author Block:	Alexandra Rodil, Alejandra Rivera, Ariana Cotto, Alexander Fret, Kristian Guzman, Edwin O. Molina, Hospital Damas, Ponce, PR, USA
Abstract Body:	**Background:** Cardiac iron overload is a reversible yet underrecognized cause of cardiomyopathy in chronically transfused patients with hemoglobinopathies. While hepatic iron deposition is monitored, myocardial iron accumulation may remain clinically silent until heart failure, malignant arrhythmias, or sudden cardiac death develop. Cardiac magnetic resonance imaging (CMR) with T2* mapping is the gold standard for noninvasive detection of myocardial siderosis allowing earlier identification of high-risk patients. **Case:** A 32-year-old woman with sickle cell disease, thalassemia, chronic transfusion dependence, HFrEF, and prior pacemaker/implantable cardioverter-defibrillator placement presented for cardiovascular evaluation due to exertional dyspnea, fatigue, weakness, with lower extremity edema. Examination revealed bilateral +2 pitting edema without pulmonary congestion. Laboratory studies demonstrated chronic anemia with hemoglobin 9.0 g/dL, ferritin 2,624 ng/mL, serum iron 230 µg/dL, and transferrin saturation 94%, suggesting severe iron overload. **Decision-making:** CMR with T2* evaluation was performed. Imaging demonstrated hypointense myocardial signal involving the interventricular septum, consistent with severe myocardial iron deposition. Findings supported transfusional iron-overload cardiomyopathy as the etiology of her nonischemic cardiomyopathy and arrhythmogenic disease requiring device therapy at a young age. Iron chelation optimization was recommended. **Conclusion:** This case highlights the need to suspect cardiac siderosis in transfused patients with unexplained cardiomyopathy or arrhythmias. It demonstrates advanced transfusional cardiac siderosis in an unusually young patient despite ongoing care. Cardiac siderosis remains one of the few

potentially reversible causes of nonischemic cardiomyopathy if identified before irreversible myocardial injury occurs. Early recognition is critical because serum ferritin and transferrin saturation may underestimate myocardial iron burden, delaying diagnosis until irreversible ventricular dysfunction and conduction abnormalities develop.

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	LOW-FLOW, LOW-GRADIENT AORTIC STENOSIS IN A PATIENT WITH CARDIAC AMYLOIDOSIS
Author Block:	Maria José Sarmiento Alvarez, Laura Lucia Acevedo Orozco, David Andres Velez Verbel, Lucia Suarez Maestre, Karellys Asseneth Salgado Cruz, Ana Carolina Salas Campo, Jannes Jose Buelvas Herazo, Manuel Urina-Triana, Miguel A. Urina-Triana, Faculty of Health Sciences, Simón Bolívar University, Barranquilla, Colombia
Abstract Body:	**Background:** The coexistence of calcified aortic stenosis (AS) and transthyretin-related cardiac amyloidosis (ATTR) is an increasingly recognized phenotype in elderly patients with disproportionate LV hypertrophy and gradient-area discordance. Amyloid infiltration contributes to a low-flow (LF) state, favoring low-gradient (LG) AS despite preserved LVEF **Case:** A 73 y/o woman with hypertension, unilateral kidney and prior small cerebellar hemorrhage without sequelae presented severe LF-LG AS (AVA 0.9 cm^2, Vmax 2.3-3.3 m/s, Pmean 13-23 mmHg) concentric LV hypertrophy, preserved LVEF and biauricular dilation. She developed paroxysmal AF requiring electrical cardioversion; TEE showed severe spontaneous contrast without thrombus. Due to discordance, LF-LG AS and hypertrophy, infiltrative disease was suspected. Pyrophosphate scintigraphy revealed Perugini grade 3 suggestive of ATTR. Molecular analysis of TTR gene sequence was negative. She later progressed to NYHA II dyspnea and is undergoing evaluation for tafamidis and TAVI vs surgery **Decision-making:** This case highlights the importance of suspecting cardiac amyloidosis in LF-LG AS with hypertrophy and AF. Identifying the AS + ATTR phenotype explains hemodynamic discordance and significantly impacts prognosis and therapeutic decision-making **Conclusion:** Screening for amyloidosis in LF-LG AS prevents underdiagnosis and enables personalized management, including transthyretin stabilizers and appropriate selection for TAVI


A
Vmax VA 2.72 m/s
Vmedia VA 1.84 m/s
VA GPmax 29.87 mmHg
VA GPmedia 16.56 mmHg
VA E/e:Ti 260 ms
VTI VA 49.2 cm
B
C
D

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	RENAL FUNCTION PRESERVATION WITHOUT DIALYSIS AND MAINTENANCE OF CARDIAC STABILITY WITHOUT CONGESTIVE SYMPTOMS: A FIVE-YEAR CASE REPORT OF AL AMYLOIDOSIS TREATED WITH DARATUMUMAB
Author Block:	Gabriel Mangas, Jose Gregorio Valero Rodriguez, Isabelle Mendes Rodrigues Salomão, Guilherme Cesar Fernandes de Oliveira da Costa, Diane Xavier de Ávila, Evandro Tinoco Mesquita, Universidade Federal Fluminense, Niterói, Brazil, Complexo Hospitalar de Niterói, Niterói, Brazil
Abstract Body:	**Background:** Immunoglobulin light-chain (AL) amyloidosis is a rare, potentially fatal systemic disorder caused by extracellular deposition of misfolded monoclonal light chains, resulting in multi-organ dysfunction. Cardiac involvement is the main determinant of prognosis. Anti-CD38 monoclonal antibodies, particularly daratumumab, have markedly improved treatment outcomes. **Case:** A 55-year-old male from Rio de Janeiro, Brazil, with no prior comorbidities, presented with progressive fatigue, exertional dyspnea, diarrhea, peripheral pain, muscle cramps, erectile dysfunction, and urinary tract infections, complicated by deep vein thrombosis and pulmonary embolism. Examination showed BMI 22.6 kg/m^2 and orthostatic hypotension (118/76 mmHg supine; 92/64 mmHg standing), with compensatory tachycardia (84 to 102 bpm). Cardiac auscultation was normal; lungs had fine basal crackles; no peripheral edema. Neurological exam revealed mild distal paresthesias with preserved strength. Laboratory studies showed elevated creatinine (5.67 mg/dL), NT-proBNP (3,156 pg/mL), detectable troponin, and positive immunofixation for monoclonal lambda light chain. **Decision-making:** Following daratumumab-based therapy, creatinine stabilized at 3.9-4.4 mg/dL by mid-2025. NT-proBNP rose transiently without evidence of new cardiac dysfunction, and troponin remained stable. Serum and urine immunofixation became negative by May 2025, indicating sustained hematologic response. **Conclusion:** This case highlights daratumumab's potential to achieve durable

hematologic response and organ stability in AL amyloidosis. Despite progressive renal impairment, the patient remained dialysis-free. Cardiac function was preserved with no overt congestion and no diuretic requirement, reinforcing daratumumab as a cornerstone treatment in advanced AL amyloidosis.

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	ATRIAL FIBRILLATION AND CARDIOEMBOLIC RISK IN CHAGAS DISEASE: A SCOPING REVIEW OF CLINICAL AND PUBLIC HEALTH EVIDENCE
Author Block:	Danilo Weir Restrepo, Luis G. Giraldo, Daniel Miranda, Maria M. Garcia, Juan Pinilla, Luis G. Pajaro, Andrés Sánchez Muñoz, Adrian M. Baranchuk, CES university, Medellin, Colombia, Sociedad Interamericana de Cardiología, Mexico
Abstract Body:	**Background:** Atrial fibrillation (AF) is the most frequent supraventricular arrhythmia in Chagas disease (CD), a marker of advanced atrial myopathy and a determinant of stroke risk increasingly affecting non-endemic regions through migration. We mapped the evidence on its clinical and public health implications. **Methods:** Following Joanna Briggs Institute methodology and PRISMA-ScR, with a PRESS peer-reviewed search strategy, we queried PubMed, Scopus, Web of Science and Lilacs through February 2026 for primary quantitative studies in adults with confirmed CD addressing AF, stroke or anticoagulation, complemented by reference hand-searching. **Results:** 39 observational studies were included (1987-2025); 75% from Brazil, none from non-endemic countries and no randomized trial targeted AF in CD. AF prevalence rose from 5-9% in primary care to 18-38% in advanced Chagas cardiomyopathy (CCM), with 13.8% incident AF over 33 months in defibrillator carriers. Advanced interatrial block (73.3% vs 0%; p<0.0001), reduced atrial function on speckle-tracking and atrial high-rate episodes >=6 min predicted new-onset AF, the latter strongly linked to silent ischemic brain lesions (OR 96.2). Ischemic stroke incidence reached 20.2 per 1,000 person-years in CCM and exceeded conventional scoring: AF (OR 14.7), apical aneurysm (OR 86), left ventricular ejection fraction (LVEF) <40% (HR 3.2), heart failure and biatrial dilatation drove risk; 56% of strokes were embolic of undetermined source and a CD-specific score misclassified 55% of cardioembolic events as low risk. Direct oral anticoagulants (DOAC) replaced warfarin without efficacy differences, yet 35% of high-risk outpatients and 68% of stroke patients

remained untreated, and residual embolic risk persisted despite anticoagulation (HR 5.65 vs other cardiomyopathies).
Conclusion: AF in CD reflects an advanced atrial myopathy whose stroke risk consistently exceeds conventional scoring. Evidence is exclusively observational and regionally restricted. Dedicated anticoagulation trials, CD-specific risk tools and screening strategies for migrant populations are urgent priorities

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	ANTI KU AUTOIMMUNE OVERLAP SYNDROME PRESENTING AS FULMINANT INFLAMMATORY CARDIOMYOPATHY
Author Block:	Mauricio Manrique, CARLOS FUENTES, FERNAN DEL CRISTO MENDOZA, Ingrid J. Martínez Ramírez, Javier F. Torres, Daniel Forero, Francisco Villadiego, Fundación Clínica Shaio, Bogotá, Colombia
Abstract Body:	**Background:** Autoimmune inflammatory cardiomyopathy may present as refractory heart failure (HF) and multisystemic involvement, creating major diagnostic and therapeutic challenges **Case:** A 52 year old man presented with cardiogenic shock due to severe biventricular dysfunction. Electrocardiogram showed diffuse low voltage, pseudoinfarction pattern, QT prolongation, atrial flutter, and nonsustained ventricular tachycardia. Coronary disease and other HF causes were excluded. Cardiac magnetic resonance demonstrated diffuse nonischemic late gadolinium enhancement involving both ventricles and pericardium, suggesting inflammatory cardiomyopathy. Chest CT revealed fibrosing interstitial lung disease (ILD). Autoimmune testing showed positive ANA, anti dsDNA, ANCA, low C4, elevated creatine phosphokinase, active urinary sediment, and anti-Ku positivity **Decision-making:** Multisystemic involvement favored anti Ku overlap inflammatory myopathy. The patient received guideline directed HF therapy, corticosteroids, hydroxychloroquine, cavotricuspid isthmus ablation, and repeated levosimendan infusions. The patient was not eligible for heart transplantation because of advanced pulmonary disease, systemic involvement, and social vulnerability **Conclusion:** Anti Ku autoimmune overlap syndrome should be considered in unexplained inflammatory cardiomyopathy with ILD. Early multimodality imaging and multidisciplinary evaluation are critical for diagnosis and management

Anti-KU autoimmune Overlap Syndrome presenting as fulminant inflammatory cardiomyopathy

CLINICAL PRESENTATION

52-Year-Old Male Patient: Former coal miner with chronic silica/coal dust exposure presenting with progressive dyspnea and cachexia.

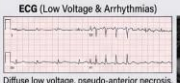
Cardiogenic Shock (SCAI Stage C): Initial presentation featured severe biventricular failure requiring vasopressors and inotropes.

Advanced Heart Failure: LVEF of 20%, massive tricuspid regurgitation, and pulmonary hypertension.

Systemic Involvement: Concurrent interstitial lung disease, elevated CPK (myopathy), and active urinary sediment.

KEY DIAGNOSTIC FINDINGS

ECG (Low Voltage & Arrhythmias)

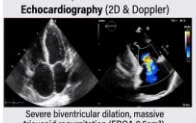


Diffuse low voltage, pseudo-anterior necrosis. QT prolongation, cavotricuspid isthmus-dependent flutter.

Cardiac MRI (Diffuse Inflammation)

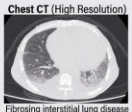
Diffuse non-ischemic LGE involving both ventricles and the pericardium.

Echocardiography (2D & Doppler)



Severe biventricular dilation, massive tricuspid regurgitation (EROA 0.6cm²), severely reduced LVEF (20-25%).

Chest CT (High Resolution)



Fibrosing interstitial lung disease (UIP/NSIP overlap) and micronodular pneumoconiosis patterns.

Serology & Biomarkers

- Positive ANA (granular), anti-dsDNA, ANCA, and Anti-Ku antibodies;
- Elevated Pro-BNP and CPK.

DIAGNOSIS & MANAGEMENT / OUTCOME

DIAGNOSIS:

- **Final Diagnosis:** Anti-Ku Autoimmune Overlap Syndrome with fulminant inflammatory cardiomyopathy and interstitial lung disease.

MANAGEMENT:

- **Targeted Management:** Treatment included Levosimendan infusions, ablation of the cavotricuspid isthmus, and GDMT.
- **Immunosuppression:** Initiation of Prednisolone (steroid tapering) and Hydroxychloroquine to address the underlying autoimmune trigger.

CLINICAL OUTCOME: Stabilization of hemodynamics and partial recovery of LVEF to 31% at discharge.

High Index of Suspicion Required: Anti-Ku overlap syndrome must be considered in patients with unexplained inflammatory cardiomyopathy, interstitial lung disease, and history of silica exposure.

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	REVERSIBLE DILATED CARDIOMYOPATHY AND PERICARDIAL EFFUSION INDUCED BY ITRACONAZOLE
Author Block:	Jorge Alejandro Pamplona Tobón, Juanita Velasquez-Ospina, Maria Camila Rojas-Rubiano, Cristian Iván García-Rincón, Catalina Gallego Muñoz, Carlos Jaime Velásquez-Franco, Clínica CardioVID, Medellín, Colombia

Abstract Body:

Background: Itraconazole is a triazole with a Food and Drug Administration black-box warning for heart failure. It exerts direct negative inotropy, potentially via mitochondrial dysfunction or sodium channel inhibition, but associated pericardial involvement is rarely reported.

Case: A 67-year-old female with disseminated histoplasmosis on itraconazole therapy underwent a follow-up positron emission tomography/computed tomography scan, which incidentally revealed pericardial effusion without metabolic activity. Although she remained asymptomatic, physical examination showed mild peripheral edema, and N-terminal pro-B-type natriuretic peptide (NT-proBNP) was elevated at 2332 pg/mL. Transthoracic echocardiography (TTE) demonstrated a newly dilated left ventricle with a left ventricular ejection fraction (LVEF) of 41%, a decline from a baseline of 55%. Cardiac magnetic resonance (CMR) showed diffuse hypokinesia and no late gadolinium enhancement, excluding ischemia and prior myocarditis as etiologies.

Decision-making: Itraconazole was suspended and guideline-directed medical therapy for heart failure was initiated. This case emphasizes that cardiotoxicity is selective for itraconazole rather than a class effect and involves direct myocardial depression. Pericardial effusion is an infrequent but identified signal in pharmacovigilance database analyses, and highlights the drug's potential for severe volume-related adverse effects. Since damage can be asymptomatic, incidental imaging and biomarker screening are crucial for early detection. Prompt drug cessation is essential, because this toxic cardiomyopathy is typically fully reversible, distinguishing it from progressive structural heart diseases. Following drug withdrawal and medical

management, serial TTEs demonstrated progressive recovery, with LVEF normalizing to 55-60% and complete resolution of the pericardial effusion by 2 years of following.

Conclusion: Itraconazole can induce reversible dilated cardiomyopathy and pericardial effusion. Incidental imaging findings may lead to early diagnosis, allowing for prompt drug cessation and complete functional and structural cardiac recovery.

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	CLINICAL UTILITY OF THE BAN-ADHF SCORE FOR PREDICTING DIURETIC RESPONSE IN ACUTE DECOMPENSATED HEART FAILURE A SYSTEMATIC REVIEW
Author Block:	Gabriel Jose Paredes Yacaman, Carlos Umaña, Jose Flores Valdés, Mariana Del Rio Rocha, David A. Guerrero Benavides, José A. Tacea González, Blas Valenzuela Zavala, Elihú Hernández Pérez, Paola M. Santa Cruz González, Francisco J. Saucedo Marin, Luis Eduardo Vidal Copal, Alejandra Guizada Vargas, Daniel A. Dionicio Hurtado, Mauricio Montelongo Quevedo, Universidad Autonoma de Guadalajara, Guadalajara, Jalisco, Mexico
Abstract Body:	**Background:** Diuretic resistance is a common complication in acute decompensated heart failure (ADHF) and is associated with inadequate decongestion and worse outcomes. The BAN-ADHF score has emerged as a potential tool to identify patients at risk of reduced diuretic efficiency and impaired natriuretic response. **Methods:** We conducted a systematic review according to PRISMA 2020 and registered in PROSPERO (CRD420261393187). PubMed/MEDLINE, Scopus, Web of Science, and CENTRAL were searched from inception through March 2026. Eligible studies included randomized trials, post-hoc analyses, and observational cohort studies evaluating BAN-ADHF-based risk stratification in adults hospitalized with ADHF. Primary outcomes were diuretic efficiency, natriuresis, and decongestive response. Risk of bias was assessed using RoB 2 and the Newcastle-Ottawa Scale. Because of heterogeneity across study designs and outcomes, findings were synthesized qualitatively. **Results:** Four studies including more than 2,000 patients were included. Higher BAN-ADHF scores were associated with lower diuretic efficiency, reduced urine output, impaired natriuresis, and worse short-term outcomes. In one cohort study, each 1-point increase in BAN-ADHF score was associated with 15% lower odds of achieving urine output >3 L within 24 hours (OR 0.85, 95% CI 0.79-0.91; p<0.001). In a post-hoc analysis of CLOROTIC, high-risk patients had lower net fluid loss (686 vs 889 mL; p=0.003), lower net diuretic

efficiency (1.85 vs 2.50 mL/mg; p<0.001), and higher 30-day mortality (11.1% vs 2.4%; p=0.04). Reported AUROC values ranged from 0.70 to 0.92 across derivation and validation cohorts, indicating variable but overall moderate-to-good discrimination.

Conclusion: BAN-ADHF-based stratification may help identify patients with ADHF at risk of poor diuretic response and short-term adverse outcomes. However, available evidence is limited by heterogeneity, observational designs, and low certainty.

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	LOW IMPLEMENTATION OF QUADRUPLE GUIDELINE-DIRECTED MEDICAL THERAPY IN PATIENTS HOSPITALIZED WITH WORSENING HFREF: A REAL-WORLD LATIN AMERICAN EXPERIENCE
Author Block:	Pamela Ramirez Rangel, JR, Miguel Alejandro Maldonado, Daniel Sandoval Manzur, Jorge Alberto Vega, Alejandro Sierra, Joaquín Rivera Villamar, SR, Maria Beatriz Paredes Rivera, Pamela Rosario M. Alvarez, Laura Victoria Torres-Araujo, Marco Ponce-Gallegos, National Institute of Cardiology Ignacio Chavez, Mexico City, Mexico, Mexico, Mexico
Abstract Body:	**Background:** Early initiation of the four foundational therapies for heart failure with reduced ejection fraction (HFrEF) is recommended, yet implementation in routine practice remains limited. We aimed to characterize guideline-directed medical therapy (GDMT) use in patients admitted with worsening HFrEF at a tertiary referral center in Latin America. **Methods:** We conducted a cross-sectional study including consecutive patients hospitalized with decompensated HFrEF over one year. Demographics, comorbidities, and baseline GDMT use were obtained from medical records. **Results:** Forty-six patients were included; 71.7% were male, median age 60 years. At admission, 19.6% were not receiving GDMT, 26.1% received one drug class, 17.4% two, 17.4% three, and only 19.6% quadruple therapy. Use of individual therapies was: RASi/ARNI 45.7%, beta-blockers 43.5%, mineralocorticoid receptor antagonists 52.2%, and SGLT2 inhibitors 50.0%. Patients on quadruple therapy had higher body mass index (30.0 vs 24.5 kg/m^2; p=0.025), while no patient with type 2 diabetes received quadruple therapy (p=0.041). **Conclusion:** In this real-world cohort, implementation of quadruple GDMT was low, with nearly one in five patients receiving no disease-modifying therapy,

highlighting persistent barriers to optimal HFrEF management.

Characteristic	Quadruple therapy			
	Overall N = 46	No N = 37	Yes N = 9	p-value
Sex				0.2
Female	13 (28.3%)	9 (24.3%)	4 (44.4%)	
Male	33 (71.7%)	28 (75.7%)	5 (55.6%)	
Age, years	60.0 (50.0 - 71.0)	61.0 (52.0 - 71.0)	50.0 (43.0- 70.0)	0.2
BMI, kg/m2	24.7 (22.0 - 30.0)	24.5 (21.3 - 28.3)	30.0 (26.8 - 32.3)	0.025
DM type 2	14 (30.4%)	14 (37.8%)	0 (0.0%)	0.041
Arterial hypertension	26 (56.5%)	22 (59.5%)	4 (44.4%)	0.5
Hypothyroidism	6 (13.0%)	5 (13.5%)	1 (11.1%)	>0.9
Chronic kidney disease	5 (10.9%)	5 (13.5%)	0 (0.0%)	0.6
COPD	3 (6.5%)	3 (8.1%)	0 (0.0%)	>0.9
Tobacco use				0.4
Denied	21 (45.7%)	15 (40.5%)	6 (66.7%)	
Active	6 (13.0%)	5 (13.5%)	1 (11.1%)	
Suspended	19 (41.3%)	17 (45.9%)	2 (22.2%)	
Alcohol use				0.9
Denied	21 (45.7%)	16 (43.2%)	5 (55.6%)	
Active	7 (15.2%)	6 (16.2%)	1 (11.1%)	
Suspended	18 (39.1%)	15 (40.5%)	3 (33.3%)	
Schooling				0.14
Illiterate	6 (13.0%)	5 (13.5%)	1 (11.1%)	
Elementary	17 (37.0%)	16 (43.2%)	1 (11.1%)	
Middle School	11 (23.9%)	7 (18.9%)	4 (44.4%)	
High School	8 (17.4%)	5 (13.5%)	3 (33.3%)	
College	4 (8.7%)	4 (10.8%)	0 (0.0%)	
Marital status				>0.9
Single	10 (21.7%)	8 (21.6%)	2 (22.2%)	
Married	25 (54.3%)	20 (54.1%)	5 (55.6%)	
Divorced	6 (13.0%)	5 (13.5%)	1 (11.1%)	
Widower/widow	5 (10.9%)	4 (10.8%)	1 (11.1%)	
Currently works	15 (32.6%)	12 (32.4%)	3 (33.3%)	>0.9

Figure 1. Percentage of patients with HFrEF using guideline-directed medical therapy, stratified by drug class.

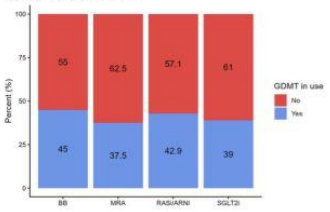
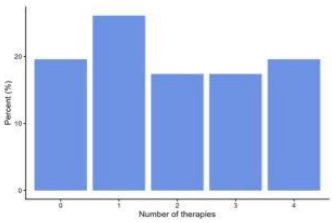
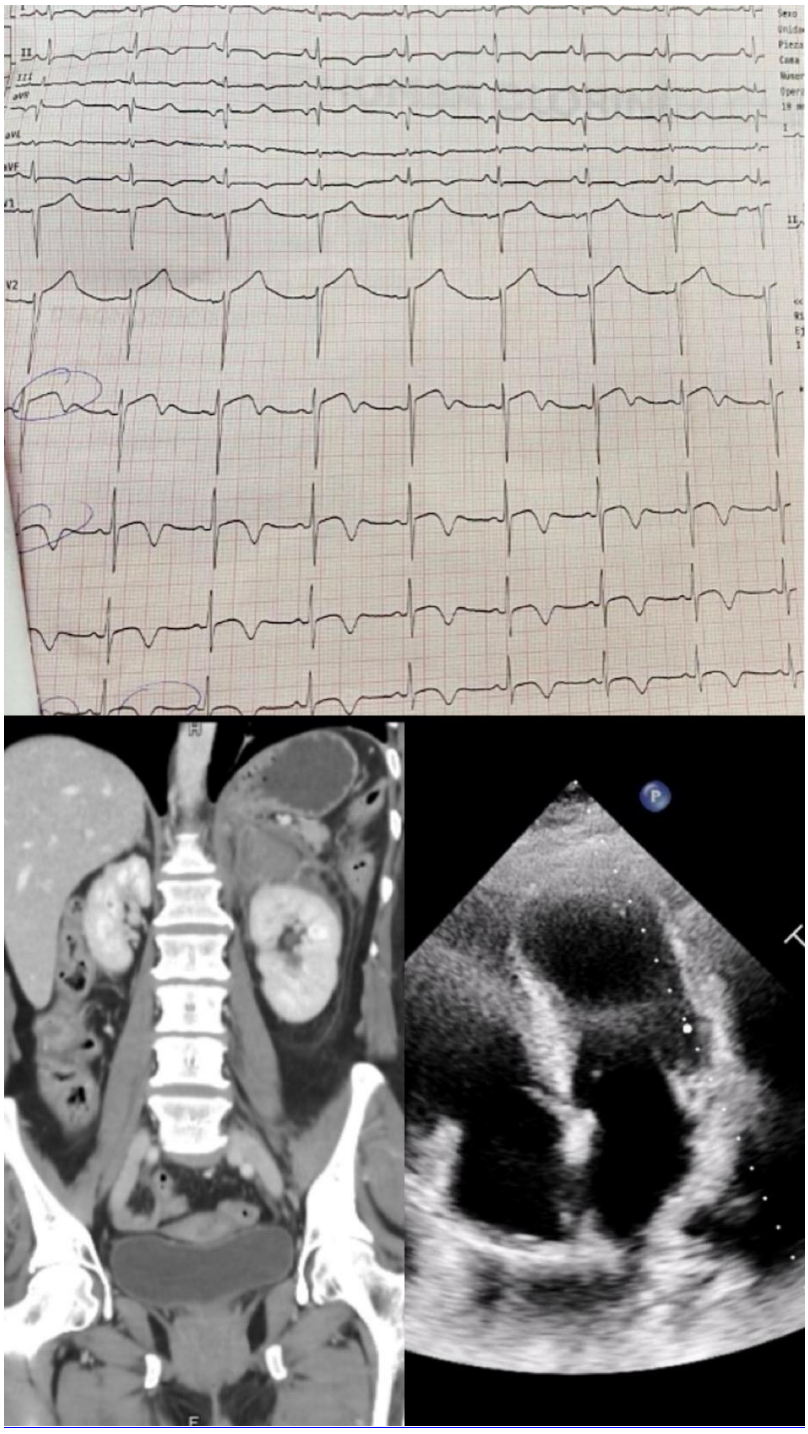


Table 2. Percentage of patients with HFrEF using each number of medications.



Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	TAKOTSUBO CARDIOMYOPATHY AS THE FIRST MANIFESTATION OF PHEOCHROMOCYTOMA A DIAGNOSTIC CHALLENGE
Author Block:	Estefania Samaniego, Fredy M. Peralta, Joffre A. Arequipa, Eduardo L. Zea, Diana I. Salazar, Jessica A. Rodriguez, John S. Rubio, Franklin A. Vilca, Lorena M. Acosta, Hospital de Especialidades Carlos Andrade Marin, Quito, Ecuador, Quito, Ecuador
Abstract Body:	**Background:** Pheochromocytoma induced Takotsubo cardiomyopathy is a rare acute coronary syndrome mimic in which early recognition of catecholamine excess may significantly alter management. **Case:** A 61year old woman presented with chest pain, diaphoresis, and holocranial headache. Electrocardiography showed deep T wave inversion in V3,V6, ST elevation in aVR, and marked QTc prolongation (626 ms) with dynamic troponin elevation. Initially managed as non ST elevation acute coronary syndrome, coronary angiography demonstrated non obstructive coronary arteries. Echocardiography revealed circumferential apical hypokinesia with preserved ejection fraction. Persistent headache and sustained hypertension prompted computed tomography, which excluded aortic dissection but revealed a 40 mm left adrenal mass with elevated metanephrine levels, consistent with pheochromocytoma induced Takotsubo cardiomyopathy. The patient underwent alpha-adrenergic blockade followed by adrenalectomy. **Decision-making:** Catecholamine excess should be suspected in acute coronary syndrome presentations with non obstructive coronary arteries, QTc prolongation, hypertensive crises, and non-territorial wall motion abnormalities. **Conclusion:** Pheochromocytoma induced Takotsubo cardiomyopathy is a rare acute coronary syndrome mimic in which early recognition of catecholamine

excess may significantly alter management.



Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	CARDIAC TAMPONADE DUE TO LARGE PERICARDIAL EFFUSION IN POSTPARTUM HELLP SYNDROME
Author Block:	Roberto Jason Marroquín Marroquín, Sussan Orozco, Hospital Regional de Occidente San Juan de Dios, Quetzaltenango, Guatemala
Abstract Body:	**Background:** Hemolysis, elevated liver enzymes and low platelet count (HELLP) syndrome is a severe hypertensive disorder of pregnancy. Severe preeclampsia may cause endothelial dysfunction, capillary leak and serous effusions. Pericardial effusion is rare but may progress to cardiac tamponade. **Case:** A 25-year-old gravida 2 woman at 29.4 weeks presented with headache and blurred vision. Blood pressure was 170/120 mmHg. Initial tests showed platelets 142,000/µL, lactate dehydrogenase 330 U/L, aspartate aminotransferase 36.9 U/L, alanine aminotransferase 22.5 U/L, uric acid 8.61 mg/dL and albumin 3.22 g/dL. Preeclampsia with threatened preterm labor was diagnosed. Magnesium sulfate, antihypertensive therapy and fetal lung maturation were started. Cesarean delivery was performed at 32 weeks. **Decision-making:** In the immediate puerperium, she developed multiorgan failure, acute kidney injury, hepatic dysfunction and severe thrombocytopenia. Laboratory deterioration showed lactate dehydrogenase 2,852 U/L, aspartate aminotransferase 713 U/L, platelets 11,000-28,000/µL and creatinine 3.20 mg/dL. Schistocytes were seen on peripheral smear. A previous echocardiogram showed preserved biventricular function and no effusion. During persistent shock, repeat echocardiography identified a large 2.2-cm pericardial effusion with cardiac tamponade. **Conclusion:** In postpartum HELLP syndrome, unexplained shock should prompt echocardiography to identify cardiac tamponade.

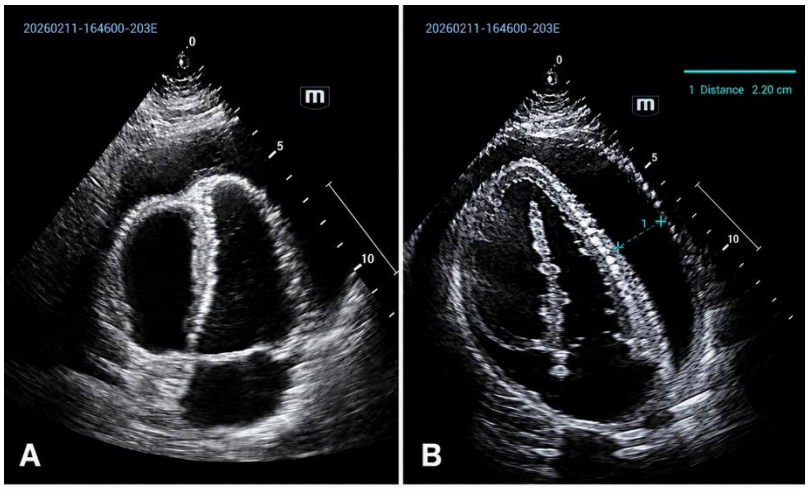


Figure. Transthoracic echocardiogram.

A) Apical four-chamber view showing a large circumferential pericardial effusion.

B) Apical four-chamber view with measurement of the posterior pericardial space, showing a pericardial effusion of 2.20 cm.

Findings are consistent with cardiac tamponade.

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	FROM REFRACTORY CARDIOGENIC SHOCK TO HEART TRANSPLANT: SUCCESSFUL BRIDGE STRATEGY WITH ECMELLA SUPPORT
Author Block:	Alan Jhoset Meneses Ruiz, ERICK REY PALMA FIERRO, Karen Quintana, Martín Arriaga Torres, Juan Betuel Ivey Miranda, Miguel Molina Alegria, Eduardo Almeida Gutiérrez, Karina Lupercio Mora, Héctor Garcia Torres, Hospital de cardiología, centro médico nacional siglo XXI, México city, Mexico
Abstract Body:	**Background:** Despite advances in medical therapy, a significant proportion of patients with heart failure progress to advanced stages with persistent symptoms despite optimal treatment. In refractory cardiogenic shock, temporary mechanical circulatory support may provide a bridge-to-decision or bridge-to-transplant strategy. **Case:** A 39-year-old man with advanced non-ischemic heart failure with reduced ejection fraction (LVEF 10%), classified as AHA/ACC stage D and NYHA functional class III despite optimal medical therapy, was admitted with SCAI stage C cardiogenic shock requiring norepinephrine, levosimendan, and later dobutamine due to persistent hemodynamic deterioration. During hospitalization, he developed sustained monomorphic ventricular tachycardia followed by cardiac arrest requiring 3 minutes of cardiopulmonary resuscitation with successful return of spontaneous circulation Peripheral venoarterial extracorporeal membrane oxygenation (VA-ECMO) was initiated as rescue therapy, followed by Impella implantation for left ventricular unloading (ECMELLA strategy). After multidisciplinary evaluation, he was accepted for heart transplantation and successfully underwent bicaval orthotopic heart transplantation.Four months after transplantation, the patient remains at home in NYHA functional class I. **Decision-making:** A subset of patients demonstrates poor response to standard vasoactive therapy, progressing to refractory cardiogenic shock.Therefore, temporary mechanical circulatory support strategies such as ECMELLA may provide effective hemodynamic stabilization and serve as a bridge-to-transplant in critically ill patients.

Conclusion: This case highlights the importance of early recognition of refractory cardiogenic shock and timely escalation of mechanical circulatory support as a bridge-to-transplant strategy in patients with advanced heart failure.

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	REGISTRY OF CARDIOMYOPATHIES ANDINFLAMMATORY MYOPERICARDIAL SYNDROME IN BRAZIL: PRELIMINARY DATA.
Author Block:	Jose Gregorio Valero Rodriguez, Guilherme C. Fernandes de Oliveira da Costa, Isabela Lira Vieira, Leonardo Castro Nunes, Vitor Ramos Navarro, Rafael Vilanova Lima, Claudio Vieira Catharina, Nina Ataide Pinho Barbosa, Anderson Madeira Campos, Anna L. Harumi de Lima Tanada, Bernardo Dinoá Nunes, André Camargo Mazzocchi, Anna Cecília de Oliveira Machado, Wesley R. Nogueira Dias, Giulia Fernandes de Oliveira da Costa, Carolina S. Tannuri Barreto da Conceição, Gabriel Mangas, Adriana Munford Lima Pimentel, Evandro Tinoco Mesquita, Universidade Federal Fluminense, Niteroi, Brazil, Complexo Hospitalar de Niterói, Niterói - Rio de Janeiro, Brazil
Abstract Body:	**Background:** Myocarditis and cardiomyopathies are myocardial conditions that share complex pathophysiological pathways and often progress to heart failure. Given their high impact on cardiovascular morbidity and mortality, establishing dedicated registries is essential to refine diagnostic strategies and therapeutic approaches, ultimately improving patient prognosis and quality of life. **Methods:** This is a cross-sectional, observational and multicenter study. Data collection from November 2025 to May 2026, covering demographic, clinical, laboratory, imaging, and outcome variables obtained from medical records in accordance with national ethical regulations. **Results:** A total of 52 patients were included (53.8% male). Dilated cardiomyopathy was the predominant phenotype (n=17), followed by myocarditis (n=13), hypertrophic cardiomyopathy (n=8), pericarditis (n=8), left ventricular arrhythmogenic cardiomyopathy (n=3), and infiltrative cardiomyopathy (n=3). Systemic arterial hypertension (55.8%), obesity (28.8%), and diabetes mellitus (23.1%) were the most prevalent comorbidities. One death (1.9%) was recorded due to non-cardiological causes. Initial diagnostic methods included echocardiography (100%), troponin (80.8%), NT-proBNP (67.3%), and ECG (59.6%). For advanced investigation, cardiac MRI

(61.5%), genetic testing (7.7%), and endomyocardial biopsy (1.9%) were performed.

Conclusion: The partial results of this registry in Metropolitan Region II of Rio de Janeiro demonstrate a predominance of dilated cardiomyopathy and myocarditis, highlighting the relevance of inflammatory and dilated phenotypes in the local hospital setting. The etiological diversity found, including cases of amyloidosis and arrhythmogenic cardiomyopathy, reinforces the need for rigorous differential diagnosis and the use of advanced imaging and genetic technologies. In summary, strengthening clinical registries is fundamental to optimizing risk stratification, enabling personalized therapies, and consequently reducing hospitalization rates and improving the prognosis of patients with myocardial and pericardial disease

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	REAL WORLD POTASSIUM DISTRIBUTION IN HOSPITALIZED HEART FAILURE
Author Block:	Jaime Alberto Gómez Rosero, Veronica lopez cardona, Mateo Morales, Juan Manuel Martinez, Natalia Mejia, Alejandro Jaramillo, Juan Daniel Castrillon, Maria Clara Gaviria, Cardiología Clinica Las Vegas, Clinica Las Vegas, Medellin, Colombia

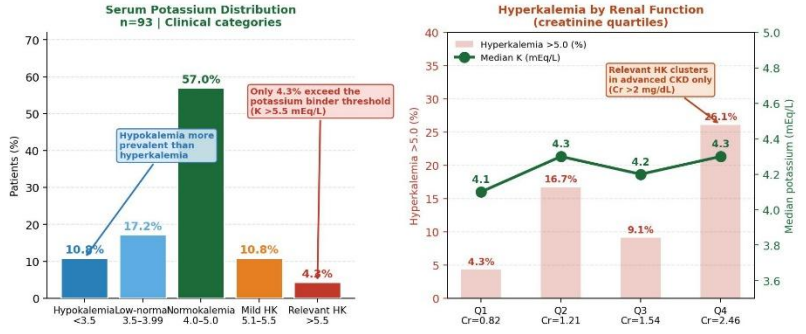
Abstract Body:

Background: Hyperkalemia is cited as a major barrier to guideline-directed medical therapy (GDMT) optimization in heart failure, driving interest in potassium binders. Real-world potassium distribution data from Latin American centers are scarce.

Methods: Prospective single-center registry of 106 hospitalized heart failure patients in Medellín, Colombia. Serum potassium (available in 93 patients) was categorized by clinical thresholds. Correlations with creatinine were assessed using Spearman analysis. Hyperkalemia prevalence was analyzed by renin-angiotensin system blocker, mineralocorticoid receptor antagonist, and sodium-glucose cotransporter-2 inhibitor use.

Results: Median potassium was 4.3 mEq/L [3.9-4.7]. Normokalemia (4.0-5.0 mEq/L) was present in 57 %. Hyperkalemia >5.0 mEq/L affected 14 patients (15.1 %); only 4 (4.3 %) exceeded 5.5 mEq/L and 2 (2.2 %) exceeded 6.0 mEq/L. Conversely, 28% had potassium <4.0 mEq/L. Potassium correlated weakly with creatinine (rho=0.33, p=0.001); clinically relevant hyperkalemia clustered in the highest creatinine quartile (median 2.46 mg/dL, 26.1% hyperkalemia). Mineralocorticoid receptor antagonist and renin-angiotensin system blocker use did not significantly increase hyperkalemia prevalence.

Conclusion: In this Colombian acute decompensated heart failure cohort, clinically relevant hyperkalemia was uncommon (4.3% above 5.5 mEq/L) and concentrated in advanced chronic kidney disease.



HK: hyperkalemia. CKD: chronic kidney disease. Cr: creatinine. Relevant HK threshold (K >5.5 mEq/L) based on clinical trials with potassium binders. Spearman rho=0.33, p=0.001 for K vs creatinine.

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	CURRENT STATUS OF HEART TRANSPLANTATION IN COLOMBIA: 1985 TO 2025
Author Block:	Juan Andrés Muñoz Ordoñez, Santiago Duque, Valeria Azcárate-Rodríguez, Brayan Daniel Córdoba-Melo, Edilma L. Rivera-Muñoz, Alvaro Mauricio Quintero-Ossa, Luis Eduardo Echeverria, Juan Esteban Gómez-Mesa, Sociedad Colombiana de Cardiología y Cirugía Cardiovascular, Bogotá DC, Colombia, Fundación Valle del Lili, Cali, Colombia
Abstract Body:	**Background:** Heart transplantation (HT) remains a cornerstone therapy for advanced heart failure. In Colombia, despite four decades of experience, national data remain limited and fragmented. **Methods:** We present a descriptive analysis integrating data from the Colombian Society of Cardiology and Cardiovascular Surgery, and from the public records from the National Institute of Health. All HT performed between 1985 and 2025 were included. Variables were summarized as absolute and relative frequencies. **Results:** From 1985 to 2025, 1,833 HT were reported across 14 institutions, 11 of them performed HT during 2025, including the first active HT center in the Atlantic region. In 2025, 97 procedures were performed. Recipients were predominantly adults (89.7%) and male (72%), most of them between 51 and 70 years. Regional 2 (Antioquia) performed 38.9% of all HT, followed by regional 1 (Bogota D.C) with 23.4%. In 2025, regional 2 performed 37.1% of HT, followed by regional 3 (Valle del Cauca), with 26.8%. The highest number of HT (102) was reached in 2023, but the highest HT rate per million population (2.1) was reached in 2012 (Figure 1). **Conclusion:** HT in Colombia shows progressive geographic expansion, yet annual procedural volume remains stable, underscoring the need to strengthen

donor availability, equitable access, and multicenter data collection.

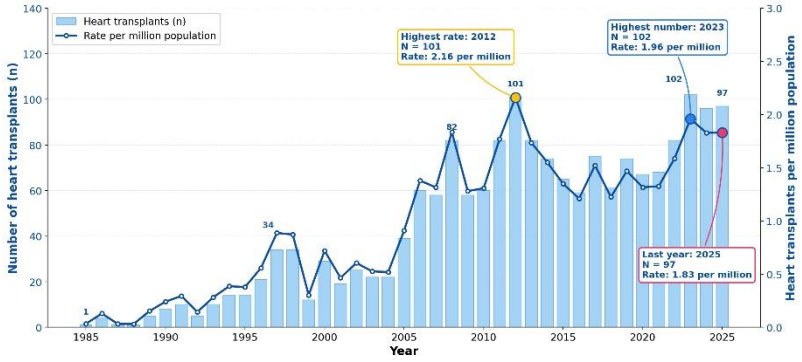


Figure 1. Annual number and rate of heart transplants in Colombia, 1985–2025. Bars represent the absolute number of heart transplants performed each year, and the line represents the annual rate per million population.

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	FERRIC CARBOXYMALTOSE IN PATIENTS WITH HEART FAILURE AND IMPAIRED BASELINE RENAL FUNCTION: A SYSTEMATIC REVIEW OF RANDOMIZED CLINICAL TRIALS
Author Block:	Juvenal Eduardo Salgado Montalvo, Sergio Quiroz-Gomez, Universidad Juárez Autónoma de Tabasco, Division Académica de Ciencias de la Salud, Villahermosa, Tabasco, Mexico
Abstract Body:	**Background:** Iron deficiency is a critical comorbidity in Heart Failure (HF) that impairs myocardial energetics and functional capacity. While intravenous Ferric Carboxymaltose (FCM) is a recognized therapy, its efficacy in patients with concomitant renal impairment remains a clinical uncertainty. This systematic review aimed to evaluate the clinical impact of FCM on cardiovascular outcomes and functional capacity in patients with HF, iron deficiency, and decreased renal function (eGFR <60 ml/min/1.73m^2). **Methods:** A systematic review and meta-analysis were conducted following PRISMA guidelines. A search was performed in PubMed, EMBASE, and Google Scholar for randomized controlled trials (RCTs) involving HF patients with iron deficiency and renal dysfunction treated with FCM. Three independent reviewers screened titles, abstracts, and full texts. Six RCTs (FAIR-HF, CONFIRM-HF, EFFECT-HF, AFFIRM-AHF, HEART-FID, and López-Vilella et al.) met the eligibility criteria. **Results:** The analysis demonstrated that FCM significantly reduces the risk of major cardiovascular events, such as recurrent hospitalizations, with a consistent benefit regardless of renal function (eGFR ≥60 vs. <60 ml/min/1.73m^2). However, functional outcomes were more heterogeneous; while some studies showed consistent improvements in the 6-minute walk test (6MWT) across all renal strata, others (CONFIRM-HF) identified a significantly diminished ergometric response in patients with lower eGFR (P=0.038). This suggests that systemic inflammation and altered iron kinetics in renal impairment may limit functional recovery. **Conclusion:** FCM is a robust and effective therapy for reducing cardiovascular

events in HF patients across the cardiorenal spectrum. Nevertheless, renal dysfunction acts as a modulating factor that may attenuate improvements in exercise capacity. A significant limitation remains the lack of granular, disaggregated data in pivotal trials, highlighting the need for more transparent reporting and personalized therapeutic approaches for the high-risk cardiorenal population.

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	SUCCESSFUL CRT UPGRADE IN TRANSTHYRETIN CARDIAC AMYLOIDOSIS WITH HEART FAILUREAND REDUCED EJECTION FRACTION
Author Block:	Daniel Forero, Francisco Villadiego, Mauricio Manrique, Fernan del Cristo Mendoza-Beltran, LAURA MENDOZA, Claudia Jaramillo, David Santacruz, Fernando Rosas, Juan Felipe Betancourt, Juan Camargo, Victor Velasco, Aura Gomez, Luis Mendoza, Custodio Ruiz, ANA MARIA GARCIA JAGUA, Juan David Lopez, Juan De Lima, Johanna Galvis, Miguel Sanchez, Fundación Clínica Shaio, Bogotá, Colombia, Universidad El Bosque, Bogotá, Colombia
Abstract Body:	**Background:** Cardiac amyloidosis may lead to conduction disease, arrhythmias, and heart failure. Although cardiac resynchronization therapy (CRT) is established for ventricular dyssynchrony, its role in amyloidosis-related pacing-induced dysfunction remains poorly defined. **Case:** A 78-year-old male with wild-type transthyretin cardiac amyloidosis treated with tafamidis and prior dual-chamber pacemaker for complete atrioventricular block was admitted with decompensated heart failure. Evaluation showed new-onset atypical atrial flutter,reduction in left ventricular ejection fraction from 56% to 39%, and high right ventricular pacing burden, consistent with pacing-induced cardiomyopathy. Transesophageal echocardiography excluded left atrial appendage thrombus. The patient underwent device upgrade to CRT combined with synchronized electrical cardioversion during the same procedure. Attempts at left bundle branch area pacing were unsuccessful because ventricular capture could not be achieved despite adequate septal penetration, likely due to diffuse amyloid infiltration. Conventional CRT via coronary sinus lead implantation was subsequently performed. Electrical cardioversion at 270 J restored sinus rhythm without complications. Postprocedural electrocardiography demonstrated QRS narrowing from 220 ms to 170ms, accompanied by improvement in congestion and overall clinical status. **Decision-making:** Conduction system pacing in cardiac amyloidosis may be limited by infiltrative myocardial disease, which can impair electrical capture

despite adequate lead positioning. In this setting, conventional CRT remains an important alternative to restore ventricular synchronyand improve symptoms in patients with pacing-induced dysfunction.
Conclusion: CRT may provide clinical benefit in selected patients with transthyretin cardiac amyloidosis and pacing-induced cardiomyopathy. When left bundle branch pacing is not feasible, coronary sinus lead implantation remains a viable therapeutic strategy.

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	GENETIC DIAGNOSIS OF PEDIATRIC CARDIOMYOPATHIES: LATIN AMERICAN PARTICIPATION
Author Block:	Guilherme Costa, Maria Bernandes, Arthur Alves, Heloá Fernandes, Maria Clara Amadeu, Carolina Correa, Juliana Ribeiro, Gabriella Bahia, Isabela Nascimento, Raquel Couto, Ana Flávia Torbey, Universidade Federal Fluminense, Niterói, Rio de Janeiro, Brazil
Abstract Body:	**Background:** Genetic testing has become central to the diagnosis, risk stratification, and family screening of pediatric cardiomyopathies. The global distribution of research evidence and its relevance to Latin American populations remains uncertain. This study mapped scientific output on genetic diagnosis of pediatric cardiomyopathies, with attention to Latin American contribution. **Methods:** A bibliometric analysis was conducted on the Web of Science (WoS) Core Collection (search date 30 March 2026). The strategy used cardiomyopathy terms with genetic diagnosis, genetic testing, or genotype, and pediatric or child, restricted to original articles. A total of 644 records published between 1993 and 2026 were analyzed in R (bibliometrix) and VOSviewer for productivity, citation impact, collaboration, co-citation, and keyword co-occurrence. **Results:** Annual output grew at 9.97% per year, peaking at 61 articles in 2025. Corresponding-author productivity was concentrated in the United States (193 articles, 30.0%), China (62, 9.6%), Canada (37, 5.7%), Italy (35), Germany (34), and the United Kingdom (30). Mean citation impact was led by Denmark (267.3 citations per article), Australia (82.7), and the Netherlands (72.4). Six Latin American countries contributed 12 of 644 articles (1.9%): Brazil 5, Chile 2, Mexico 2, Argentina 1, Colombia 1, and Ecuador 1; only Ecuador had any international co-authorship. Lotka's law showed 83.8% of authors contributed a single article. Genetic testing, hypertrophic cardiomyopathy, and children occupied the motor-themes quadrant of the thematic map, with cascade family screening emerging as the most recent trend.

Conclusion: Variant classification frameworks and genotype-phenotype correlations in pediatric cardiomyopathies have been built almost entirely on cohorts from outside Latin America. Closing this gap may require integrating regional genomic data into multicenter pediatric registries, adapting cascade-screening protocols to local kindred structures, and ensuring reciprocal participation of Latin American centers in international consortia driving precision pediatric cardiology.

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	IMPACT OF RIGHT VENTRICULO-ARTERIAL COUPLING IN GUIDELINE-DIRECTED MEDICAL THERAPY AT 12-MONTH FOLLOW-UP IN HEART FAILURE: INSIGHTS FROM THE AMERICCAASS REGISTRY
Author Block:	Brayan Daniel Cordoba Melo, Juan Andres Munoz Ordonez, Valeria Azcarate-Rodriguez, Juan Daniel Caicedo-Ruiz, Sebastian Seni-Molina, Mario Miguel Barbosa Rengifo, Daniel Quesada-Chaves, Eduardo R. Perna, Mark H. Drazner, Walter Alarco, SR, Mario Speranza, Víctor Rossel, Elda Lorena Brocal Ocampo, Ana Virginia Figueroa, Beder Gustavo Farez, Juan Esteban Gomez, Sociedad Interamericana de Cardiología (SIAC), Ciudad de México, Mexico, Fundación Valle del Lili, Cali, Colombia
Abstract Body:	**Background:** Guideline-directed medical therapy (GDMT) tolerability remains challenging in heart failure (HF) with reduced ejection fraction (HFrEF). The ratio of tricuspid annular plane systolic excursion (TAPSE) to pulmonary artery systolic pressure (PASP), a marker of right ventriculo-arterial coupling (rVAC), reflects right ventricular function and afterload, and has been associated with adverse HF outcomes. However, its role in GDMT prescription remains unclear. We evaluated 12-month GDMT prescription according to baseline VAC status. **Methods:** AMERICCAASS Registry is a prospective, observational, multicenter registry of patients aged >18 years with HF in the Americas. For this analysis, we included hospitalized / outpatient patients with HFrEF, rVAC data at recruitment and a 12-month follow-up. Preserved VAC was defined as TAPSE/PSAP >0.32 and GDMT was defined as quadruple therapy (ACEI/ARB/ARNI, beta-blockers, MRAs, and SGLT2i). **Results:** Among 268 included patients, median age was 65 years (IQR: 54.5-75), and 65% were male. At baseline, 75% were outpatients and this was higher in the preserved VAC group (80% vs. 56%, p<0.001). Main etiology was non-ischemic (61%), and most frequent comorbidities were hypertension (62%), dyslipidemia (47%), and coronary artery disease (40%). Preserved rVAC was present in 80.5% of patients. Patients with preserved rVAC more frequently had baseline NYHA I-II than those with non-preserved VAC (63% vs.

21%), whereas NYHA III-IV was more frequent in non-preserved VAC (60% vs. 38%; p=0.007). At 12 months follow-up, GDMT was achieved in 61% of patients with preserved rVAC, compared with 40% of those with non-preserved VAC (p=0.036).
Conclusion: In patients with HFrEF, preserved rVAC was accompanied by better functional class and higher GDMT prescription at 12-month follow-up. These findings support the potential role of rVAC assessment as a non-invasive tool for clinical evaluation during follow-up in patients with HF. Further studies are needed to determine its predictive value for GDMT tolerance.

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	BEYOND CHILDHOOD: RETHINKING THE ROLE OF SLC22A5 MUTATIONS IN LATE-ONSET CARDIOMYOPATHYBEYOND CHILDHOOD: RETHINKING THE ROLE OF SLC22A5 MUTATIONS IN LATE-ONSET CARDIOMYOPATHYBEYOND CHILDHOOD: RETHINKING THE ROLE OF SLC22A5 MUTATIONS IN LATE-ONSET CARDIOMYOPATHY
Author Block:	Enad Haddad, Donald C. Haas, Jefferson Abington Hospital, Abington, PA, USA
Abstract Body:	**Background:** Primary Carnitine Deficiency (PCD) is an autosomal recessive disorder caused by mutations in the SLC22A5 gene, resulting in defective carnitine transport and impaired fatty acid oxidation. It usually presents in early childhood with cardiomyopathy, hypoglycemia, and muscle weakness. Adult-onset presentations are exceedingly rare, and often asymptomatic. **Case:** An 87 year old female with a history of ischemic and hypertrophic cardiomyopathy, severe mitral and aortic stenosis, interstitial pulmonary fibrosis, who presented to the hospital with one week of worsening dyspnea after being started on Mavacamten. She was diagnosed with hypertrophic cardiomyopathy 2 months prior on cardiac MRI which showed hyperdynamic left ventricular ejection fraction (LVEF) of 87%, asymmetric septal hypertrophy measuring 20 mm, and 10% delayed gadolinium enhancement. In the hospital, she received IV diuretics and transiently required pressor support. At first, it was thought that Mavacamten led to acute decompensation in the patient's LVEF, and she was discharged off Mavacemten On follow up, genetic testing revealed a heterozygous mutation in the SLC22A5 gene. However, her carnitine level was normal. **Decision-making:** While homozygous or compound heterozygous mutations in SLC22A5 are known to cause PCD with cardiomyopathy in pediatric patients, the significance of heterozygous mutations in adults remains unclear. Some studies suggest that heterozygous carriers may have subclinical manifestations or be predisposed to cardiac conditions under stress. However, the absence of systemic carnitine deficiency and skeletal muscle involvement

in this patient suggests that the SLC22A5 mutation may not be the primary driver of her cardiomyopathy. However, there is a suspicion that her mutation may have contributed to her inability to tolerate Mavacamten.

Conclusion: The incidental finding of a heterozygous SLC22A5 mutation in an elderly patient with HCM raises important considerations about the mutation's clinical significance in adult populations in terms of developing cardiomyopathy and tolerating treatments like Mavacamten.

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Interventions and Ischemic Heart Diseases
Publishing Title:	CARDIOVASCULAR OUTCOMES WITH STATIN-EZETIMIBE VERSUS STATIN-EVOLOCUMAB COMBINATION THERAPY IN POST-CABG PATIENTS WITH PERSISTENTLY ELEVATED LDL CHOLESTEROL (>55 MG/DL) - A PROPENSITY SCORE-MATCHED ANALYSIS
Author Block:	God-dowell O. Odukudu, Carlos Hernandez, Efeturi Maxwell Okorigba, Lee-Ann Briggs, Chinelo Madekwe, Mohammed Maroof, Innocent Lutaya, Kisha L. Burgess, Ndausung Udongwo, Joseph Heaton, Hafiz Fadl, Nicolas Bakinde, Morehouse School of Medicine, Atlanta, GA, USA, West Virginia University, Morgantown, WV, USA
Abstract Body:	**Background:** Achieving and maintaining target LDL cholesterol levels remains difficult for patients undergoing coronary artery bypass grafting (CABG), even with intensive lipid-lowering therapy. Guidelines recommend a stepwise, sequential approach to intensifying lipid-lowering therapy when statins alone do not achieve targets. While ezetimibe and evolocumab (a PCSK9 inhibitor) are common add-ons to statin therapy, their comparative effectiveness in post-CABG patients with high LDL levels remains unclear. **Methods:** We conducted a retrospective cohort study using the TriNetX US Collaborative Network, identifying CABG patients (January 2016-December 2024) with LDL >55 mg/dL. Patients were stratified into statin plus ezetimibe (n=8,963) versus statin plus evolocumab (n=2,406) cohorts. Propensity score-matching balanced demographics, co-morbidities, medications, and laboratory findings, yielding 2,397 matched pairs. Outcomes were assessed from 30 to 365 days post-index event and included all-cause mortality, 3P-MACE (death, AMI, or stroke), stroke, AMI, acute heart failure, atrial fibrillation/flutter, and hospitalization. **Results:** Over a median follow-up of approximately one year, no statistically significant differences were observed between statin-ezetimibe and statin-evolocumab for any outcome. All-cause mortality (1.4% vs. 1.3%; RR 1.136, p=0.607) and 3P-MACE (3.7% vs. 3.4%; RR 1.083, p=0.734) were comparable between groups. Stroke (1.5% vs. 1.5%; p=0.973), AMI (1.6% vs. 1.7%;

p=0.845), acute heart failure (0.8% vs. 0.9%; p=0.758), and hospitalization (18.8% vs. 17.6%; p=0.261) were similarly equivalent. One-year survival probability was 98.28% versus 98.44% (log-rank p=0.763).
Conclusion: In this propensity score-matched real-world analysis of post-CABG patients with persistently elevated LDL cholesterol, statin-ezetimibe and statin-evolocumab combination therapies demonstrated comparable cardiovascular outcomes across all endpoints over a 1-year follow-up; however, these findings should be interpreted cautiously given the observational nature of this study, and prospective studies are needed to validate them.

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Interventions and Ischemic Heart Diseases
Publishing Title:	ELECTROCARDIOGRAPHIC CHARACTERISTICS IN INDIVIDUALS WITH MYOCARDIAL MUSCULAR BRIDGE: ANALYSIS OF A SERIES OF CONFIRMED CASES
Author Block:	Francisco Javier Campos Hernández, Daniel Gámez González, Eduardo Nieves Paredes, SR, JUAN ANTONIO ROBLES JAIME, Omar Alejandro Morales Vazquez, Zoe Rivera, Guillermo Llamas-Esperon, SR, Hospital Cardiológica Aguascalientes, aguascalientes, Mexico
Abstract Body:	**Background:** Myocardial bridging is a congenital coronary anomaly associated with angina, ischemia, and arrhythmias. The aim was to describe electrocardiographic findings in patients with angiographically confirmed myocardial bridging. **Methods:** Retrospective cross-sectional study including 55 adults with myocardial bridging diagnosed by coronary angiography between 2019 and 2025. Clinical, angiographic, and electrocardiographic variables were analyzed. **Results:** Mean age was 59 years and 65% were male. Typical exertional angina was present in 85%. The left anterior descending artery was involved in 88%, mainly in the mid segment (82%). Frequent findings included negative T waves in precordial leads, ST-segment abnormalities, prominent U waves (55%), and fascicular block (15%). Based on these findings, the Campos Criteria for Myocardial Bridging were developed. **Conclusion:** This study allowed the development of the Campos Criteria for Myocardial Bridging, a novel exploratory electrocardiographic scoring system designed to improve clinical suspicion of myocardial bridging in patients without obstructive coronary disease. Further prospective validation is warranted.

CAMPOS CRITERIA FOR MYOCARDIAL BRIDGING (CC-MB)

ELECTROCARDIOGRAPHIC FINDING	POINTS
Negative T-wave in precordial leads (V_1–V_2 or V_1–V_4)	3
Presence of U waves	1
Fascicular block (anterior or posterior)	1
Other findings (ST-segment depression or elevation, bundle branch block)	0
TOTAL POSSIBLE SCORE: 0 TO 5 POINTS	

INTERPRETATION OF TOTAL SCORE

0–1 points	Low probability of myocardiial bridging in the mid segment of the LAD
2–3 points	Moderate probability of myocardial bridging in the mid segment of the LAD
4–5 points	High probability of myocardial bridging in the mid segment of the LAD

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Interventions and Ischemic Heart Diseases
Publishing Title:	PROGNOSTIC FACTORS OF CARDIOVASCULAR MORTALITY IN PATIENTS WITH CHRONIC TOTAL CORONARY OCCLUSION. A PROSPECTIVE COHORT STUDY
Author Block:	Alejandro Gonzalez Veliz, Susel Ramos, Carlos Fonseca-Marrero, Leonardo Hipolito Lopez Ferrero, Lorenzo Daniel Llerena Rojas, Ronald Aroche Aportela, Lariel Torres Reyes, SR, Raúl Señor Dross, Lidia Maria Rodriguez Nande, Reynold Calderín, Julio Cesar Gandarilla Sarmiento, Luis Javier Santa Cruz Pacheco González, Ernesto Peña-López, Carlos Mirel Peñate, Julio Cesar Echarte Martinez, Juan Antonio Soto, Angel Yaniel Rodrigiez Navarro, SR, Román Vasallo Peraza, Albert Roig, Institute of Cardiology and Cardiovascular Surgery, La Habana, Cuba
Abstract Body:	**Background:** Chronic total occlusion (CTO) of coronary arteries worsens cardiovascular outcomes, but mortality predictors remain ill-defined. We aimed to identify independent predictors of cardiovascular mortality in coronary CTO. **Methods:** Prospective single-center cohort study (January 2017-December 2024) including patients with ≥1 chronically occluded epicardial artery (luminal diameter ≥2.5 mm) and evidence of ischemia or viability. The primary endpoint was cardiovascular death. Crude (cHR) and adjusted hazard ratios (aHR) with 95% confidence intervals (CI) were estimated by Cox regression, and adjusted survival was modeled using flexible parametric spline models. **Results:** Among 259 patients followed for up to 48 months, 26 (10.0%) experienced the primary endpoint. Mean survival was 45.6 months (95% CI 44.2-46.3). Independent predictors were age (aHR 1.05 per year, 95% CI 1.00-1.11; p=0.039), diabetes (aHR 2.42, 95% CI 1.10-5.34; p=0.028), and ejection fraction (aHR 0.93 per 1% increase, 95% CI 0.90-0.98; p=0.002). The presence of ≥2 arteries with CTO showed a strong trend toward significance (aHR 2.66, 95% CI 0.99-7.14; p=0.052). Chronic kidney disease was significant in univariable analysis (cHR 3.06; p=0.025) but not after adjustment. **Conclusion:** Older age, diabetes, and lower ejection fraction independently predicted cardiovascular mortality in coronary CTO; multivessel CTO showed a

borderline association. These simple variables may support risk stratification in practice.

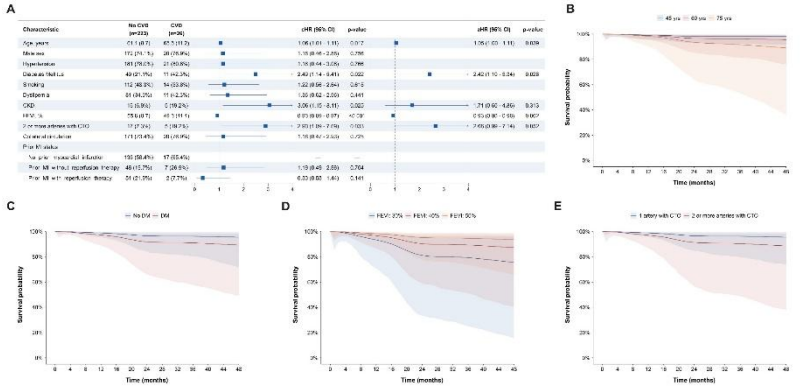
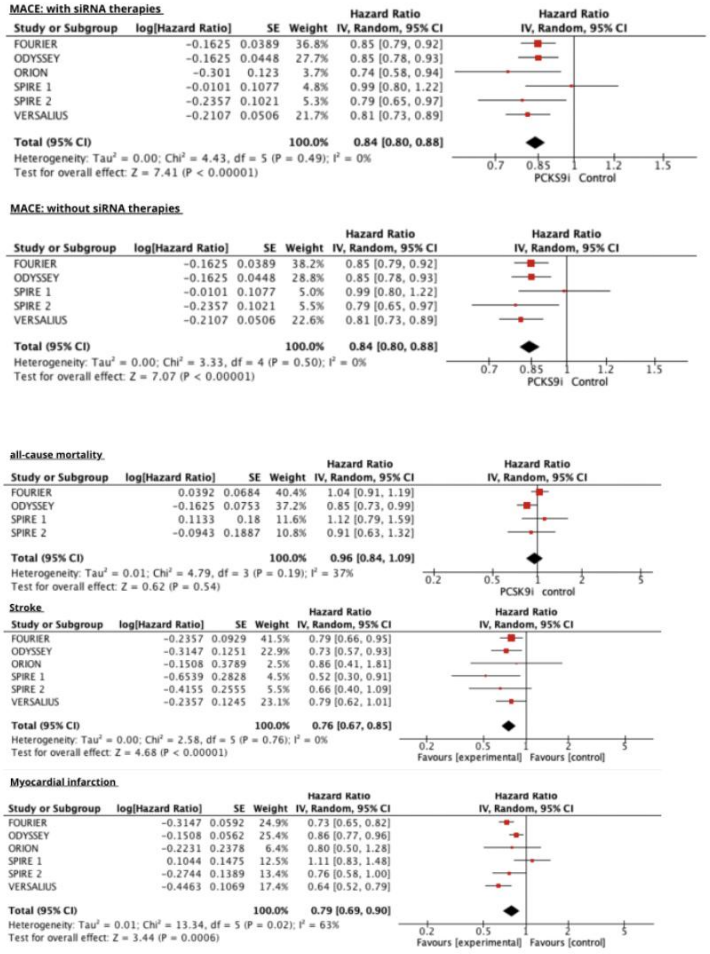


Figure 1. Predictors of cardiovascular mortality and adjusted survival curves in patients with chronic total coronary occlusion

(A) Forest plot showing baseline characteristics by cardiovascular death status, together with crude (cHR) and adjusted (aHR) hazard ratios with 95% confidence intervals from Cox proportional hazards regression. The adjusted model included age, diabetes mellitus, chronic kidney disease, left ventricular ejection fraction, and number of arteries with chronic total occlusion. Age and ejection fraction (LVEF) are expressed as mean (standard deviation); categorical variables are expressed as n (%). (B–E) Adjusted survival curves estimated using flexible parametric spline models, with shaded areas representing 95% confidence intervals. (B) by age (45, 60, and 75 years); (C) by diabetes mellitus status; (D) by left ventricular ejection fraction (≥50%, 40%, and ≤30%); and (E) by number of arteries with chronic total occlusion. CHD: chronic kidney disease; CTO: chronic total occlusion; CVD: cardiovascular death; HFrEF: left ventricular ejection fraction; MI: myocardial infarction.

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Interventions and Ischemic Heart Diseases
Publishing Title:	BEYOND MONOCLONAL ANTIBODIES: CARDIOVASCULAR OUTCOMES ACROSS PCSK9 INHIBITION STRATEGIES INCLUDING INCLISIRAN: A SYSTEMATIC REVIEW AND META-ANALYSIS
Author Block:	Hector Iñaki Marrufo Rizo, Javier Andres Ascencio Guerrero, Ilani Paola Santoyo Pérez, Jose Daniel Jimenez Tirado, Roberto Dali Paz Lara, Carlos Ruiz, Ronaldo Yared Vargas, SR, Eduardo Maximiliano Vázquez Valadez, Alejandro Hernández González, Mario López Ruiz, Abril Elizabeth Ayala Herrera, María Fernanda Gutiérrez Aguilera, Julia Renata Sánchez Vallejo, Daniela Martínez Martín, Emmanuel Méndez Vázquez, Universiy of Guanajuato, Department of Medicine and nutrition, Leon, Mexico
Abstract Body:	**Background:** PCSK9 inhibition reduces cardiovascular risk, but consistency across different PCSK9-targeting strategies remains uncertain. **Methods:** A systematic search through April 2026 identified randomized controlled trials comparing PCSK9 inhibition versus placebo on MACE. Hazard ratios (HR) with 95% confidence intervals (CI) were pooled using a random-effects model. Sensitivity analysis incorporated pooled ORION inclisiran data, with odds ratios considered approximate HR estimates because of low event rates. Heterogeneity was assessed using I^2. Leave-one-out analyses and funnel plot inspection evaluated robustness and publication bias. **Results:** Five randomized trials including 89,842 patients showed that PCSK9 inhibition significantly reduced MACE versus placebo (HR 0.84, 95% CI 0.80-0.88; $p < 0.00001$), with no heterogeneity ($I^2 = 0\%$). Inclusion of pooled inclisiran ORION data did not change the overall effect estimate, supporting consistency across PCSK9-targeting strategies. Significant reductions were also observed for myocardial infarction (HR 0.79, 95% CI 0.69-0.90) and stroke (HR 0.76, 95% CI 0.67-0.85), while all-cause mortality was not significantly different (HR 0.96, 95% CI 0.84-1.09). Leave-one-out analyses confirmed stability without major publication bias. **Conclusion:** PCSK9 inhibition was associated with a robust and consistent reduction in MACE, supporting a potential class effect across mechanistically

distinct strategies. .



Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Interventions and Ischemic Heart Diseases
Publishing Title:	ASSOCIATION OF NON-CLASSICAL AND PSYCHOSOCIAL RISK FACTORS IN WOMEN WITH CORONARY ARTERY DISEASE
Author Block:	maria julia destro, Guilherme Silva Mendes Gaia, Jackelline Preto, Paula Teixeira, Laura Nunes, Lucas Ferreira, Adriano Henrique Barbosa, Maria Teresa Bombig, Maria Cristina Izar, UNIFESP, São Paulo, Brazil
Abstract Body:	**Background:** Coronary artery disease (CAD) remains a leading cause of morbidity and mortality among women, yet traditional cardiovascular risk assessment tools may underestimate risk by failing to account for female-specific and psychosocial determinants. This study aimed to evaluate the prevalence of non-classical cardiovascular risk factors, including pregnancy-related conditions and psychosocial factors, among women with established CAD. **Methods:** Observational, cross-sectional study targeted a population of 45 women aged over 18 years with a prior diagnosis of CAD, followed at the same outpatient clinic. Data were collected through structured questionnaires assessing non-classical cardiovascular risk factors, female-specific conditions, and under-recognized psychosocial determinants. **Results:** Among the 45 women with a prior diagnosis of CAD, psychosocial risk factors were highly prevalent: anxiety (48.9%), depression (44.4%), and barriers to healthcare access (37.8%). Racial discrimination and sexual abuse were reported by 17.8% and 11.1%, respectively. Regarding female-specific factors, the most common were hypertensive disorders of pregnancy (37.8%), followed by autoimmune diseases (20.0%) and preterm birth (22.2%). Other factors included gestational diabetes mellitus (8.9%), polycystic ovary syndrome (6.7%), and early menopause (15.6%). **Conclusion:** Overall, these findings reinforce the growing consensus in recent literature that traditional risk assessment alone may underestimate cardiovascular risk in women. Addressing these dimensions may improve risk

prediction and support more individualized prevention and management strategies for women with, or at risk for, coronary artery disease.

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Interventions and Ischemic Heart Diseases
Publishing Title:	CMR LGE-DEFINED MYOCARDIAL VIABILITY DOES NOT PREDICT LEFT VENTRICULAR FUNCTIONAL RECOVERY OR CLINICAL OUTCOMES AFTER CABG IN ISCHEMIC CARDIOMYOPATHY: A SINGLE-CENTER OBSERVATIONAL COHORT (2022-2025).
Author Block:	Marcelo Henrique Moreira Barbosa, Andre Gerhardt, Valeria Mozetic de Barros, Soraia Rachid Youseff, Milena Piccolo, Luiz Fernando Cal, Ricardo Pavanello, Dante Pazzanese Institute of Cardiology, São Paulo, Brazil
Abstract Body:	**Background:** Ischemic cardiomyopathy is a major cause of morbidity and mortality, and coronary artery bypass grafting (CABG) remains a key therapeutic option in selected patients with severe left ventricular (LV) dysfunction. Although early cardiac magnetic resonance (CMR) studies suggested that myocardial viability could identify patients most likely to benefit from revascularization, later evidence, including STICH, failed to show consistent clinical benefit, largely using non-CMR modalities. Thus, the prognostic value of CMR late gadolinium enhancement (LGE) remains uncertain. **Methods:** We conducted a single-center observational cohort study including patients with chronic coronary syndrome and LVEF <40% who underwent pre-operative CMR before CABG between 2022 and 2025. Viability was defined in revascularized territories as: absent viability (>50% LGE transmurality in ≥4 segments) or present viability (<50% LGE in ≥4 segments). Endpoints included LV functional remodeling (change in LVEF and LV end-systolic diameter pre- vs post-CABG) and extended major adverse cardiovascular events (MACE). Analyses included paired non-parametric tests, linear regression, ANCOVA adjusted for baseline LVEF, and Kaplan-Meier survival analysis. **Results:** 46 patients were included, with 12 extended MACE events during a mean follow-up of 3 years. CABG was associated with significant LV reverse remodeling: LVEF increased (Δ +4.1%, p<0.001) and LV end-systolic diameter decreased (Δ −9.3 mm, p<0.001). However, LGE-defined viability did not identify patients with greater functional improvement. No significant difference

was observed between viability groups, even after adjustment for baseline LVEF (ANCOVA p=0.786). Extended MACE-free survival was also similar (log-rank p>0.05).
Conclusion: In patients with ischemic cardiomyopathy undergoing CABG, significant LV functional improvement occurred regardless of pre-operative CMR LGE-defined viability. LGE-based viability did not predict reverse remodeling or extended MACE, supporting a more integrated approach to surgical decision-making beyond viability assessment alone.

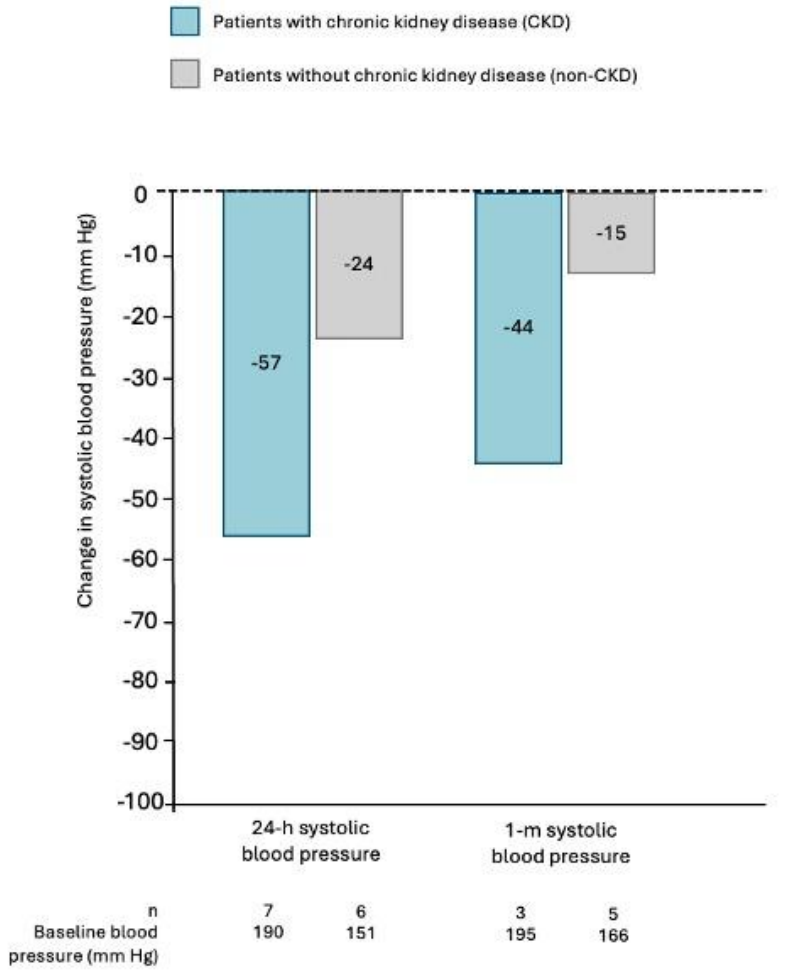
Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Interventions and Ischemic Heart Diseases
Publishing Title:	EFFICACY AND SAFETY OF VERY-EARLY (< 1 MONTH) P2Y12 INHIBITOR MONOTHERAPY AFTER PCI IN ACUTE CORONAR YSYNDROMES: SYSTEMATIC REVIEW AND RANDOM-EFFECTS META-ANALYSIS OF RANDOMIZED TRIALS
Author Block:	Marcelo Henrique Moreira Barbosa, Andre Gerhardt, Valeria Mozetic de Barros, Soraia Rachid Youseff, Milena Piccolo, Luiz Fernando Cal, Ricardo Pavanello, Dante Pazzanese Institute of Cardiology, São Paulo, Brazil
Abstract Body:	**Background:** Very-early aspirin discontinuation with continuation of a P2Y12 inhibitor as monotherapy (<1 month of DAPT) after percutaneous coronary intervention (PCI) for acute coronary syndromes (ACS) has been proposed to reduce bleeding. However, the ischemic safety of stopping aspirin this early remains uncertain, and recent randomized trials have shown discordant results. **Methods:** We performed a systematic review and random-effects meta-analysis of randomized controlled trials comparing very-early P2Y12 inhibitor monotherapy x standard 12-month dual antiplatelet therapy (DAPT) after PCI in ACS. The initial search identified 156 records; after screening, 6 studies underwent full-text review. Four were excluded for lacking an appropriate control group and/or not directly comparing very-early aspirin withdrawal versus standard DAPT, leaving two eligible trials (T-PASS and NEO-MINDSET). A total of 6,260 patients were included. Prespecified outcomes were: (1) major adverse cardiovascular events (MACE); (2) major or clinically relevant bleeding (BARC 2-5 or equivalent); and (3) net adverse clinical events (NACE). Trial-level hazard ratios (HRs) with 95% confidence intervals (CIs) were pooled using a DerSimonian-Laird random-effects model. **Results:** Very-early P2Y12 inhibitor monotherapy significantly reduced major or clinically relevant bleeding (pooled HR 0.38, 95% CI 0.27-0.53; I^2=0%), corresponding to an approximate 60% relative risk reduction. For ischemic outcomes, the pooled effect on MACE was neutral (HR 0.98, 95% CI 0.53-1.81), with substantial heterogeneity (I^2≈75%), likely reflecting differences in aspirin discontinuation timing and endpoint definitions. For NACE, there was a

numerically favorable trend with monotherapy (HR 0.70, 95% CI 0.45-1.10), also with high heterogeneity ($I^2 \approx 76\%$)

Conclusion: In ACS patients undergoing PCI, very-early aspirin withdrawal with continuation of P2Y12 inhibitor monotherapy consistently reduces bleeding without a clear increase in ischemic events. However, the small number of studies and substantial heterogeneity suggest thrombotic safety depends on aspirin discontinuation timing and individual ischemic risk.

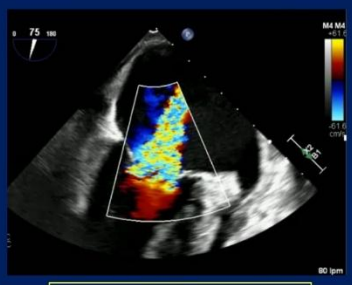
Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Interventions and Ischemic Heart Diseases
Publishing Title:	REAL-WORLD OUTCOMES OF RADIOFREQUENCY RENAL DENERVATION IN RESISTANT HYPERTENSION WITH AND WITHOUT CHRONIC KIDNEY DISEASE
Author Block:	Jonathan Javier Diaz Jurado, Laura Del Mar González, Juan Gomez-Sandoval, Jaime Cabrales, Diego Salas-Márquez, Alejandra Molano, Dario Echeverri, Universidad del Rosario, Bogotá, Colombia, Fundación Cardioinfantil-Instituto de Cardiología, Bogotá, Colombia
Abstract Body:	**Background:** Hypertension is the leading cardiovascular risk factor worldwide. Resistant hypertension is associated with increased cardiovascular risk and target organ damage. Renal denervation (RDN) has emerged as an endovascular strategy to modulate sympathetic overactivity; however, real-world Latin America data remain limited, particularly in chronic kidney disease (CKD) **Methods:** We conducted a retrospective cohort study including adults with resistant hypertension undergoing radiofrequency multipolar catheter-based RDN (Medtronic Symplicity system) between 2019 and 2025. The primary outcome was change in office systolic blood pressure (SBP) during follow-up. Secondary outcomes included antihypertensive therapy changes and procedural safety **Results:** Fourteen patients were included (median age 53 years, 50% female); 50% had CKD. Median baseline SBP was 170.5 mmHg overall, including 190 mmHg in CKD and 154 mmHg in non-CKD patients. Patients were receiving a median of 4.5 antihypertensive medications at baseline. RDN was associated with early and sustained SBP reduction, numerically greater among CKD patients (Figure). Antihypertensive therapy decreased slightly over time. No peri-procedural or in-hospital complications occurred **Conclusion:** In this real-world cohort, radiofrequency RDN was associated with sustained SBP reduction and an excellent safety profile in resistant

hypertension, including patients with CKD.

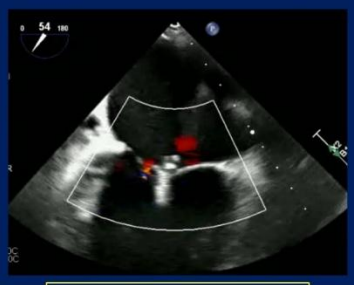


Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Interventions and Ischemic Heart Diseases
Publishing Title:	MITRAL TRANSCATHETER EDGE-TO-EDGE REPAIR TO FACILITATE LIBERATION FROM MECHANICAL CIRCULATORY SUPPORT IN POST-INFARCTION CARDIOGENIC SHOCK
Author Block:	Raul Eduardo Reyes Toledo, David David, Juan Felipe Vasquez, Gabriel Salazar, Dario Echeverri, Jaime Ramon Cabrales, Diego Alfredo Salas, Fundación Cardioinfantil, Bogotá, Colombia
Abstract Body:	**Background:** Acute ischemic mitral regurgitation may prevent liberation from mechanical circulatory support in post-infarction cardiogenic shock despite coronary reperfusion **Case:** A 50-year-old man presented with inferoposterior ST-segment elevation myocardial infarction initially treated with fibrinolysis without reperfusion, requiring rescue percutaneous coronary intervention. Coronary angiography demonstrated severe ectatic right coronary artery disease with complete thrombotic mid-vessel occlusion. Clinical course rapidly deteriorated with complete atrioventricular block and refractory cardiogenic shock requiring temporary pacing, intra-aortic balloon pump, and VA-ECMO support. Intensive care course remained complicated by recurrent cardiogenic pulmonary edema secondary to severe ischemic functional mitral regurgitation, preventing liberation from mechanical circulatory and ventilatory support **Decision-making:** Heart Team evaluation favored mitral transcatheter edge-to-edge repair (TEER). A MitraClip XTW was successfully implanted at A2-P2, reducing mitral regurgitation to mild residual severity and allowing liberation from support the next day. After a prolonged hospital course, the patient was discharged home **Conclusion:** Severe ischemic mitral regurgitation may be the main determinant of failed ECMO weaning in post-infarction cardiogenic shock. TEER can facilitate liberation from mechanical circulatory support in selected patients

Severe ischemic MR

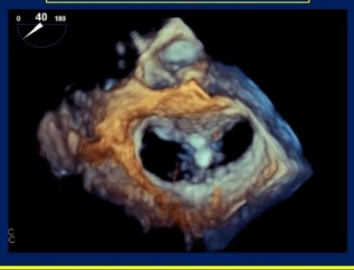


Mild residual MR



Mean gradient 3 mmHg

Tissue bridge



Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Interventions and Ischemic Heart Diseases
Publishing Title:	MULTIMODAL RISK STRATIFICATION SUBSTANTIALLY OUTPERFORMS CLINICAL SCORES FOR MACE PREDICTION IN NSTE-ACS: EVIDENCE FROM A HIGH-ALTITUDE ECUADORIAN COHORT
Author Block:	JONATHAN DAVID MELENA ZAPATA, GABRIELA CAROLINA SANTAMARIA NARANJO, Silvia Dianela Zurita Fuentes, SHICELA MARIBEL CRUZ, Iván Alejandro Paredes Heredia, Ximena Elizabeth Salazar, Rocío Alexandra Garzón, Lizeth Estefanía Campaña, Liliana Patricia Cardenas, PONTIFICIA UNIVERSIDAD CATOLICA DEL ECUADOR, QUITO, Ecuador, HOSPITAL DE ESPECIALIDADES EUGENIO ESPEJO, QUITO, Ecuador
Abstract Body:	**Background:** Risk stratification in non-ST-elevation acute coronary syndrome (NSTE-ACS) relies on clinical scores, high-sensitivity cardiac troponin (hs-cTn) and left ventricular function. Whether integrating these domains improves prediction of major adverse cardiovascular events (MACE) remains unevaluated in high-altitude Latin American populations, where chronic hypobaric hypoxia may modulate cardiovascular risk. **Methods:** Retrospective cohort of 139 confirmed NSTE-ACS patients (110 NSTEMI, 29 unstable angina) from a tertiary center at 2,800 m above sea level (2024). Clinical scores (TIMI and GRACE), left ventricular ejection fraction (LVEF) by echocardiography, global longitudinal strain by speckle-tracking and peak hs-cTn were recorded. Primary endpoint: MACE at 12 months (cardiovascular death, recurrent MI, unplanned revascularization, heart failure hospitalization, stroke, malignant arrhythmia or cardiogenic shock). Multivariable logistic regression was performed integrating TIMI, LVEF, global longitudinal strain and peak hs-cTn; discrimination was assessed by area under the curve (AUC) versus a baseline TIMI+GRACE model. **Results:** MACE occurred in 45.3% (n=63); median time to first event 5 months. Peak hs-cTn was the strongest individual discriminator (AUC 0.872), followed by TIMI (0.751), LVEF (0.740) and global longitudinal strain (0.689). MACE followed a pronounced LVEF gradient: 85.7% (<40%), 50.9% (40-49%) and 27.7% (≥50%). The integrated model (n=128) achieved AUC=0.902 with

adequate calibration (p=0.654); independent predictors: peak hs-cTn (OR 6.14; 95%CI 2.79-13.54; p<0.001) and TIMI (OR 2.46; 95%CI 1.40-4.31; p=0.002). Discrimination improved from AUC 0.749 (TIMI+GRACE) to 0.902 adding hs-cTn and echocardiography (+20.5% gain).
Conclusion: Integrating TIMI, LVEF, global longitudinal strain and peak hs-cTn achieves excellent MACE discrimination (AUC 0.902), outperforming clinical scores by 20.5% in a high-altitude Latin American cohort. The 45.3% MACE rate — far exceeding high-income registries (15-30%) — reveals a critical stratification gap for high-altitude, middle-income populations underrepresented in current guidelines.

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Interventions and Ischemic Heart Diseases
Publishing Title:	CATHETER-DIRECTED THROMBOLYSIS VERSUS ANTICOAGULATION ALONE IN INTERMEDIATE-RISK PULMONARY EMBOLISM: A SYSTEMATIC REVIEW AND META-ANALYSIS OF RANDOMIZED TRIALS
Author Block:	Dario Lopez, Joshua Emmanuel Arteaga, Simon Dario Madroñero, Daneil Felipe Suarez, Maria Paula Eraso, Esteban Rendon Ordoñez, Ignacio Alexander Benavides, Juan S. Acosta, Hospital Universitario Departamental de Nariño, Pasto, Colombia, Universidad Cooperativa de Colombia, Colombia
Abstract Body:	**Background:** Intermediate-risk and intermediate-high-risk pulmonary embolism (PE) are associated with right ventricular dysfunction, clinical deterioration, and increased short-term mortality. Catheter-directed thrombolysis (CDT), has been proposed as a reperfusion strategy that may improve early hemodynamic and imaging outcomes while limiting bleeding risk **Methods:** We conducted a systematic review and meta-analysis of randomized clinical trials evaluating CDT or USAT in adults with intermediate-risk or intermediate-high-risk acute PE. PubMed, Scopus, and Embase were searched, yielding 1,256 records. After duplicate removal, 801 records underwent screening. Seven randomized studies were included in the qualitative synthesis. Five trials comparing CDT/USAT plus anticoagulation versus anticoagulation alone were included in the primary meta-analysis. Trials evaluating only USAT dose/duration or USAT versus standard CDT were retained for narrative synthesis. Random-effects models were used to pool major bleeding and hospital length of stay. **Results:** The primary comparative evidence included 858 participants across five randomized trials. CDT/USAT was not associated with a statistically significant increase in major bleeding compared with anticoagulation alone (risk ratio [RR] 1.42, 95% confidence interval [CI] 0.52 to 3.87; I^2 = 0%). Hospital length of stay was numerically shorter with CDT/USAT but did not reach statistical significance (mean difference −0.63 days, 95% CI −1.36 to 0.11; I^2 = 0%). Across trials, CDT/USAT generally improved early surrogate markers, including RV/LV ratio, pulmonary artery pressure, thrombus burden, and

rescue therapy requirements. Mortality was uncommon, and available trials were not powered to detect mortality differences.
Conclusion: In selected patients with intermediate-risk or intermediate-high-risk PE, CDT/USAT appears to improve early physiologic and imaging outcomes without a clear increase in major bleeding. However, evidence remains insufficient to demonstrate reductions in mortality or hospitalization duration. Larger trials powered for patient-important outcomes are needed.

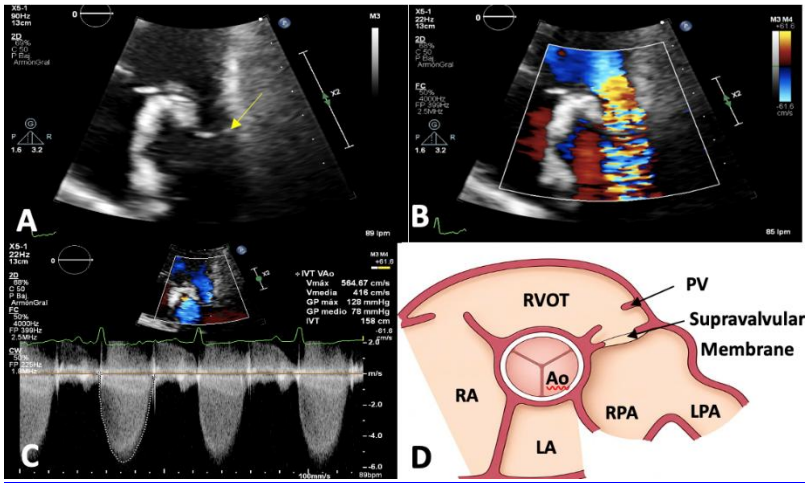
Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	SYSTOLIC BLOOD PRESSURE AND RIGHT VENTRICULAR-PULMONARY ARTERY COUPLING IN PRETERM ADULTS EXPOSED VS. NOT EXPOSED TO KANGAROO MOTHER CARE: A PRELIMINARY ANALYSIS
Author Block:	HERNAN RAMIREZ, Gustavo Lemus, Jose Arias, Nohra Romero, Raul Eduardo Reyes Toledo, Jaime Torres, Francisco Sebastián Terán Ibarra, Andres F. Buitrago, Andres C. Ruiz, Juan David Castillo Peña, Diana Carrillo, Diana Muñoz, Geny González, Karen Rivera, Catalina Lince, Nathalie Charpak, Maria A. Gutierrez, Bernardo Lombo, Robert L. McNamara, Fundacion Santa Fe de Bogota, Bogota, Colombia, Kangaroo Foundation, Bogota, Colombia
Abstract Body:	**Background:** Preterm birth has been associated with long-term cardiovascular differences in adulthood. Whether neonatal Kangaroo Mother Care (KMC) exposure is associated with systemic blood pressure and right ventricular-pulmonary artery assessment in adulthood remains incompletely characterized. **Methods:** Historical cohort with cross-sectional adult evaluation in Colombia. Adults born preterm with birth weight <2000 g and gestational age <37 weeks underwent standardized blood pressure measurement, 12-lead ECG, and transthoracic echocardiography including right ventricular structure, function, and pulmonary hemodynamics. Data are mean ± SD, median [IQR], or n (%). Between-group comparisons used Welch's t-test, Mann-Whitney U test, or chi-square. Multivariable models adjusted for gestational age, sex, intrauterine growth restriction, and birth weight. **Results:** Ninety preterm-born adults were evaluated: 51 KMC-exposed and 39 non-exposed. Mean age was 31.3 years in both groups; female sex was similar, 72% vs 69%. Gestational age was 33.1 ± 2.0 vs 33.3 ± 2.0 weeks, birth weight 1707 ± 258 vs 1748 ± 214 g, and intrauterine growth restriction 37.3% vs 28.2%. Antenatal steroid exposure was higher in non-exposed adults, 43.6% vs 17.6%; p=0.007. KMC-exposed adults had lower systolic blood pressure, 117.2 ± 13.9 vs 122.5 ± 8.7 mmHg; p=0.037, although this association was attenuated after adjustment, β=−4.49; p=0.116. Pulmonary systolic pressure

was similar, 21.8 ± 6.0 vs 19.6 ± 6.3 mmHg; p=0.194. Right ventricular parameters were comparable: TAPSE 21.5 ± 3.1 vs 22.2 ± 4.0 mm; p=0.422, FAC 44.2 ± 5.9% vs 43.9 ± 13.8%; p=0.888, and RV S' 13.0 ± 2.3 vs 16.2 ± 16.8 cm/s; p=0.247. No right ventricular dysfunction was identified in either group. **Conclusion:** In this preliminary cohort of adults born preterm, KMC exposure was associated with lower unadjusted systolic blood pressure, but not after multivariable adjustment. Right ventricular structure, function, and pulmonary systolic pressure were comparable between groups, with no evidence of RV dysfunction. These exploratory findings require confirmation after completion of the planned sample size.

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	FROM MYXOMA TO METASTATIC CARCINOMA: DIAGNOSTIC LIMITATIONS OF MULTIMODALITY IMAGING
Author Block:	Mauricio Murillo, Luis Armando Velasquez Trujillo, Kenyi Kuratomi, Oscar Emilio Diaz Portilla, Sebastian Ayala, Bryan Zamora, Manuel Hurtado, Alvaro Herrera, Hospital Universitario del Valle, Cali, Colombia
Abstract Body:	**Background:** Accurate tissue characterization of cardiac masses remains challenging even with multimodality imaging. Cavoatrial tumor thrombus from renal cell carcinoma (RCC) can replicate all echocardiographic and CMR criteria of right atrial myxoma, leading to misdiagnosis with important therapeutic implications. **Case:** A 74-year-old male with chronic kidney disease (CKD) stage G4 presented with 4-month progressive dyspnea and jugular venous distension. Transesophageal echocardiography (TEE) identified a mobile, lobulated, pedunculated right atrial mass (area 16.5 cm2, 90% cavity occupation); Paolisso score 1/6. Cardiac magnetic resonance (CMR) showed a 57x46 mm mass with heterogeneous T1 signal, absent first-pass perfusion, no late gadolinium enhancement and negative STIR; CMR Mass Score 1-2/8. Both modalities concluded right atrial myxoma. Surgery revealed inferior vena cava (IVC) extension to hepatic veins, precluding complete resection. Histopathology showed clear-cell proliferation in nests and trabeculae with sinusoidal vasculature, confirming metastatic RCC thrombus. CT angiography identified a 13.5 cm IVC mass with right renal vein involvement and enlarged right kidney, reclassifying the case as Neves IV cavoatrial RCC thrombus. **Decision-making:** Concordant misdiagnosis occurred because the RCC thrombus reproduced the hypovascular CMR signature of myxoma: absent first-pass perfusion, no gadolinium retention and pedunculated morphology. Validated scoring tools (CMR Mass Score, Paolisso) presuppose cardiac-origin masses and require known oncological context; both failed here. Standard cardiac planes cannot evaluate full IVC extent, the critical undetected finding. Advanced CKD with de novo right atrial mass must prompt systematic

abdominal vascular imaging before cardiac surgery.
Conclusion: RCC cavoatrial thrombus can precisely replicate all multimodality imaging criteria of right atrial myxoma, rendering malignancy scoring systems unreliable. In patients with advanced CKD and a de novo right atrial mass, preoperative abdominal CT or MRI to exclude IVC tumor extension should be considered.

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	ISOLATED SUPRAVALVULAR PULMONARY STENOSIS CAUSED BY A MEMBRANOUS OBSTRUCTION IN A 70 YEAR OLD WOMAN
Author Block:	Manuela Orozco Martínez, Jose Fernando Zuluaga Rojas, Santiago Orozco Martínez, Fabio Mauricio Sánchez Cano, Andrés Ramos Piedrahita, Universidad de Manizales, Manizales, Colombia
Abstract Body:	**Background:** Supravalvular pulmonary stenosis is a rare cause of right ventricular outflow tract obstruction, usually associated with congenital syndromes and diagnosed during childhood. Isolated presentation in elderly patients is uncommon. **Case:** A 70 year old woman with hypertension, hypothyroidism, and dyslipidemia presented with 10 years of progressive dyspnea, initially on exertion and later at rest, associated with lower extremity edema. Physical examination revealed mild jugular venous distention, bilateral edema, and a grade III systolic ejection murmur at the pulmonary area radiating to the left supraclavicular region. Transthoracic echocardiography demonstrated a supravalvular membranous obstruction within the main pulmonary artery causing severe supravalvular pulmonary stenosis, with turbulent flow acceleration, peak velocity of 5.6 m/s, peak systolic gradient of 128 mmHg, and mean gradient of 78 mmHg (Figure 1). **Decision-making:** No associated congenital cardiac abnormalities were identified. Based on echocardiographic findings, the patient underwent surgical resection of the obstructive membrane with symptomatic improvement. Correlation between echocardiographic and surgical findings confirmed the diagnosis. **Conclusion:** This case highlights a rare cause of right ventricular outflow tract obstruction presenting late in adulthood and underscores the role of echocardiography in identifying supravalvular lesions and guiding definitive treatment.


A
B
C
D
RVOT
PV
Supravalvular
Membrane
Ao
RA
RPA
LPA
LA

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	FROM PUSH TO PNEUMOMEDIASTINUM: HAMMAN SYNDROME MIMICKING CARDIOPULMONARY DISEASE
Author Block:	Xavier Delgado Lopez, Luis Alfredo Acevedo Soto, Kimberly Pagan, Brian Torres Mercado, Joseph Maldonado, Andres Jose Cordova Toro, David R. Bermudez-Nunez, Mayaguez Medical Center, Mayaguez, PR, USA
Abstract Body:	**Background:** Hamman syndrome is a rare complication of labor caused by increased intrathoracic pressure during Valsalva maneuvers. It presents with spontaneous pneumomediastinum and subcutaneous emphysema and may mimic serious cardiopulmonary conditions such as pulmonary embolism or acute coronary syndrome. Early recognition is essential to avoid unnecessary invasive interventions. **Case:** A 34-year-old G1P0 woman with hypothyroidism at 39 weeks gestation was admitted for labor. During vaginal delivery, she developed bilateral cheek swelling, voice changes, dyspnea, and sinus tachycardia. Physical examination revealed palpable crepitus with subcutaneous emphysema involving the chest, neck, and mandibular region. Electrocardiogram showed sinus tachycardia without ischemic changes, and high-sensitivity troponin levels were normal. Chest radiography demonstrated pneumomediastinum with associated subcutaneous emphysema without pneumothorax. Transthoracic echocardiography showed preserved biventricular function without structural abnormalities or pericardial effusion. **Decision-making:** The differential diagnosis included pulmonary embolism, pneumothorax, acute coronary syndrome, esophageal rupture, and peripartum cardiomyopathy. However, imaging-confirmed pneumomediastinum with extensive subcutaneous emphysema after labor supported the diagnosis of Hamman syndrome. Because the patient remained hemodynamically stable, conservative management with observation, supplemental oxygen, analgesia, and avoidance of further Valsalva maneuvers was pursued. **Conclusion:** Hamman syndrome is an uncommon postpartum condition that may mimic life-threatening cardiopulmonary disease. Recognition of

characteristic findings following labor is important for prompt diagnosis, conservative management, and prevention of unnecessary invasive procedures.

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	TRAPPED BETWEEN THE GREAT VESSELS: CLINICAL COURSE OF AN ANOMALOUS RIGHT CORONARY ARTERY
Author Block:	Xavier Delgado Lopez, Luis Alfredo Acevedo Soto, Kimberly Pagan, Brian Torres Mercado, Joseph Maldonado, Migdoel Cruz-Rodriguez, David R. Bermudez-Nunez, Mayaguez Medical Center, Mayaguez, PR, USA
Abstract Body:	**Background:** Anomalous aortic origin of a coronary artery (AAOCA) is a rare congenital anomaly associated with myocardial ischemia and sudden cardiac death, particularly with an inter arterial course. Management in asymptomatic adults remains controversial, especially with coexisting cardiac disease. **Case:** A 63-year-old man with hypertension, obesity, hyperlipidemia, chronic diastolic heart failure, and Brugada type 1 ECG pattern was found to have an anomalous right coronary artery (RCA) arising from the left coronary cusp with suspected inter-arterial course and slit-like proximal segment. He presented with atypical chest pain and exertional dyspnea. Echocardiography showed preserved ejection fraction, mild concentric LV hypertrophy, and grade 1 diastolic dysfunction. Myocardial perfusion imaging demonstrated normal perfusion without scar. Left heart catheterization confirmed normal coronaries, anomalous RCA, and LVEDP 25 mmHg. Coronary CTA revealed high RCA takeoff, inter-arterial course, and mild non-obstructive CAD. Physical exam was unremarkable, he denied syncope or recurrent chest pain. Serial ECGs showed Brugada type 1 pattern with right bundle branch block. Holter monitoring demonstrated sinus rhythm with occasional premature complexes and no significant arrhythmias. He was managed conservatively with antihypertensive, lipid lowering, and heart failure therapy plus lifestyle modification. Cardiothoracic surgery did not recommend intervention given absence of ischemia or symptoms. **Decision-making:** This case highlights diagnostic and management challenges of AAOCA in older adults with cardiac comorbidities. Despite high risk features, including inter arterial course and slit like orifice, absence of ischemia, symptoms, or malignant arrhythmias favored conservative

management. Multimodality imaging and multidisciplinary evaluation were essential for risk stratification

Conclusion: Individualized management is critical in adults with AAOCA. Conservative therapy with close follow up may be appropriate in asymptomatic patients without ischemia or arrhythmias. Further studies are needed to improve risk stratification and management strategies.

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	CONTEMPORARY PROFILE OF CONGENITAL HEART DISEASE IN A TERTIARY REFERRAL CENTER IN LATIN AMERICA
Author Block:	Deisy T. Pineda, Isabella Casallas, Juliana Hernandez, Jafeth Camargo, Carlos E. Guerrero Chalela, Fundación Cardioinfantil - LaCardio, Bogota, Colombia
Abstract Body:	**Background:** Congenital heart disease (CHD) presents a significant and increasing burden in Latin America, yet regional data remain scarce. This study characterizes the clinical profiles of CHD patients treated at our center. **Methods:** From our institutional registry of 2,500 patients, a sample of 125 patients with confirmed CHD was analyzed. Demographic data, complexity, interventions, comorbidities, and outcomes were evaluated descriptively. **Results:** The cohort included 72.8% pediatric patients and 27.2% adults, 57.6% being female. Simple, moderate, and severe CHD were present in 44.8%, 36.0%, and 19.2%, respectively. Severe lesions were more common in children (25.3%) than in adults (2.9%). Prior cardiac surgery was reported in 50.4% of patients, and percutaneous intervention in 27.2%. Arrhythmias were documented in 15.2% of patients, more frequently in adults (29.4% vs. 9.9%). Adults had higher rates of hypertension (17.6% vs. 0%) and ischemic heart disease (5.9% vs. 0%) compared to pediatric patients. The most prescribed medications were diuretics (34.4%), aspirin (22.4%), and ACE inhibitors (16.0%). Mortality was 6.4%, exclusively among pediatric patients with moderate to severe CHD. **Conclusion:** This cohort shows a diverse population with complex pediatric diseases and many undergoing corrective or palliative procedures. The increasing comorbidities in adults with CHD highlight the need for specialized,

long-term care and regional registries in Latin America.

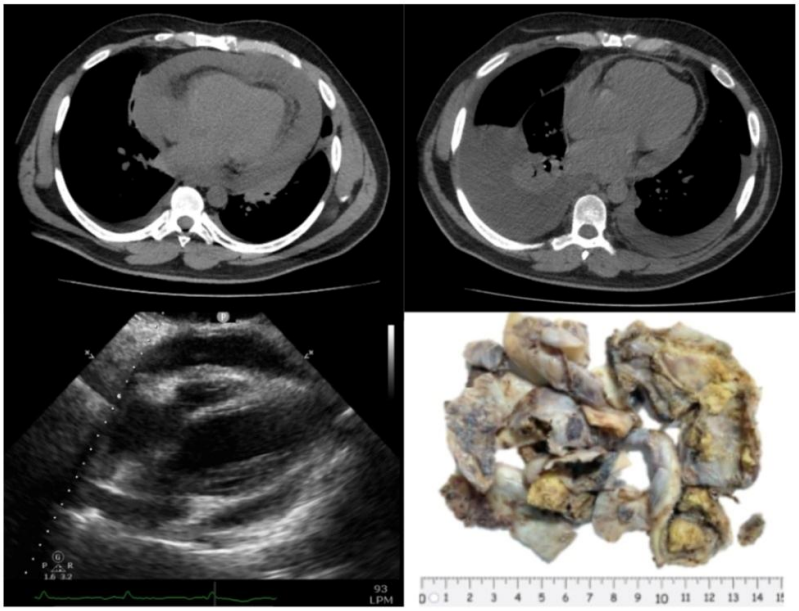
TABLE 1. Contemporary Profile of Congenital Heart Disease — Summary by Age Group

Characteristic	Overall (n=125)	Adults (n=34)	Pediatrics (n=91)
Demographics			
Female sex, n (%)	72 (57.6)	22 (64.7)	50 (54.9)
Age, median (IQR), years	—	42 (30–52)	5 (3–10)
CHD Complexity			
Simple CHD, n (%)	56 (44.8)	14 (41.2)	42 (46.2)
Moderate CHD, n (%)	45 (36.0)	19 (55.9)	26 (28.6)
Severe CHD, n (%)	24 (19.2)	1 (2.9)	23 (25.3)
Prior Interventions			
Cardiac surgery only, n (%)	63 (50.4)	15 (44.1)	48 (52.7)
Percutaneous intervention only, n (%)	34 (27.2)	9 (26.5)	25 (27.5)
Both surgery and percutaneous, n (%)	7 (5.6)	1 (2.9)	6 (6.6)
No intervention, n (%)	21 (16.8)	9 (26.5)	12 (13.2)
Genetic Syndromes			
Any genetic syndrome, n (%)	22 (17.6)	1 (2.9)	21 (23.1)
Down syndrome, n	12	1	11
DiGeorge syndrome, n	7	0	7
Arrhythmias			
Arrhythmia, n (%)	19 (15.2)	10 (29.4)	9 (9.9)
Pacemaker implantation, n	6	4	2
Cardioversion, n	12	6	6
Comorbidities			
Hypertension, n (%)	6 (4.8)	6 (17.6)	0
Dyslipidemia, n (%)	5 (4.0)	5 (14.7)	0
Ischemic heart disease, n (%)	2 (1.6)	2 (5.9)	0
Diabetes mellitus, n (%)	2 (1.6)	2 (5.9)	0
Hypothyroidism, n (%)	7 (5.6)	3 (8.8)	4 (4.4)
Endocarditis, n (%)	4 (3.2)	1 (2.9)	3 (3.3)
Medications			
Diuretics, n (%)	43 (34.4)	7 (20.6)	36 (39.6)
Aspirin, n (%)	28 (22.4)	10 (29.4)	18 (19.8)
ACE inhibitors, n (%)	20 (16.0)	3 (8.8)	17 (18.7)
Spironolactone, n (%)	17 (13.6)	1 (2.9)	16 (17.6)
Beta-blockers, n (%)	17 (13.6)	14 (41.2)	3 (3.3)
ARBs, n (%)	11 (8.8)	5 (14.7)	6 (6.6)
No medications, n (%)	48 (38.4)	9 (26.5)	39 (42.9)
Functional Class (NYHA)			
Class I, n (%)	93 (74.4)	21 (61.8)	72 (79.1)
Class II, n (%)	18 (14.4)	10 (29.4)	8 (8.8)
Class III, n (%)	9 (7.2)	1 (2.9)	8 (8.8)
Class IV, n (%)	5 (4.0)	2 (5.9)	3 (3.3)
Follow-up and Outcomes			
Mortality, n (%)	8 (6.4)	0 (0)	8 (8.8)
Alive at follow-up, n (%)	117 (93.6)	34 (100)	83 (91.2)

Abbreviations: CHD = congenital heart disease; IQR = interquartile range; NYHA = New York Heart Association; ACE = angiotensin-converting enzyme; ARBs = angiotensin receptor blockers.

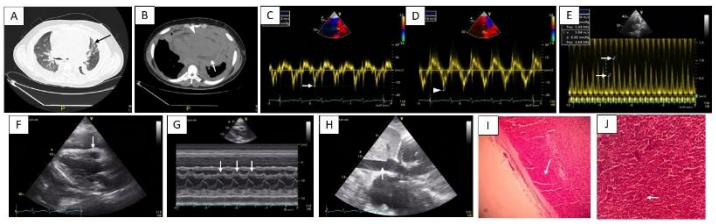
Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	WHEN SUSPICION PERSISTS: TUBERCULOUS PERICARDITIS DESPITE NEGATIVE TESTING IN A HEALTHY INDIVIDUAL
Author Block:	Sarai Betsabé Velarde Sánchez, Juan Jose Orozco Ruelas, Ricardo Augusto Sepulveda Juarez, Hospital General Ensenada, Ensenada, Mexico, Universidad Autonoma de Baja California, Ensenada, Mexico
Abstract Body:	**Background:** Tuberculous pericarditis is a rare but life-threatening cause of effusive-constrictive disease that can occur even in otherwise healthy individuals and is often obscured by negative initial testing. **Case:** A 43-year-old previously healthy patient developed progressive dyspnea after a respiratory infection. ECG showed low-voltage QRS; echocardiography revealed massive pericardial effusion. Initial evaluation, including infectious, rheumatologic studies, PCR and ADA, was negative. CT confirmed pericardial and pleural involvement. Despite NSAIDs, colchicine and corticosteroids, the patient evolved to recurrent effusion with constrictive physiology, requiring pericardiectomy. Diagnosis remained elusive until molecular analysis of paraffin-embedded pericardial tissue identified *Mycobacterium tuberculosis*. Targeted therapy resulted in marked clinical improvement. **Decision-making:** Nonspecific presentation, absence of risk factors and negative fluid studies delayed diagnosis. Serial imaging and clinical progression were critical to guide escalation toward surgery. This case highlights the limited sensitivity of conventional tests and the pivotal role of tissue-based molecular analysis in unresolved cases. **Conclusion:** Negative tests do not exclude tuberculosis. In refractory pericarditis, failure to pursue definitive diagnosis delays life-saving therapy: timely recognition and decisive action can be the difference between

progression and recovery.



(A) Sagittal CT showing marked enlargement of the pericardial space, consistent with a large pericardial effusion. (B) Bilateral pleural effusions with pericardial thickening and recurrent effusion. (C) Transthoracic echocardiography in a subxiphoid view showing pericardial effusion and pericardial thickening (D) Resected pericardial tissue specimen.

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	CONSTRICTIVE PERICARDITIS SECONDARY TO NON-HODGKIN LYMPHOMA COMPLICATED BY SPONTANEOUS TUMOR LYSIS SYNDROME
Author Block:	Deisy Tatiana Duarte Gutierrez, Andres Valdez, Elisabet Varela Dalmasi, Julio Jimenez, Jose M. Stefan, Monica Rosario, Pamela Pina Santana, Cesar J. Herrera, CEDIMAT, Santo Domingo, Dominican Republic
Abstract Body:	**Background:** Constrictive pericarditis (CP) is an uncommon cause of heart failure and may be difficult to diagnose in tuberculosis (TB) endemic regions, where infectious etiologies are often prioritized. Malignancy-related CP is rare. **Case:** A 19-year-old man presented with dyspnea, weight loss and cough. He was initially treated empirically for pleural tuberculosis without clinical improvement. Examination revealed cervical lymphadenopathy and 3+ edema. TTE showed constrictive physiology with septal bounce, 46% respiratory variation in mitral inflow, and annulus reversus. Chest CT demonstrated mediastinal lymphadenopathy and marked pericardial thickening. Cervical node biopsy confirmed B-cell non-Hodgkin lymphoma (NHL). Before chemotherapy could be initiated, he developed spontaneous tumor lysis syndrome (TLS) (uric acid >17mg/dL, K+ 8.9mmol/L, phosphorus >13mg/dL), followed by refractory hemodynamic collapse and death. **Decision-making:** In TB-endemic regions, CP often masks rare etiologies like NHL. The lack of response to empiric antituberculosis therapy and negative microbiology should prompt rapid investigation for malignancy. Spontaneous TLS is a fatal oncological emergency that requires immediate recognition in high-grade lymphomas to manage metabolic collapse. **Conclusion:** This case emphasizes the need for broad differentials in CP and the critical danger of spontaneous TLS in hematological malignancies even before initiating cytotoxic therapy.



A. Chest CT (Lung Window): Axial view demonstrating diffuse ground-glass opacities and and interstitial thickening (arrow). **B. Chest CT (Mediastinal Window):** Axial view revealing pericardial effusion (arrow), thickened pleura and thickened pericardium (arrowhead), and cardiomegaly. **C-D. Tissue Doppler Imaging (TDI):** Annulus reversus: Septal e´ 16 cm/s (arrowhead) > lateral 13 cm/s (arrow). **E. Pulsed-Wave Doppler:** Mitral inflow pulsed Doppler revealing a 46% respiratory variation. **F. TTE (Parasternal Long-Axis):** Thickened pericardium (arrow) with layer separation and moderate pericardial effusion. **G. TTE (M-Mode):** Thickened right ventricular free wall without collapse. Interventricular septum shows characteristic *septal bounce* (arrows). **H. TTE (Subcostal View):** Plethoric inferior vena cava measuring 24 mm without inspiratory collapse (arrow). **I. Lymph Node Biopsy:** Effacement of nodal architecture with diffuse proliferation and absence of reactive follicles (arrow). **J. Lymph Node Biopsy:** Proliferation of small to intermediate lymphoid cells with scant cytoplasm, suggestive of high-grade B-cell lymphoma (arrow).

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	BEYOND THE ORDINARY: HYPERTENSION IN A YOUNG PATIENT ASSOCIATED WITH AORTIC PSEUDOCOARCTATION, AN EXCEPTIONAL CONGENITAL ANOMALY
Author Block:	Ivonne Hernández Montiel, Héctor Hugo Escutia Cuevas, Arnoldo Santos Jiménez Valverde, Sergio Alfonso Patrón Chi, César Jesús Muñoz Hernández, Marco Antonio Alonso Lima, Juan Guzmán Olea, Daniel Iván Pérez Vásquez, Verónica Moreno García, Sergio Miguel Porras Catarino, Hospital Puebla, Puebla, Mexico
Abstract Body:	**Background:** Aortic pseudo-coarctation is a rare congenital anomaly mostly associated with other congenital heart diseases. Incidence is unknown, and clinically it may remain asymptomatic or present with nonspecific symptoms. **Case:** A 26-year-old man with a history of polyneuropathy and cervical and lumbar radiculopathy presented for evaluation as part of a diagnostic workup for probable secondary hypertension. Echocardiography revealed a bicuspid aortic valve with moderate aortic regurgitation and findings suggestive of aortic coarctation, with a peak gradient of 28 mmHg and focal narrowing of 8 mm. Computed tomography angiography demonstrated an elongated aortic arch with kinking and buckling, without evidence of collateral circulation. **Decision-making:** Based on these findings, ascending aortic, aortic arch, and descending aortic angiography was performed, revealing a redundant aortic arch and a non-significant hemodynamic gradient of less than 10 mmHg, establishing the definitive diagnosis of aortic pseudo-coarctation. **Conclusion:** Aortic pseudo-coarctation differs from true aortic coarctation by the presence of a hemodynamically non-significant pressure gradient across the affected segment, and definitive diagnosis is established by angiography. This distinction is essential to avoid unnecessary surgical interventions. Careful

follow-up is required to detect potential complications.

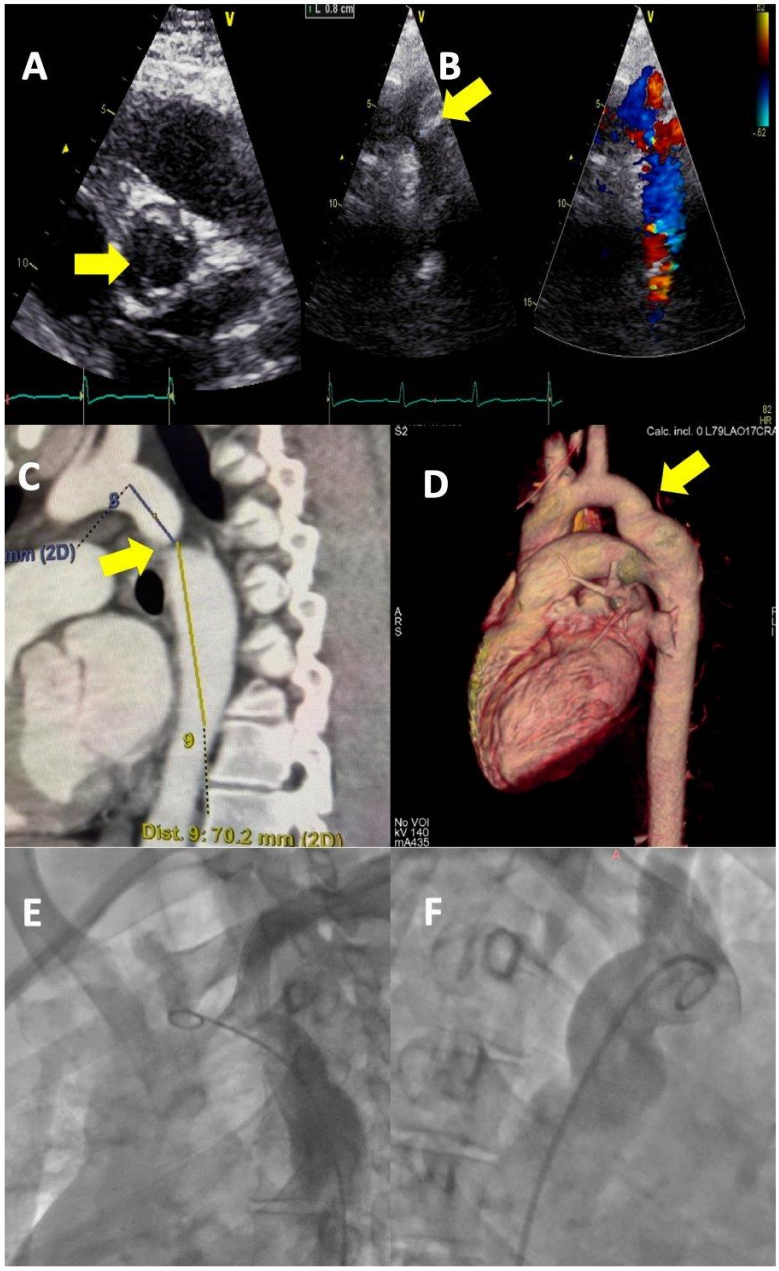


Figure 1. A) and **B)** Echocardiogram showing a bicuspid aortic valve with mild turbulence on color Doppler. **C)** Computed tomography angiography with measurements of the aortic arch and areas of narrowing. **D)** Three-dimensional reconstruction of the ascending aorta, aortic arch, and descending aorta. **E)** and **F)** Aortography showing a non-significant hemodynamic gradient.

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	DUAL ATRIAL SEPTAL DEFECTS: MISSED SINUS VENOSUS INFERIOR ASD AFTER OSTIUM SECUNDUM REPAIR
Author Block:	Karen Alayo Rojas, Luisser Dainner Saavedra Cordova, Wilfredo Velezmoro, BRYAN WALTER ANGULO GARCIA, Javier Torres, Hospital Nacional Edgardo Rebagliati Martins, Lima, Peru
Abstract Body:	**Background:** Simultaneous atrial septal defects (ASDs) are extremely rare, occurring in <1% of congenital heart disease. Sinus venosus inferior ASDs represent the least common type and may be overlooked during initial evaluations. **Case:** A 74-year-old male with previous ostium secundum ASD surgical closure at age 35 presented with decompensated heart failure, atrial fibrillation with slow ventricular response and peripheral edema. Transthoracic and transesophageal echocardiography revealed preserved systolic function, right heart dilation, and a 24x18mm septal discontinuity near the inferior vena cava with left-to-right shunt. Cardiac CT excluded pulmonary embolism and confirmed the defect. Right heart catheterization demonstrated post-capillary pulmonary hypertension (mPAP 32mmHg, PVR 1.38WU, PCWP 20mmHg) with step-up oxygenation at the right atrium (88.9% saturation). **Decision-making:** Given the patient's frailty and high surgical risk, a conservative approach was chosen after multidisciplinary evaluation. A permanent pacemaker was successfully implanted for bradycardia management. The patient was discharged hemodynamically compensated with outpatient cardiology follow-up. **Conclusion:** This case highlights the rarity of coexisting ASDs and emphasizes the importance of comprehensive multimodal imaging evaluation. The missed sinus venosus inferior defect during initial surgery underscores the need for

thorough assessment to prevent long-term complications.

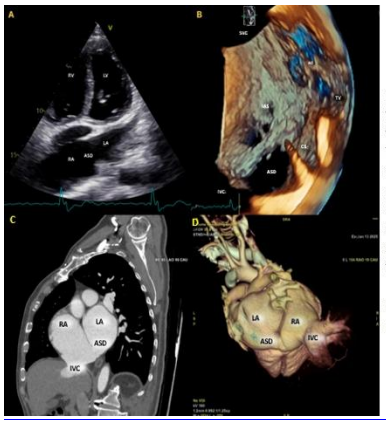
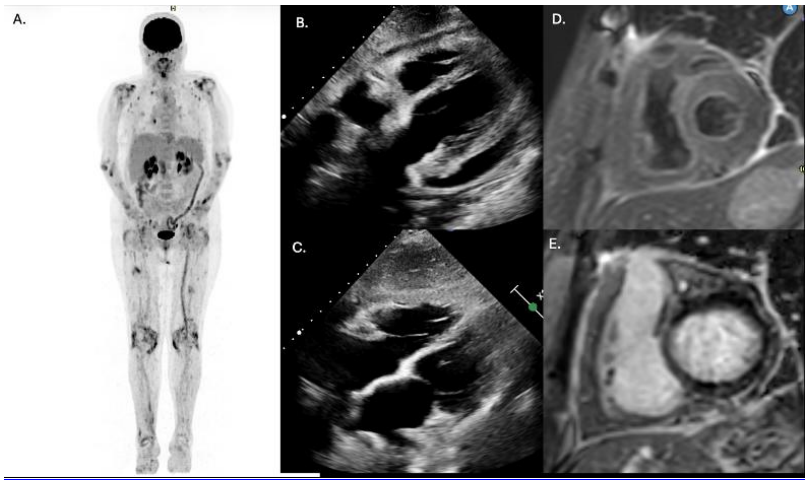


Figure 1. Echocardiogram: A) Modified apical four-chamber transthoracic echocardiogram in the posterior direction to visualize the defect (ASD) and associated anatomical landmarks. B) Transesophageal echocardiogram with three-dimensional reconstruction, viewed from the right atrium of the interatrial septum, to identify a sinus venosus-type atrial septal defect (ASD) and associated anatomical landmarks. Cardiac CT angiography: C) Multiplanar reconstruction showing an inferior atrial septal defect adjacent to the inferior vena cava. D) 3D reconstruction of the defect with adjacent anatomical landmarks.

RA: Right atrium. LA: Left atrium. ASD: Atrial septal defect. IVC: Inferior vena cava.

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	LATE-ONSET SYSTEMIC LUPUS ERYTHEMATOSUS AND SECONDARY ANTIPHOSPHOLIPID SYNDROME PRESENTING AS MYOPERICARDITIS MIMICKING ACUTE CORONARY SYNDROME
Author Block:	Jonathan Javier Diaz Jurado, Camilo Andrés Olivares, Santiago Beltran, Daniel Isaza-Restrepo, Universidad del Rosario, Bogotá, Colombia, Fundación Cardioinfantil-Instituto de Cardiología, Bogotá, Colombia
Abstract Body:	**Background:** Late-onset systemic lupus erythematosus (SLE) may present with atypical cardiovascular manifestations mimicking acute coronary syndrome. Multimodality imaging is essential for diagnostic clarification **Case:** A 67-year-old woman with recent peripheral arterial thrombosis, inflammatory polyarthralgias, and progressive functional decline presented with chest pain, resting dyspnea, and elevated troponin. Computed tomography angiography excluded pulmonary embolism and revealed moderate pericardial and bilateral pleural effusions. TTE confirmed polyserositis with preserved LVEF. Autoimmune testing showed positive ANA, anti-Sm and antiphospholipid antibodies, establishing SLE with secondary antiphospholipid syndrome. Following methylprednisolone therapy, symptoms and pericardial effusion resolved within 96 hours. Cardiac magnetic resonance later demonstrated pericardial late gadolinium enhancement and mesocardial fibrosis without ischemic findings **Decision-making:** Sequential multimodality imaging differentiated autoimmune myopericarditis from ischemic disease and supported avoidance of unnecessary invasive coronary evaluation. Rapid improvement after corticosteroid therapy further supported an inflammatory etiology **Conclusion:** Late-onset SLE may present with troponin elevation and polyserositis in older adults. Multimodality imaging facilitated diagnosis and

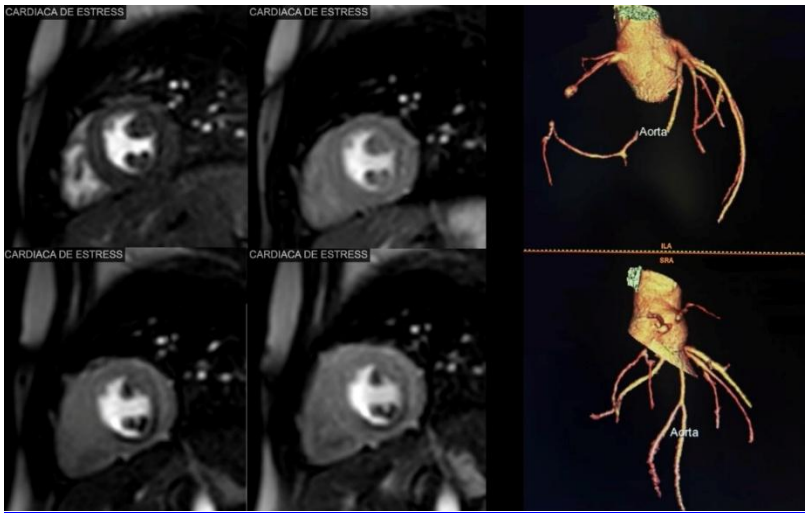
rapid resolution after treatment.



Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	FROM CHILDHOOD VASCULITIS TO ADULT CORONARY ISCHEMIA; A MULTIMODALITY IMAGING APPROACH
Author Block:	Domenica Bayas, María Sol Calero, Giovanni Escorza, Lucia Gordillo, Hospital Metropolitano, Quito, Ecuador

Abstract Body:

Background: Kawasaki disease is a childhood vasculitis with late coronary sequelae, including aneurysm, thrombosis, occlusion, and ischemia.
Case: A 17-year-old male with Kawasaki disease since infancy presented with 18 hours of severe retrosternal chest pain. Vital signs and cardiopulmonary examination were normal. Troponins were negative. Electrocardiogram showed sinus rhythm, right axis deviation, and no ischemic ST changes. Coronary computed tomography angiography (CTA) showed calcium score 0, total ostial/proximal right coronary artery occlusion, a small mid-vessel aneurysm, second mid-vessel occlusion, and distal collateral filling. Stress echocardiography reproduced pain with inferior/posterior hypokinesia. Stress cardiac magnetic resonance (CMR) showed moderate inferior/inferoseptal ischemia, subtle inferior subendocardial enhancement, and viability.
Decision-making: Kawasaki history and coronary computed tomography angiography (CTA) findings raised concern for late coronary sequelae. Multimodal imaging drove management: CTA defined anatomy, stress echocardiography confirmed ischemia, CMR showed ischemic burden with viability. Bisoprolol reduced myocardial oxygen demand while heart team review defined medical therapy versus revascularization.
Conclusion: Kawasaki disease in infancy can remain relevant years later. Multimodal Imaging connected coronary anatomy, ischemia, and viability, guiding treatment in Kawasaki-related coronary disease.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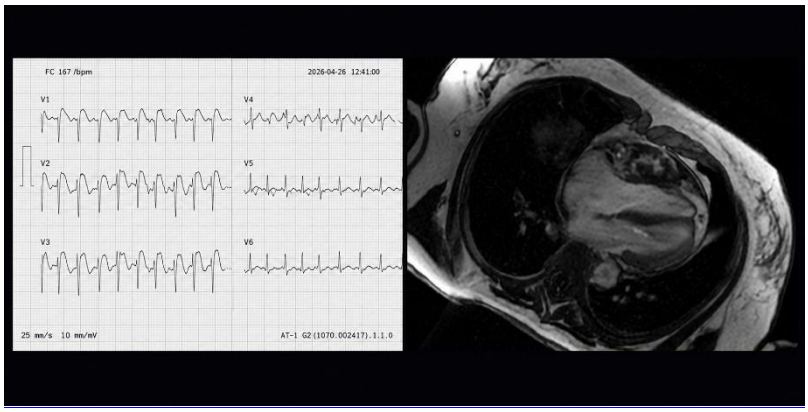
Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	PERSISTENT ST-SEGMENT ELEVATION MIMICKING ACUTE MYOCARDIAL INFARCTION AS THE INITIAL MANIFESTATION OF PRIMARY CARDIAC LYMPHOMA
Author Block:	Juan Sebastian Rodriguez Zakzuk, Rafael David Otavo Duarte, Lauren Sofia Calvo Betancourt, Fernando Ortiz Duarte, Jesus Alexander Cotes Millan, Clinica Universitaria Colombia, Bogota, Colombia
Abstract Body:	**Background:** Cardiac tumors are uncommon and may mimic acute coronary syndromes on electrocardiography (ECG), posing diagnostic challenges. Persistent ST-segment elevation without dynamic evolution should raise suspicion for nonischemic causes. **Case:** A 76-year-old woman presented with angina and progressive decline. ECG showed sinus tachycardia with persistent anteroseptal ST-segment elevation, without reciprocal changes or dynamic evolution over 24 hours. Cardiac biomarkers and laboratory studies were unremarkable except for thrombocytopenia. Given the atypical findings, multimodality imaging was performed. Computed tomography revealed a mediastinal mass with infiltration of the right ventricle and atrium. Cardiac magnetic resonance showed a heterogeneous infiltrative lesion with areas of necrosis, suggestive of primary cardiac lymphoma. **Decision-making:** The absence of dynamic ECG changes, lack of biomarker elevation, and infiltrative imaging favored a neoplasic rather than ischemic etiology. Imaging was essential to differentiate tumor infiltration from myocardial infarction and to guide oncologic and surgical evaluation. **Conclusion:** Persistent ST-segment elevation without electrocardiographic evolution may represent myocardial tumor infiltration rather than coronary occlusion. Early recognition and multimodality imaging are critical for diagnosis and avoidance of unnecessary reperfusion.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Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	OBSTRUCTIVE COR TRIATRIATUM SINISTER IN A PREGNANT PATIENT. A CASE REPORT
Author Block:	Heydi Jimenez, LUIS ADRIAN BOLIVAR MEJIA, SOMER INCARE, RIONEGRO, Colombia

Abstract Body:

Background: Cor triatriatum sinister (CTS) is a rare congenital heart defect characterized by a fibromuscular membrane dividing the left atrium, which can cause severe obstruction to blood flow and represents an absolute contraindication to pregnancy.

Case: A 26-year-old woman at 28 weeks of gestation, presented with dyspnea and palpitations of one month's duration. On physical examination, her heart rate was 78 bpm, and she was orthopneic, without murmurs. Transthoracic echocardiography revealed obstructive CTS (Figure 1), with a mean gradient of 18 mmHg. Three-dimensional reconstruction demonstrated obstruction of 74% of the left atrial transverse area. Pulmonary artery systolic pressure was estimated at 61 mmHg. Fetal well-being tests were normal.

Decision-making: Due to the gestational age and the severity of the obstruction, immediate hospitalization was indicated. Fetal lung maturation was induced, and diuretic therapy was initiated, resulting in clinical improvement. A multidisciplinary medical team was convened, it was decided to continue the pregnancy until 36 weeks of gestation, perform a cesarean section, and subsequently carry out surgical resection of the CTS during the postpartum period.

Conclusion: The management of obstructive CTS during pregnancy must be individualized, as it depends on the degree of obstruction, gestational age, maternal and fetal well-being, and the response to medical therapy,

representing a significant therapeutic challenge.

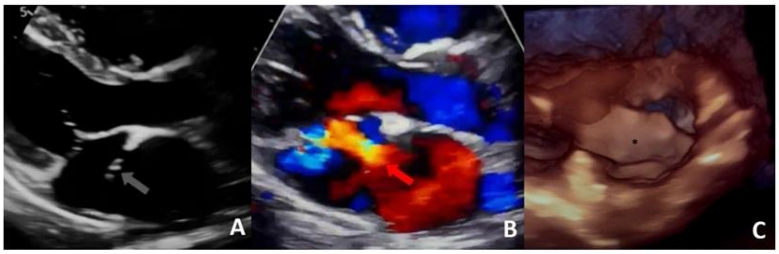
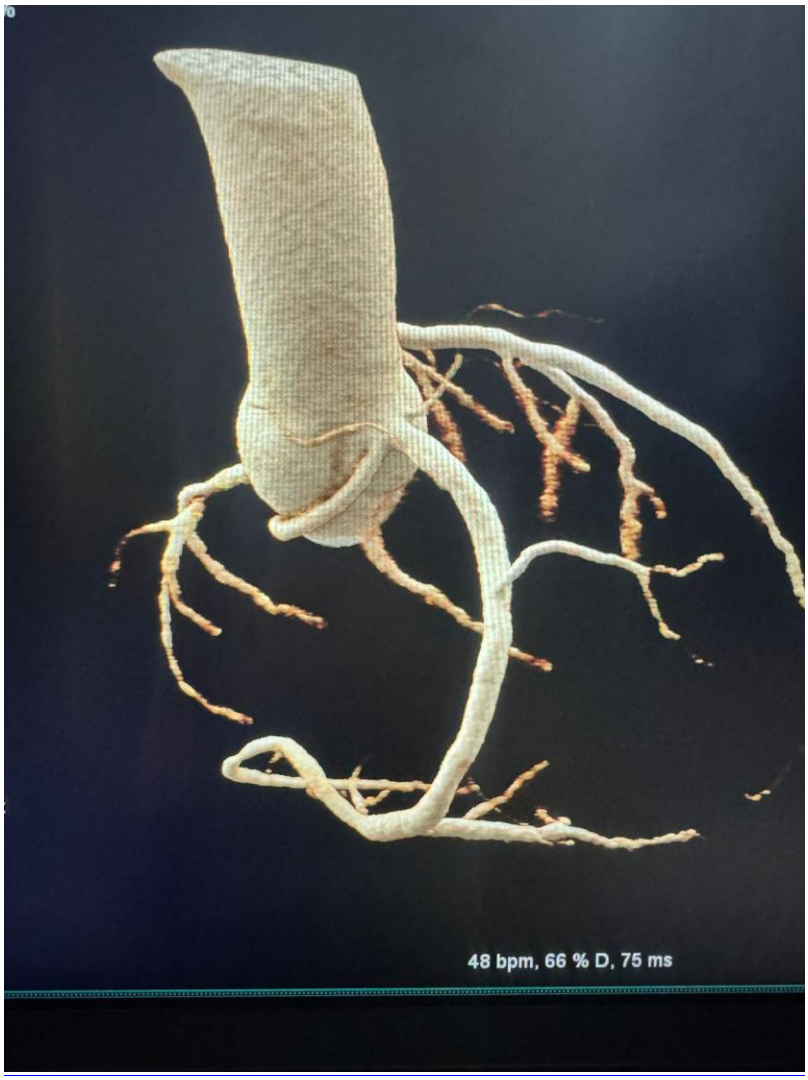


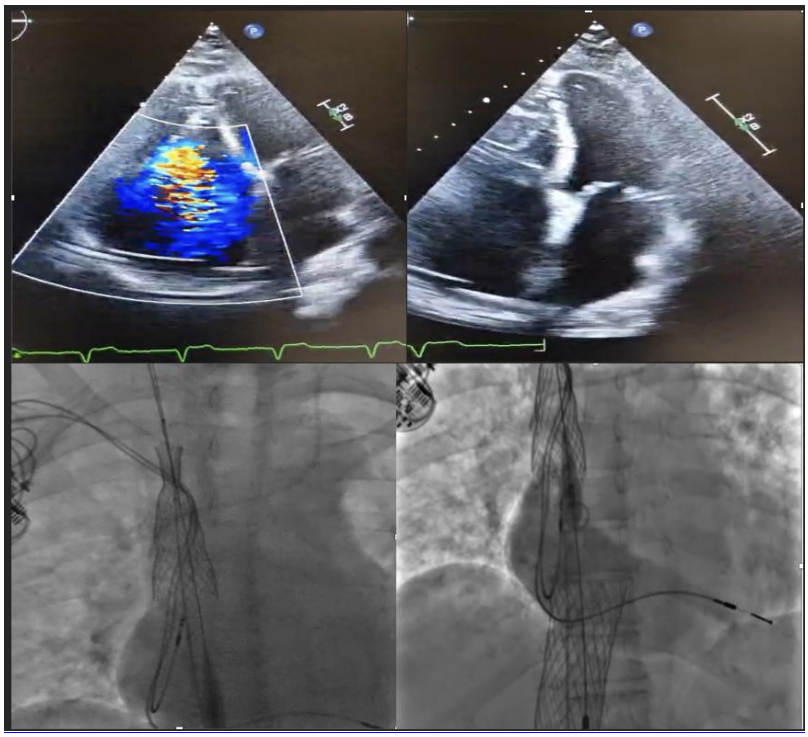
Figure 1: Transthoracic echocardiogram showing cor triatriatum sinister (arrow) in two-dimensional (A) and color Doppler mode (B). Three-dimensional reconstruction (C) demonstrated that the cor triatriatum membrane (asterisk) occupied 74% of the transverse area of the left atrium.

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	THE VALUE OF CORONARY COMPUTED TOMOGRAPHY IN CONGENITAL ANOMALIES: ANOMALOUS ORIGIN OF THE CIRCUMFLEX ARTERY
Author Block:	Oscar Ospina, Diana Llanos, Angela Rodriguez, Stephania Cespedes, Angiografia de Occidente, Cali, Colombia
Abstract Body:	**Background:** Congenital anomalies of the origin of the coronary arteries are rare entities whose clinical relevance depends primarily on their anatomical course. Coronary CT angiography has become an essential tool for differentiating benign variants from those associated with ischemia and sudden cardiac death. **Methods:** We present the case of a 40-year-old male patient with atypical chest pain of long duration. Initially, a stress echocardiogram was performed, in which an anomalous coronary origin was suspected; subsequently, a coronary CT angiogram was performed for anatomical characterization and risk stratification. **Results:** Coronary CT angiography confirmed an anomalous origin of the left coronary artery from the right coronary sinus with a benign retroaortic course, without evidence of interarterial course or vascular compression. The patient remained clinically stable, with no findings of myocardial ischemia or high-risk anatomical features, allowing for conservative management and outpatient follow-up. **Conclusion:** This case highlights the value of coronary CT angiography in the evaluation of congenital coronary anomalies, allowing differentiation of benign pathways from potentially malignant variants. The identification of a retroaortic pathway avoided unnecessary interventions and guided conservative

management with a favorable clinical outcome.



Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Valvular Diseases
Publishing Title:	SILENT CONGESTION: CAVI IN DEVICE INDUCED TRICUSPID REGURGITATION
Author Block:	Pablo Mireles, Edgardo Santos, Mauricio Kuri, Enrique Ponce de Leon, JOSE RAMON AZPIRI, ADRIAN DAVILA BORTONI, Christus Muguerza Alta Especialidad, Monterrey Mexico, Mexico
Abstract Body:	**Background:** Severe tricuspid regurgitation related to intracardiac device leads is an increasingly recognized complication of pacemakers and may progress to advanced right heart failure. Management is challenging when structural leaflet damage limits reparative transcatheter therapies. **Case:** A 78 year old woman with a dual chamber pacemaker implanted in 2014 for complete atrioventricular block developed lead dysfunction with failed extraction attempts. In 2025, a new system was implanted on the right side and left sided lead extraction was performed, the procedure was complicated by tricuspid valve injury, resulting in torrential tricuspid regurgitation. The patient developed progressive dyspnea with severe limitation of daily activities. Physical examination revealed jugular venous pressure of 12 cm, positive Kussmaul sign, and a holosystolic murmur increasing with inspiration. Echocardiography showed TAPSE of 12 mm, severe right atrial dilation, ventricular interdependence, and massive tricuspid regurgitation with Coanda effect. **Decision-making:** Due to severe leaflet destruction from lead-related trauma, the patient was not suitable for TriClip. After Heart Team evaluation, caval valve implantation CAVI was selected as a palliative transcatheter strategy to reduce systemic venous congestion. **Conclusion:** In severe symptomatic tricuspid regurgitation with extensive leaflet damage, CAVI may be a feasible alternative, providing symptomatic improvement in selected patients.



Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Valvular Diseases
Publishing Title:	ONE PATHOGEN, THREE CATASTROPHES: DESTRUCTIVE MITRAL VALVE ENDOCARDITIS IN AUSTRIAN SYNDROME
Author Block:	Ivan Rafael Figueroa Baez, Maniel Ruiz, Marcos Fernandez, Angel Davila, Andrew Engel-Rodriguez, Ruben Gonzalez, San Juan City Hospital, San Juan, PR, VA Caribbean Healthcare System, San Juan, PR, USA
Abstract Body:	**Background:** Austrian syndrome is a rare manifestation of invasive *Streptococcus pneumoniae* infection characterized by pneumonia, endocarditis, and meningitis, with high associated mortality. **Case:** A 57-year-old woman with untreated hepatitis C and chronic intravenous drug use presented encephalopathic with acute hypoxemic respiratory failure requiring intubation. Chest imaging demonstrated bilateral multilobar pneumonia. Blood cultures grew *Streptococcus pneumoniae*. Transthoracic echocardiography revealed a destructive mitral valve vegetation measuring >1.5 cm, fulfilling Modified Duke Criteria for infective endocarditis. Despite antimicrobial therapy, neurologic status worsened, and lumbar puncture confirmed pneumococcal meningitis, completing Austrian syndrome. **Decision-making:** Early echocardiography and lumbar puncture were pursued due to pneumococcal bacteremia with neurologic decline. Broad-spectrum meningeal-dose antimicrobial therapy and multidisciplinary management guided treatment in the setting of rapidly progressive multisystem disease. **Conclusion:** Austrian syndrome should be suspected in high-risk patients with pneumococcal bacteremia and neurologic or cardiac abnormalities. Early recognition, cardiac imaging, and multidisciplinary management are essential

to improve outcomes.

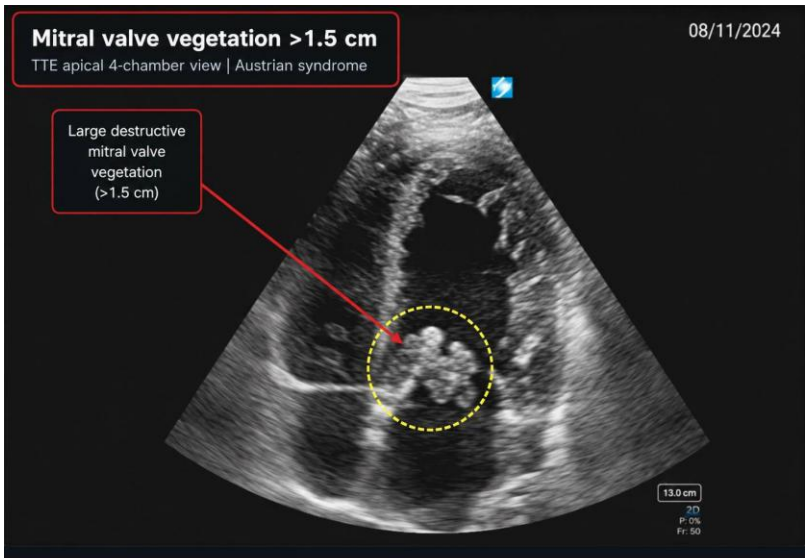


Figure 1. Destructive pneumococcal endocarditis

Transthoracic echocardiography (apical 4-chamber view) demonstrating a large, mobile, and friable vegetation (>1.5 cm) attached to the mitral valve, consistent with invasive Streptococcus pneumoniae endocarditis as part of Austrian syndrome (Osler's triad).

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Valvular Diseases
Publishing Title:	AN UNUSUAL PRESENTATION OF A CLASSIC DISEASE: ACUTE RHEUMATIC CARDITIS IN AN ADULT PATIENT
Author Block:	Pedro Miguel Hernández Aramburo, Manuela Flórez Gómez, Heydi Jimenez, LUIS ADRIAN BOLIVAR MEJIA, Somer In Care, Somer Clinic, Rionegro, Colombia
Abstract Body:	**Background:** Rheumatic heart disease is the leading cause of acquired heart failure in young people in developing countries. Only 10% of patients with acute rheumatic fever (ARF) develop severe valvulitis after the first episode. **Case:** A 38-year-old male with streptococcal tonsillitis three weeks prior presented with migratory polyarthralgias, fever, and progressive dyspnea. Physical examination revealed a newly onset aortic diastolic murmur. Laboratory findings: elevated C-reactive protein (CRP), positive antistreptolysin O (ASO), and negative blood cultures. Echocardiogram: severe aortic regurgitation with valvular perforation and severe mitral regurgitation secondary to left ventricular dilation. **Decision-making:** The patient met Jones criteria: 2 major criteria (carditis and polyarthralgia) and 2 minor criteria (fever and elevated acute-phase reactants). Severe aortic regurgitation with a regurgitant volume of 113 mL and a jet occupying 100% of the outflow tract indicated the need for immediate surgery. Aortic valve replacement and mitral valve repair were performed. Negative blood cultures and valvular cultures confirmed ARF over infective endocarditis. **Conclusion:** ARF with severe valvular involvement may require early surgical intervention. Timely echocardiography and Jones criteria are key for prompt

diagnosis and decision-making in endemic areas.

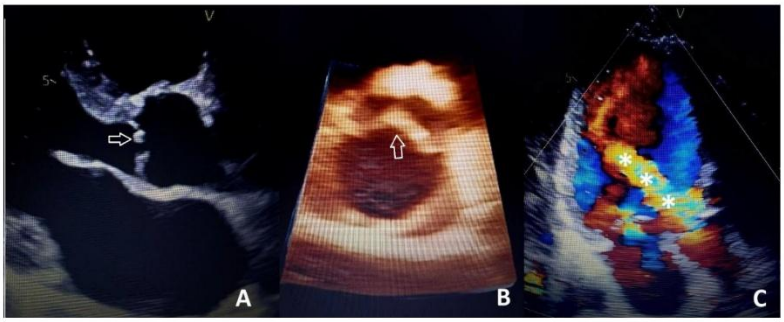


Figure 1: Transthoracic echocardiogram in a 38-year-old male patient. A: Parasternal long-axis view showing the aortic valve with thickening, deformity, and retraction of the right coronary cusp (arrow). B: Three-dimensional parasternal short-axis view showing the aortic valve with thickening, deformity, and retraction of the right coronary cusp (arrow). C: Apical three-chamber view with severe aortic regurgitation on color Doppler (asterisks).

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Valvular Diseases
Publishing Title:	HYBRID LEAD EXTRACTION IN A PACEMAKER-DEPENDENT YOUNG WOMAN WITH SEVERE SVC STENOSIS AND SEVERE TRICUSPID REGURGITATION
Author Block:	Salomón Giraldo, Carla Castillo, Kunal Shah, Ana Cristina Garcia, Roger G. Carrillo, Palmetto General Hospital, Miami, FL, USA
Abstract Body:	**Background:** When abandoned leads, superior vena cava (SVC) stenosis, and severe tricuspid regurgitation coexist in a pacemaker-dependent young patient, traditional transvenous extraction becomes exceptionally hazardous. A hybrid surgical-electrophysiology strategy can provide controlled anatomy-guided extraction while enabling definitive pacing without further valvular trauma. **Case:** A 39-year-old pacemaker-dependent woman with congenital complete heart block presented with progressive heart failure and device malfunction. Echocardiography showed severe tricuspid regurgitation from four interfering transvenous leads, right ventricle (RV) dilation, and chronic SVC stenosis. **Decision-making:** Pacemaker extraction was performed through right infraclavicular and internal jugular dissections, providing access to heavily scarred entry sites. Upper-SVC adhesions were released with a laser sheath, allowing controlled advancement through the stenotic segment. A small submammary incision with endoscopic visualization improved assessment of the intracardiac course and enabled safe mobilization of adherent segments. Due to distorted venous anatomy, peripheral cardiopulmonary bypass was used during high-risk phases. All leads were removed, the tricuspid valve was repaired, and an Aveir leadless pacemaker was implanted the next day. She recovered quickly and was discharged on day three. **Conclusion:** In congenital conduction disease with severe lead-induced tricuspid regurgitation, complete lead extraction with valve repair followed by leadless pacing represents a safe and effective rhythm-management strategy, reducing recurrent valvular dysfunction and future extraction complexity.

Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Valvular Diseases
Publishing Title:	SHARED DECISION-MAKING IN SEVERE RHEUMATIC MITRAL STENOSIS COMPLICATING PREGNANCY: A MULTIDISCIPLINARY CARDIO-OBSTETRIC APPROACH
Author Block:	Luis Armando Velasquez Trujillo, Stephany Barbosa-Balaguera, Manuel Alejandro Hurtado Rivera, Víctor Rafael Bucheli Enríquez, Sebastian Ayala, María Jose Dussan Delgado, Alvaro Herrera, Clinica Sebastian de Belalcazar, Cali, Colombia, Hospital Universitario del Valle, Colombia
Abstract Body:	**Background:** Severe rheumatic mitral stenosis (MS) in pregnancy is a leading cause of maternal cardiac mortality when valve anatomy precludes percutaneous balloon mitral valvuloplasty (PBMV) and the patient declines pregnancy termination. **Case:** A 20-year-old woman without prenatal care presented at 23.5 weeks of gestation with progressive dyspnea, apical diastolic rumble, and lower limb edema. Pro-BNP was 477 pg/mL. Echocardiography showed severe rheumatic MS: valve area 0.5 cm^2, mean gradient 15 mmHg, Wilkins score 13, severely dilated left atrium, pulmonary artery systolic pressure 49 mmHg, and preserved ejection fraction. **Decision-making:** Pregnancy termination was offered and refused. PBMV was excluded due to unfavorable anatomy. Respecting maternal autonomy, a multidisciplinary cardio-obstetric team agreed on shared decision-making with intensive medical therapy targeting fetal viability at 28 weeks. At 28.1 weeks, acute pulmonary edema mandated urgent cesarean delivery of a 940-g neonate. Cardiac surgery was deferred postpartum to avoid fetal bypass exposure. Two weeks later, mitral valve replacement with a 27-mm mechanical prosthesis was performed uneventfully. **Conclusion:** Severe rheumatic MS in pregnancy unsuitable for PBMV can be managed through shared decision-making, multidisciplinary care, and deliberate sequencing: medical bridge therapy, urgent delivery, and deferred postpartum valve replacement. **$$MISSING OR BAD GRAPHIC SPECIFICATION (2C639231-0C04-4173-9F29-**

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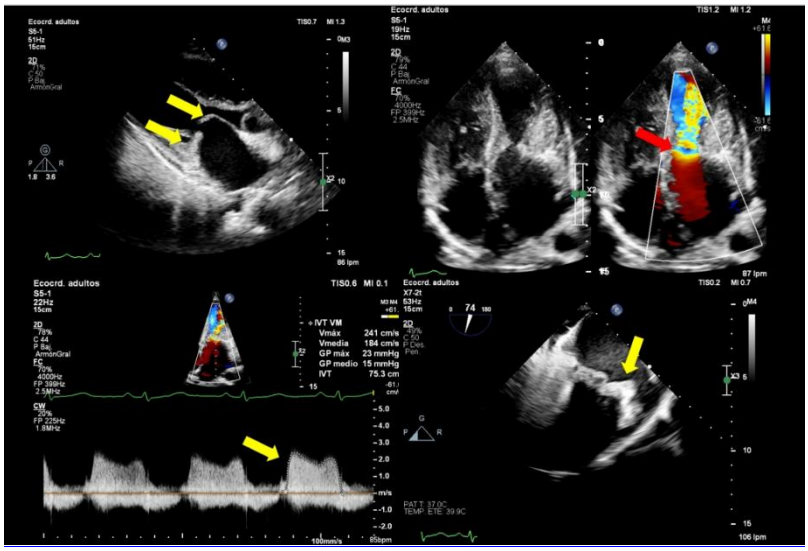
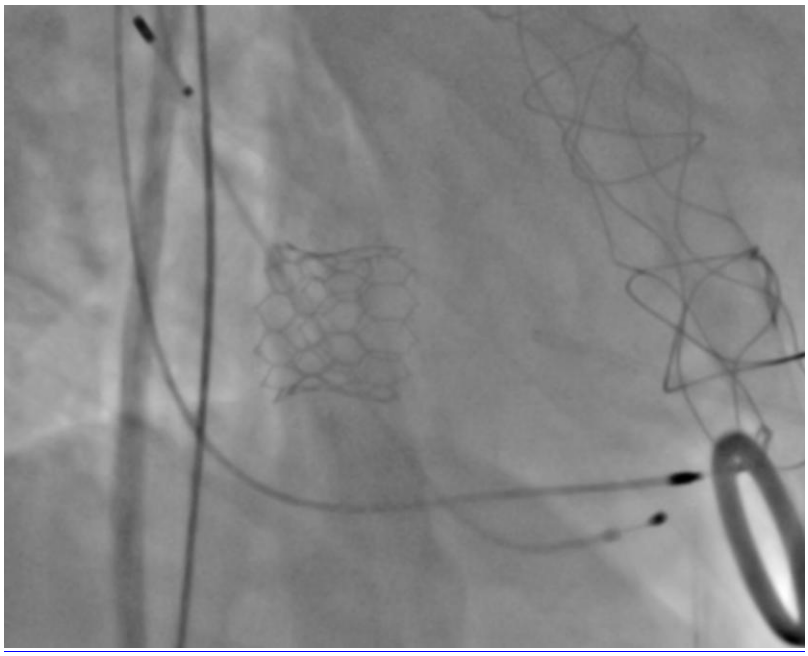


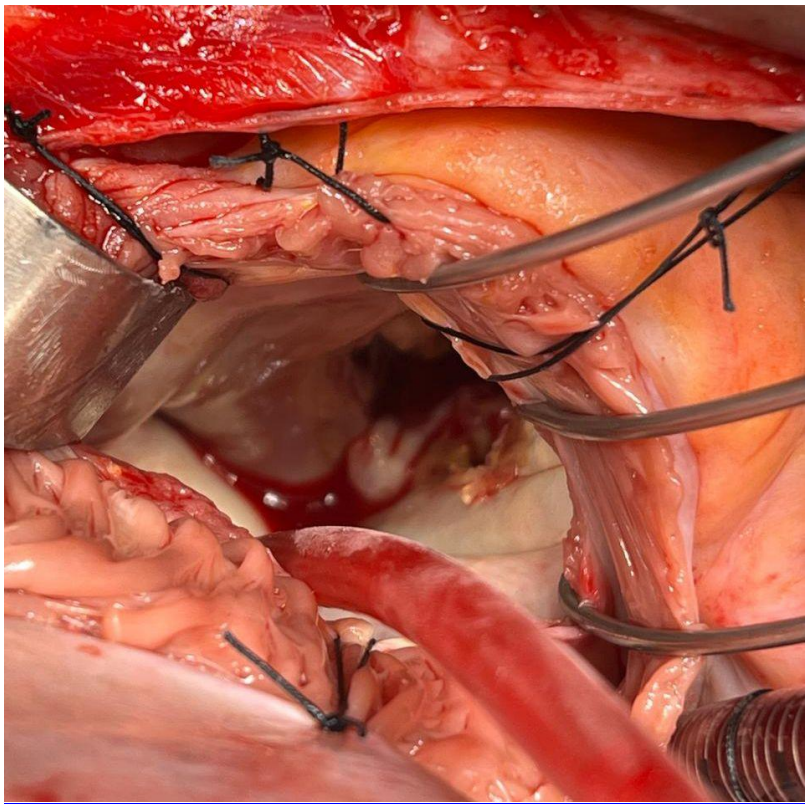
Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Valvular Diseases
Publishing Title:	RESCUE TRANSAPICAL MITRAL VALVE IN VALVE IMPLANTATION AFTER FAILED TRANSSEPTAL STRATEGY
Author Block:	Stephania Cespedes, Daniela M. Lekas, Jose Alejandro Gasca, Antonio Dager, Angela M. Rodriguez, Angiografia de Occidente, Cali, Colombia
Abstract Body:	**Background:** Degeneration of mitral bioprosthetic valves is common, and redo surgery carrieshigh risk. Transcatheter valve-in-valve implantation is an alternative, but feasibility depends on anatomy **Case:** A 48-year-old woman with prior atrial septal defect repair and multiple mitral surgeries presented with dyspnoea. Echocardiography showed severe bioprosthetic stenosis with a mean gradient of 17 mmHg and pulmonary hypertension. Cardiac CT confirmed a degenerated valve suitable for transcatheter treatment **Decision-making:** A transseptal approach was attempted but failed due to septal patch calcification preventing safe access. After Heart Team reassessment, transapical valve-in-valve implantation with a 24.5-mm MyVAL prosthesis was successfully performed, achieving immediate haemodynamic improvement **Conclusion:** When transseptal access is not feasible, the transapical approach remains an effective bailout strategy in complex mitral valve-in-valve

procedures



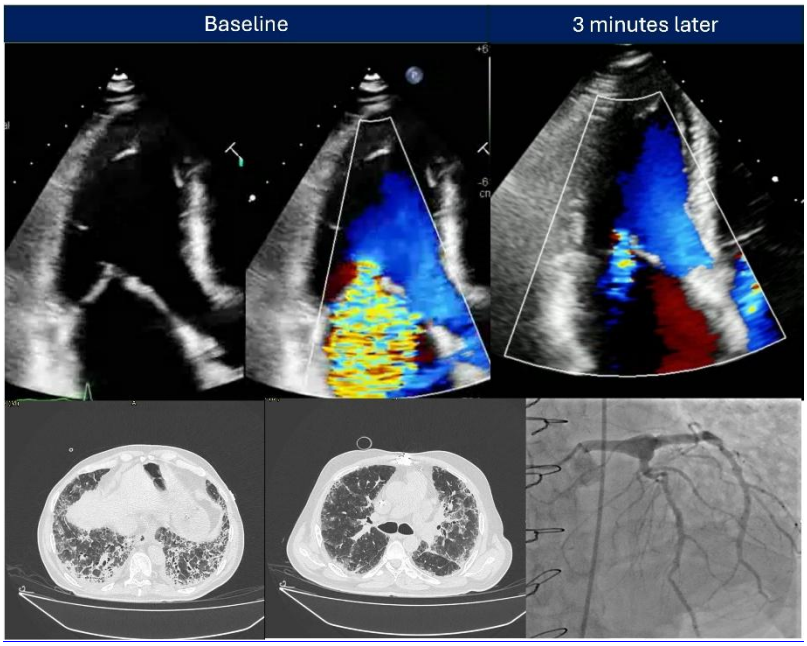
Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Valvular Diseases
Publishing Title:	TRANSSEPTAL ASPIRATION OF LARGE MITRAL VEGETATIONS WITH CEREBRAL PROTECTION AS BRIDGE TO SURGERY
Author Block:	Stephania Cespedes, Jose Alejandro Gasca, Daniela M. Lekas, Angela M. Rodriguez, Antonio Dager, Angiografia de Occidente, Cali - Valle del Cauca, Colombia
Abstract Body:	**Background:** Large mitral vegetations in infective endocarditis are associated with high embolic risk and often require urgent surgery, which may be contraindicated in unstable patients **Case:** A 64-year-old man on haemodialysis was admitted with septic shock due to Serratia marcescens. Transoesophageal echocardiography showed a 23 mm mitral vegetation with moderate regurgitation. The patient developed multiple embolic strokes with haemorrhagic transformation and acute limb ischaemia requiring thrombectomy. Progressive vegetation growth suggested ongoing embolization **Decision-making:** Urgent surgery was indicated but deferred due to neurological instability and septic shock. A multidisciplinary Heart Team opted for transseptal aspiration as a bridge-to-surgery strategy. Debulking was performed using a Penumbra system under echocardiographic guidance with cerebral embolic protection devices **Conclusion:** Percutaneous transseptal vegetation debulking may reduce

embolic burden and stabilize high-risk patients when surgery must be delayed



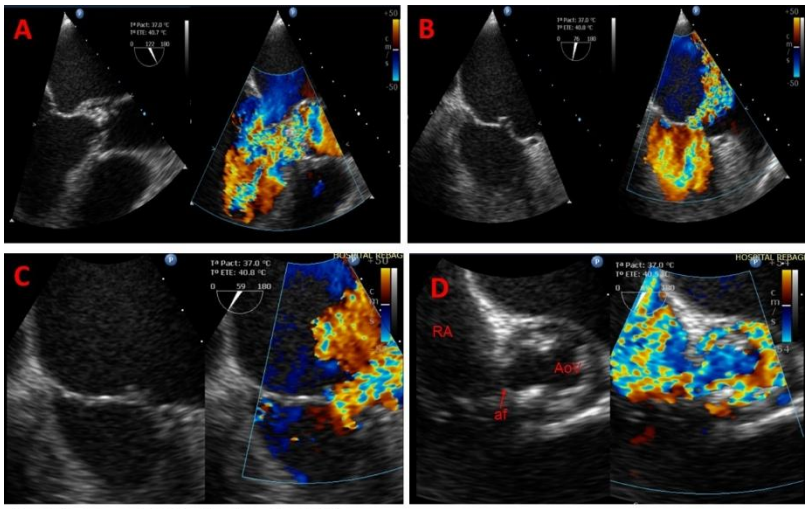
Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Valvular Diseases
Publishing Title:	ECLIPSED MITRAL REGURGITATION: AN UNDERRECOGNIZED HIGH-RISK PHENOTYPE OF DYNAMIC MITRAL REGURGITATION
Author Block:	Raul Eduardo Reyes Toledo, Juan Felipe Vasquez, David David, Gabriel Salazar, Carlos-Eduardo Guerrero-Chálela, Yeisson Avila, Fundación Cardioinfantil, Bogota, Colombia
Abstract Body:	**Background:** Eclipsed mitral regurgitation is an underrecognized phenotype of transient severe dynamic functional mitral regurgitation associated with abrupt hemodynamic deterioration **Case: A 64-year-old man with ischemic cardiomyopathy, prior coronary artery bypass grafting, and paroxysmal atrial fibrillation presented with recurrent episodes of sudden dyspnea, hemoptysis, and transient hemodynamic collapse. Pulmonary and autoimmune evaluation suggested interstitial autoimmune lung disease, leading to immunosuppressive therapy. Transthoracic echocardiography demonstrated severe dynamic functional mitral regurgitation secondary to ventricular tethering despite preserved systolic function and absence of ventricular dilatation. Regurgitation severity fluctuated within the same examination from torrential to mild. Retrospective review identified the same phenomenon in two prior studies. Coronary angiography demonstrated occluded left internal mammary artery graft with severe proximal native vessel disease** **Decision-making: Heart Team evaluation recommended mitral valve replacement and repeat myocardial revascularization after cardiopulmonary optimization. Recurrent hemoptysis precluded anticoagulation and was complicated by pulmonary embolism, delaying surgery** **Conclusion: Eclipsed mitral regurgitation is a dynamic high-risk valvular phenotype whose variability may obscure diagnosis and complicate**

management.



Session Title:	**Friday Afternoon Poster Session**
Topic 1:	Valvular Diseases
Publishing Title:	BEYOND VEGETATIONS: A CASE OF RELENTLESS ENDOCARDITIS
Author Block:	Karen Alayo Rojas, Luisser Dainner Saavedra Cordova, Rodrigo Leon, Hospital Nacional Edgardo Rebagliati Martins, Lima, Peru
Abstract Body:	**Background:** Acute infective endocarditis is potentially a fatal condition, particularly when associated with severe valve disease and moreover with local complications. **Case:** A 70 year - old woman with no significant medical history, was hospitalized with signs of acute heart failure. Transthoracic echocardiography revealed a mobile mass in the aortic valve, highly suggestive of infective endocarditis, along with mitral valve thickening. A transesophageal echocardiography also revealed vegetations on the mitral valve with severe regurgitation in both valves, additionally complications such as a pseudoaneurysm with a mass in the aortic root and an aorto-right atrial fistula were seen in the study. **Decision-making:** Given the affectation of two valves with severe valvular dysfunction and extensive periannular complications, urgent surgical intervention was planned despite the high surgical risk given by the patient's critical condition and septic shock. **Conclusion:** The present case highlights the importance of an early diagnosis using multimodality imaging in patients with suspected endocarditis, which also helps ruling out possible complications. Intracardiac fistula, pseudoaneurysm and involvement of two valves with multiple vegetations at the same time is very rare to be seen in one single patient and involves a poor

prognosis.



RA: right atrium; AoV: Aortic valve; af: atrial fistula

ACC Latin America 2026

Saturday, 19 September 2026

Session Title:	**Heart Failure and Cardiomyopathies Oral Abstracts**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	FIRST CARDIO-OBSTETRIC REGISTRY OF SOUTHWESTERN COLOMBIA: CLINICAL CHARACTERIZATION, RISK STRATIFICATION AND MATERNAL-FETAL OUTCOMES
Author Block:	Sebastian Ayala, Oswaldo Aguilar, Santiago Vallejo, Luis Armando Velasquez Trujillo, Stephany Barbosa-Balaguera, Juliana Charria, Alvaro Herrera, Universidad del Valle, Cali, Colombia, Hospital Universitario del Valle Evaristo Garcia ESE, Cali, Colombia
Abstract Body:	**Background:** CVD complicates 1-4% of pregnancies and is a leading cause of indirect maternal mortality worldwide. No cardio-obstetric registry had previously existed for southwestern Colombia. **Methods:** Retrospective institutional registry of pregnant women with confirmed cardiovascular disease at HUV, a high-complexity referral center in Cali, Colombia (2020-2025). Clinical, echocardiographic, obstetric, and neonatal variables were systematically collected. Risk stratification was performed using modified WHO (mWHO) and CARPREG II scores. Cardiac outcomes were hierarchically classified as primary events (pulmonary edema, arrhythmia requiring treatment, stroke, or cardiac arrest), secondary events (urgent invasive procedure or ≥2 NYHA class deterioration), and MACE occurring during pregnancy or within 4 weeks postpartum. **Results:** A total of 79 gestations in 73 patients were analyzed (mean age 26.5±6.5 years). None had preconception evaluation (0%). Median gestational age at first cardiology visit was 26 weeks (IQR 16-35); 48.7% presented in the third trimester. Over 83% were subsidized insurance enrollees. Congenital heart disease predominated (45.6%), followed by arrhythmias (25.3%) and valvular disease (15.2%). Risk stratification identified 21.5% in mWHO class IV and 20.3% with CARPREG II ≥4 points. Primary cardiac events occurred in 13.9%; MACE in 7.6%, including one maternal death from tuberculous pericardial tamponade. Obstetric complications affected 25.3% (severe preeclampsia 10.1%). Neonatal prematurity: 38.4%. Cardiology follow-up: 9%. **Conclusion:** This first cardio-obstetric registry from southwestern Colombia

reveals a critically high-risk population with zero preconception evaluation and late specialist access. Over one in five patients carried an mWHO IV condition, a formal contraindication to pregnancy, yet arrived without prior counseling. These findings expose a structural gap in cardiovascular maternal care in soutwestern Colombia.

Session Title:	**Heart Failure and Cardiomyopathies Oral Abstracts**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	ELIGIBILITY FOR GLP-1 RECEPTOR AGONIST THERAPY AMONG AMBULATORY PATIENTS WITH HEART FAILURE WITH PRESERVED EJECTION FRACTION IN THE AMERICAS
Author Block:	Alex David Sotomayor, Sebastian Seni-Molina, Carlos Vélez, Federico Arango, Ayme Alberna Cardoso, María Paniagua, Jorge Gustavo Castro Daul, Eglee Castillo, Daniel Quesada Chaves, Eduardo R. Perna, Victor Rossel, Mark H. Drazner, Walter Alarco Leon, Juan Esteban Gomez, AMERICCAASS Research Group, Sociedad Interamericana de Cardiologia, Ciudad de Mexico, Mexico, Fundación Valle del Lili, Cali, Colombia
Abstract Body:	**Background:** Obesity-related heart failure with preserved ejection fraction (HFpEF) remains a therapeutic challenge. STEP-HFpEF showed that semaglutide improved symptoms, exercise capacity and weight loss, but real-world applicability of glucagon-like peptide-1 (GLP-1) receptor agonist eligibility in the Americas is uncertain. **Methods:** We performed a cross-sectional eligibility analysis of ambulatory HFpEF patients enrolled in the AMERICCAASS Registry. HFpEF was defined as left ventricular ejection fraction (LVEF) ≥50%. Body mass index (BMI) was calculated from baseline weight and height. Eligibility definitions were: modified STEP-HFpEF-like criteria (LVEF ≥50%, BMI ≥30 kg/m^2 and NYHA II-IV); obesity-only criteria (LVEF ≥50% and BMI ≥30 kg/m^2); and pragmatic cardiometabolic criteria (LVEF ≥50% plus BMI ≥30 kg/m^2 or BMI ≥27 kg/m^2 with diabetes, hypertension, dyslipidemia or coronary artery disease). Reasons for ineligibility and baseline characteristics were assessed. **Results:** Among 1,121 ambulatory HFpEF patients, 1,061 had BMI data. Median age was 71 years, 53.3% were women, median LVEF was 56%, and median BMI was 26.6 kg/m^2. Overall 233 patients (22.0%) met modified STEP-HFpEF-like criteria, 280 (26.4%) met obesity-only criteria, and 477 (45.0%) met pragmatic cardiometabolic criteria. Ineligibility was driven by BMI thresholds: 94.3% of modified STEP-HFpEF-like non-eligible patients had BMI <30 kg/m^2, and 96.7% of pragmatic non-eligible patients had BMI <27 kg/m^2. Eligible

patients had higher diabetes (36.5% vs 23.2%), hypertension (79.0% vs 70.4%), dyslipidemia (50.2% vs 41.2%), atrial fibrillation (35.6% vs 25.4%), sleep apnea (15.9% vs 5.0%), and sodium-glucose cotransporter-2 inhibitor use (31.3% vs 18.0%) (all $p<0.05$).

Conclusion: In this ambulatory HFpEF cohort from the Americas, one in five patients met modified trial-like eligibility for GLP-1 receptor agonist therapy, and nearly half met pragmatic cardiometabolic criteria. Eligibility was limited mainly by BMI, while eligible patients showed greater cardiometabolic burden, supporting an obesity-related HFpEF phenotype and potential applicability of GLP-1 receptor agonist therapy in our continent.

Session Title:	**Heart Failure and Cardiomyopathies Oral Abstracts**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	FORECASTING HEART FAILURE HOSPITALIZATIONS AND MORTALITY IN BRAZIL: A MACHINE-LEARNING APPROACH FOR RESOURCE PLANNING IN LATIN AMERICAN HEALTH SYSTEMS
Author Block:	Guilherme Costa, Gabriel Mangas, Jose Gregorio Valero Rodriguez, Giulia Costa, Adriana Pimentel, Evandro T. Mesquita, Universidade Federal Fluminense, Niteroi, Rio de Janeiro, Brazil
Abstract Body:	**Background:** In Latin America, heart failure (HF) represents a major public health challenge, influenced by resource constraints and fluctuations in hospital demand. Forecasting tools may help low- and middle-income countries to optimize limited infrastructure. This study aimed to apply an automated time-series forecasting algorithm to estimate HF hospitalizations and mortality in Brazil (2026-2030), valuating a possible scalable model for regional crisis anticipation and resource planning. **Methods:** Monthly nationwide HF hospitalization data from the Brazilian Public Health System (2008-2025) were modeled qith an automated additive machine learning algorithm. The pandemic period (March 2020-May 2022) was included as an exogenous regressor to isolate its transient effect. Multiplicative seasonality was used for admissions; additive for mortality. Predictive accuracy was quantified by Mean Absolute Percentage Error (MAPE) and Mean Absolute Error (MAE) through rolling time-series cross-validation. 95% uncertainty intervals were derived via Monte Carlo simulation. **Results:** The admissions model achieved adequate accuracy (MAPE 8.17%; MAE 1,231.9 admissions/month). Adjusting for the pandemic structural break, projections indicate 207,204 HF hospitalizations in 2026 (95% Confidence Interval [CI]: 195,123-219,248), rising to 211,064 by 2030 (95% CI: 197,476-225,833). Intra-hospital mortality is projected to remain elevated: 11.96% in 2026 (95% CI: 11.45-12.47%) and 11.93% in 2030 (95% CI: 11.39-12.46%). The 2020-2022 admission decline coincided with peak mortality, which could represent delayed presentations rather than reduced incidence. **Conclusion:** These forecasts suggest a continuous and substantial burden of

HF on the Brazilian healthcare system through the end of the decade. Automated forecasting models may develop into a support tool for Latin American health systems to anticipate increases in disease burden. By identifying the underlying growth trend, these models could help nations to transition from reactive to proactive management, important for maintaining system resilience in settings with limited budget flexibility.

Session Title:	**Heart Failure and Cardiomyopathies Oral Abstracts**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	HISTORY OF WEIGHT LOSS WITH BARIATRIC SURGERY DOES NOT CONFER ACUTE PROTECTION IN OBESE PATIENTS HOSPITALIZED FOR HEART FAILURE WITH PRESERVED EJECTION FRACTION
Author Block:	Jean Carlo Rivera, Deitrich Gerlt, Michael J. Mogg, Terrell Roane, Ashton Thiemer, William Giesing, Mohammad Akram Kawsara, Nasser Ud-Din Khan, Methodist Dallas Medical Center, Dallas, TX, USA, Centro Medico Episcopal San Lucas, Ponce, PR, USA
Abstract Body:	**Background:** Obesity is a major driver of heart failure with preserved ejection fraction (HFpEF). As metabolic therapies and GLP-1 agonists gain prominence, the impact of substantial weight loss on HFpEF outcomes has become increasingly relevant. We evaluated whether prior bariatric surgery influences inpatient outcomes during HFpEF hospitalizations. **Methods:** Using the Nationwide Readmission Database (2017-2022), we identified obese adults hospitalized with a primary diagnosis of HFpEF and stratified patients by history of bariatric surgery. Primary outcomes included 30-day readmission and in-hospital mortality. Secondary outcomes included length of stay (LOS), discharge disposition, and hospital charges. We performed 1:1 propensity score matching followed by multivariable regression adjusting for demographics, hospital characteristics, and comorbidities. **Results:** A total of 62,763 weighted HFpEF hospitalizations were identified, including 2.5% with prior bariatric surgery. Before matching, bariatric patients were younger (62 vs 66 years, P<.001), more frequently female (71.2% vs 61.4%, P<.001), and had lower rates of severe comorbidities. Unadjusted mortality was lower in the bariatric cohort (1.1% vs 2.1%, P=.006), while 30-day readmission rates were similar (18.1% vs 19.8%, P=.209). After propensity matching (N=826 pairs), bariatric surgery history was not independently associated with 30-day readmission (aOR 1.05, 95% CI 0.81-1.35, P=.731) or in-hospital mortality (aOR 1.17, 95% CI 0.51-2.71, P=.713). LOS, discharge disposition, and hospital charges were also similar. Notably, annual mortality increased significantly over time only in the non-bariatric cohort (1.8% to 2.5%,

P-trend<.001).
Conclusion: Prior bariatric surgery was not independently associated with reduced mortality or readmission during HFpEF exacerbations after propensity matching. These findings suggest the benefits of profound weight loss may be primarily long-term and disease-modifying rather than acutely protective during hospitalization.

Session Title:	**Cardiac Arrhythmias Oral Abstracts**
Topic 1:	Cardiac Arrhythmias
Publishing Title:	AUTOMATED DIGITIZATION OF PAPER 12-LEAD ECGS FOR RETROSPECTIVE ARTIFICIAL INTELLIGENCE ANALYSIS: A VALIDATION ACROSS DIAGNOSTIC CLASSES
Author Block:	Guilherme Costa, Jose Gregorio Valero Rodriguez, Giulia Costa, André Mazzocchi, Evandro T. Mesquita, Erivelton Nascimento, Universidade Federal Fluminense, Niterói, Rio de Janeiro, Brazil
Abstract Body:	**Background:** Latin American institutions retain large electrocardiograms (ECG) archives stored only as paper or scanned images, which are inaccessible to signal-based artificial intelligence (AI). This study validated an image-to-signal digitization pipeline against a publicly available European ECG database, with the purpose of enabling future use of Latin American archives to assess AI-based diagnostic support algorithms on regional populations. **Methods:** A stratified sample of 6,400 records (1,280 per diagnostic superclass: normal, myocardial infarction, ST/T changes, conduction disturbance, hypertrophy) drawn from a public European ECG database was rendered as 12-lead images at 16 px/mm and processed by the pipeline at 1 kHz. Output was compared to the original waveform using Pearson correlation, root mean square error, and morphological metrics (heart rate, PR, QRS, QT, QTc, R/T/P amplitudes). The same delineation algorithm was applied to both signals to isolate digitization error from delineation bias. Signed Bland-Altman analysis was performed across 76,800 lead-level comparisons. **Results:** Median Pearson correlation was 0.967, with median absolute differences of 1.90 bpm in heart rate, 8 ms in QRS duration, and 8 ms in QT interval. Signed Bland-Altman analysis disclosed a small positive QRS bias (+8.4 ms), attributable to the delineation algorithm rather than to digitization. Performance was consistent across all five diagnostic superclasses (median Pearson 0.958-0.976). 1.84% of records (n=118) had at least one failed lead, traceable to layout detection rather than amplitude clipping. Throughput was 0.66s per record for the pipeline core and 2.51s end-to-end on a single CPU workstation.

Conclusion: The pipeline reproduces 12-lead ECG morphology with errors of the order of inter-reader variability and without class-specific blind spots, with a single bounded QRS bias attributable to the delineation algorithm and correctable by downstream users. These findings support its deployment as an enabling step to convert ECG archives held in Latin American centers into digital signals, assisting future regional validation of AI diagnostic algorithms in local populations.

Session Title:	**Cardiac Arrhythmias Oral Abstracts**
Topic 1:	Cardiac Arrhythmias
Publishing Title:	EARLY OUTCOMES OF LEFT ATRIAL APPENDAGE OCCLUSION WITH A COMBINED ABLATION STRATEGY IN A LATIN AMERICAN PUBLIC HEALTH CENTER
Author Block:	Jose Alejandro Cordova, Juan Carlos Ibarrola-Pena, Francisco Valadez, Melissa Galindo, Jorge E. Leal, Martin Ortiz, Ana Gisselle Castillo Davila, Carlos Guzman, Mauricio Cortes, Hospital ISSSTE Regional Monterrey, Monterrey, Mexico
Abstract Body:	**Background:** Left atrial appendage occlusion (LAAO) is an alternative strategy for stroke prevention in atrial fibrillation patients at increased bleeding risk. Data on outcomes of LAAO combined with catheter ablation in real-world settings remain limited. **Methods:** We performed a retrospective analysis of consecutive patients undergoing LAAO between 2023 and 2025. Baseline risk was assessed using CHA_2DS_2-VA and HAS-BLED scores. Procedural success, complications, and six-month clinical and imaging outcomes were evaluated. **Results:** Twenty-seven patients were included (mean age 69.0±9.4 years). Concomitant AF ablation was performed in 70.4%, with additional prior ablation in 18.5%. Technical success was 100%. One LAAO-related complication (3.7%) required surgical repair. One atrioventricular block (3.7%) was attributed to ablation. At six months (88.9% follow-up), mild peridevice leak occurred in 7.4%, intracranial hemorrhage in 3.7%, and non-cardiovascular death in 7.4%. **Conclusion:** LAAO combined with AF ablation is feasible with high procedural success and acceptable early safety in a moderate-to-high risk population.

Larger studies are needed to define long-term outcomes.

Table 1. Baseline Characteristics

Age (years)	68.96 ± 9.61
Male sex	20 (76.9%)
BMI (kg/m²)	27.07 ± 2.82
Hypertension	19 (73.1%)
Type 2 diabetes mellitus	9 (34.6%)
Coronary artery disease	7 (26.9%)
Prior stroke/TIA	15 (57.7%)
Cirrhosis	1 (3.8%)
CHA_2DS_2-VA score	3.42 ± 1.82
HAS-BLED score	3.15 ± 1.40
Anticoagulation	21 (80.8%)
DOAC use	21 (80.8%)
LVEF (%)	54.04 ± 9.06
LAVI (mL/m²)	40.27 ± 8.70

Table 2. Complications

Type of Complication	Specific Event	n (%)
Procedural complications	Pericardial Efussion	1 (3.8%)
	Complete atrioventricular block (third degree)	1 (3.8%)
Six-month follow-up complications	Intracranial haemorrhage	1 (3.8%)
	Non-cardiovascular death	2 (7.7%)
	Peridevice leak (<5 mm)	2 (7.7%)
	Device-related thrombus	0 (0%)
	Vegetation	0 (0%)

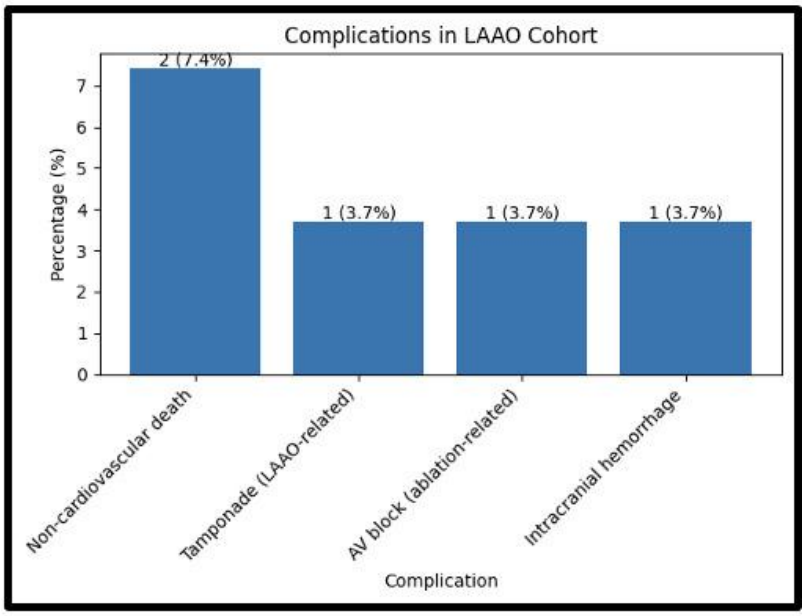
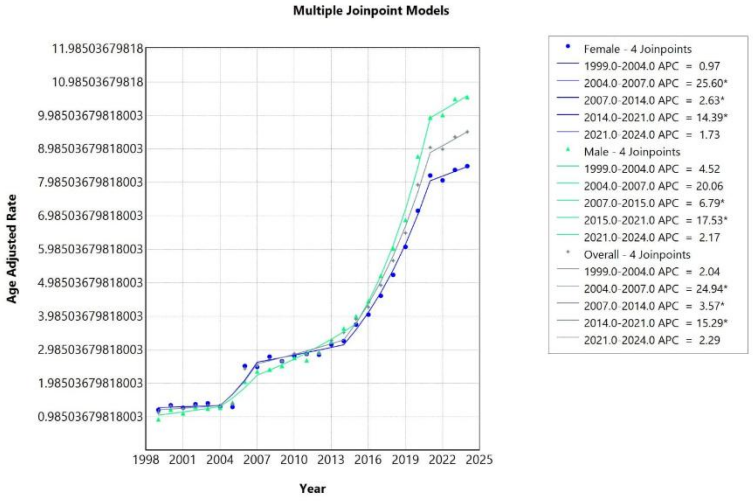


Figure 1. Table 1 summarizes baseline patient characteristics. Table 2 presents procedural complications and six-month outcomes. Complications are also shown as percentages in a bar chart.

Session Title:	**Cardiac Arrhythmias Oral Abstracts**
Topic 1:	Cardiac Arrhythmias
Publishing Title:	TRENDS AND DISPARITIES IN MORTALITY FROM HYPERTENSIVE HEART DISEASE AND ATRIAL FIBRILLATION IN THE UNITED STATES (1999-2024)
Author Block:	Naveed Ahmad, Own Khraisat, Camila Cestero, Kaneez Fatima, Divyashish Bhardwaj, Shah Jahan, Shiva Kumar, Bilal Ahmad, Muhammad Bilal Aamir, Taimur Iqbal, Kamran Adil, Aman Ullah, IBAD UR RAHMAN, Ahmed Mustafa, Khyber Medical College, Peshawar, Pakistan, Englewood Hospital, Englewood, NJ, USA
Abstract Body:	**Background:** Hypertensive heart disease and atrial fibrillation are closely linked cardiovascular disorders associated with hypertension that increase morbidity and mortality, especially in older adults, despite available therapies, requiring continuous surveillance and prevention. **Methods:** CDC WONDER multiple cause of death files for adults aged ≥25 years were analyzed for age-adjusted and crude mortality rates (AAMRs and CMRs) per 1,000,000 using ICD-10 codes I11 for HHD and I48 for AF, stratified by sex, race/ethnicity, geography, and year. Joinpoint regression estimated annual and average annual percent change (APC/AAPC) with 95% CIs. **Results:** A total of 138,970 deaths were reported from 1999-2024 due to HHD and AF. AAMR increased from 1.10 in 1999 to 9.49 in 2024 (AAPC: 8.67%; $p < 0.001$), with a significant rise from 2014-2021 (APC: 15.29%; $p < 0.001$). Males had higher rates than females (4.19 vs. 3.78). Adults aged ≥65 years had the greatest mortality burden (CMR: 10.06). The West had the highest AAMR (4.65), followed by the South, Midwest, and Northeast. Rates were highest among Whites (4.36) and lowest among Hispanics (2.34). Non-metropolitan areas had higher rates than metropolitan areas (3.07 vs. 3.03). Oklahoma ranked in the top 90th percentile for AAMR (54.33). **Conclusion:** Mortality due to HHD and AF increased from 1999-2024, with higher rates in males, older adults, Whites, and the Western region, highlighting demographic and geographic disparities requiring targeted interventions.


Multiple Joinpoint Models
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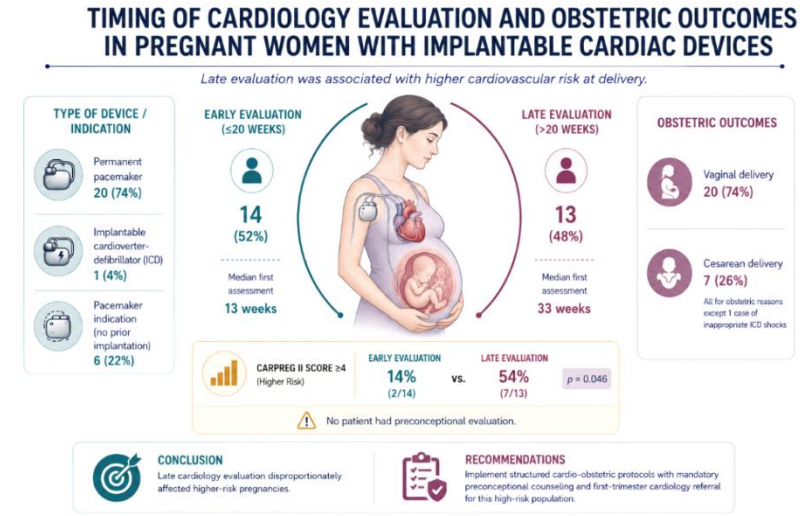
Age Adjusted Rate
1998 2001 2004 2007 2010 2013 2016 2019 2022 2025
Year
Female - 4 Joinpoints
1999.0-2004.0 APC = 0.97
2004.0-2007.0 APC = 25.60*
2007.0-2014.0 APC = 2.63*
2014.0-2021.0 APC = 14.39*
2021.0-2024.0 APC = 1.73
Male - 4 Joinpoints
1999.0-2004.0 APC = 4.52
2004.0-2007.0 APC = 20.06
2007.0-2015.0 APC = 6.79*
2015.0-2021.0 APC = 17.53*
2021.0-2024.0 APC = 2.17
Overall - 4 Joinpoints
1999.0-2004.0 APC = 2.04
2004.0-2007.0 APC = 24.94*
2007.0-2014.0 APC = 3.57*
2014.0-2021.0 APC = 15.29*
2021.0-2024.0 APC = 2.29

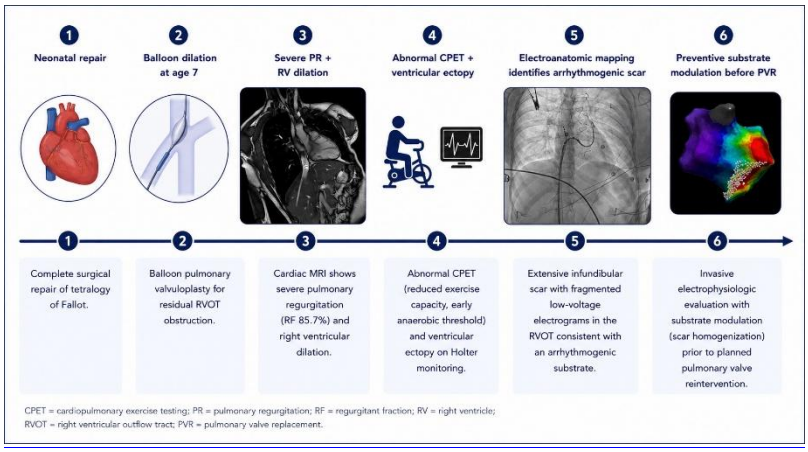
Session Title:	**Cardiac Arrhythmias Oral Abstracts**
Topic 1:	Cardiac Arrhythmias
Publishing Title:	TIMING OF CARDIOLOGY EVALUATION AND OBSTETRIC OUTCOMES IN PREGNANT WOMEN WITH IMPLANTABLE CARDIAC DEVICES: A COLOMBIAN COHORT
Author Block:	Pedro Duque Duque, David Aristizabal, Luis Pajaro, Jesus Velasquez, Jairo Gandara, Miguel Giraldo, Nicolas Dallos, Lia Mullet, Edison Muñoz, University of Antioquia, Medellin, Colombia
Abstract Body:	**Background:** Pregnant women with implantable cardiac devices require timely cardio-obstetric evaluation. Delayed referral remains prevalent in Latin America, with limited data on its impact on obstetric outcomes. **Methods:** Retrospective cohort of 27 pregnant women with advanced atrioventricular conduction disorders or implantable cardiac devices at a referral center in Medellín, Colombia. Patients were stratified by timing of cardiology evaluation (early ≤20 vs. late >20 weeks) and risk assessed using the WHO 2.0 and CARPREG II score. **Results:** 20 patients (74%) carried permanent pacemakers, 1 (4%) an implantable cardioverter-defibrillator, and 6 (22%) had a pacemaker indication without prior implantation. Late evaluation occurred in 13 patients (48%), with a median first assessment at 33 weeks. No patient had preconceptional evaluation. Patients with late evaluation had significantly higher CARPREG II scores ≥4 compared to those evaluated early (54% vs. 14%; p=0.046), suggesting that higher-risk patients paradoxically received later cardiology care. Vaginal delivery was achieved in 65%; cesarean sections were indicated for obstetric reasons in all but one case of inappropriate ICD shocks. **Conclusion:** Late cardiology evaluation disproportionately affected higher-risk pregnancies, revealing a critical care gap. Vaginal delivery was feasible regardless of device type, underscoring the need for early evaluation and

preconceptional counseling.



Session Title:	**Complex Cases in Cardiac Arrhythmias, Heart Failure and Cardiomyopathies**
Topic 1:	Cardiac Arrhythmias
Publishing Title:	SILENT ARRHYTHMOGENIC REMODELING IN REPAIRED TETRALOGY OF FALLOT IDENTIFIED THROUGH MULTIMODALITY ASSESSMENT AND ELECTROANATOMIC MAPPING
Author Block:	Juan David Castillo Peña, David Esteban Hamon, HERNAN RAMIREZ, Jhon David Sánchez Mejía, Hanner Gómez-Velasco, Carlos Daniel Rodriguez Ariza, Juan Sebastian Cabrera, José Alfredo Restrepo Urbina, Manuel Alvarez Gaviria, Adult Congenital Heart Disease and Cardiac Electrophysiology, Fundación Santa Fe de Bogota, Bogota DC, Colombia, Schools of Medicine, Universidad de los Andes and Universidad El Bosque, Bogotá, Colombia, Bogota DC, Colombia
Abstract Body:	**Background:** Adults with repaired tetralogy of Fallot remain at risk for progressive right ventricular remodeling and ventricular arrhythmias despite minimal symptoms. **Case:** A 24-year-old woman with repaired tetralogy of Fallot underwent multimodality evaluation for severe pulmonary regurgitation and right ventricular dilation. Despite NYHA functional class I symptoms and occasional palpitations, cardiopulmonary exercise testing showed reduced exercise capacity, early anaerobic threshold, and ventricular ectopy. Holter monitoring showed occasional ventricular ectopy. Cardiac magnetic resonance revealed severe pulmonary regurgitation (85.7%) with right ventricular dilation. Given concern for occult arrhythmogenic substrate before pulmonary valve intervention, invasive electrophysiologic evaluation was pursued. **Decision-making:** Three-dimensional electroanatomic mapping identified an extensive infundibular scar extending from the pulmonary valve to the tricuspid annulus with fragmented low voltage electrograms in the right ventricular outflow tract. Preventive substrate modulation with scar homogenization was performed before planned pulmonary valve reintervention. Ventricular tachycardia was not inducible after ablation. **Conclusion:** Multimodality assessment may identify clinically silent but advanced arrhythmogenic remodeling in repaired tetralogy of Fallot, enabling

targeted electrophysiologic intervention before pulmonary valve reintervention.



Session Title: **Complex Cases in Cardiac Arrhythmias, Heart Failure and Cardiomyopathies**

Topic 1: Heart Failure and Cardiomyopathies

Publishing Title: PREGNANCY UNDER PRESSURE: HANDLING TAKOTSUBO CARDIOMYOPATHY IN THE THIRD TRIMESTER

Author Block: Jose Israel Sanchez Martinez, SR, Fabio Enrique Parada Cabrera, Gustavo Sotomora, RODOLFO Gutiérrez, Roosevelt Hospital, Guatemala, Guatemala

Abstract Body:

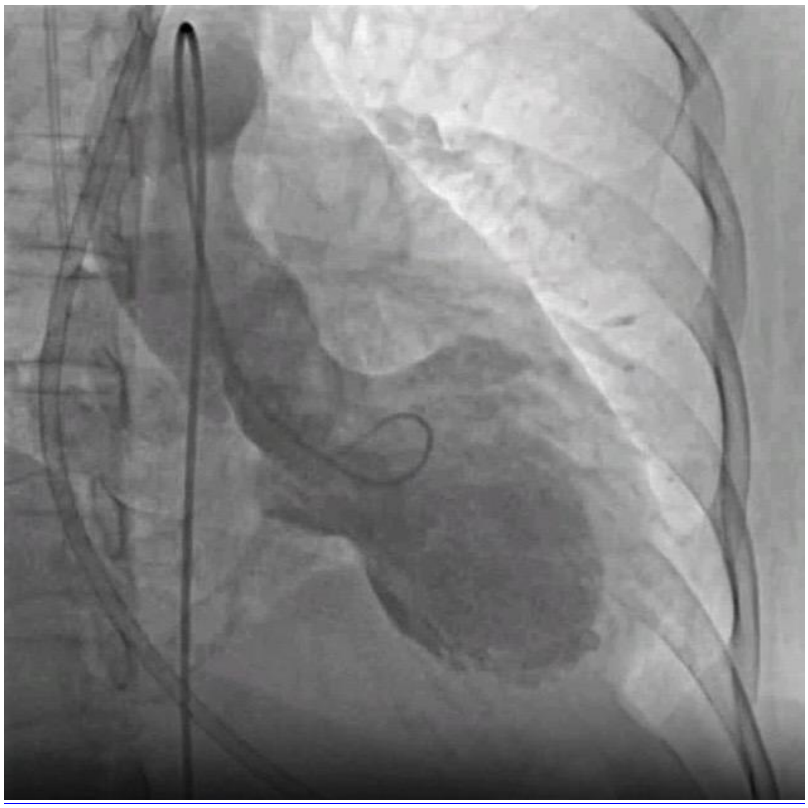
Background: Takotsubo syndrome involves the sudden onset of regional systolic dysfunction. Occurs only rarely during pregnancy

Case: A 26-year-old patient with a 30-week pregnancy was admitted because of bilateral lower limb paralysis. The cardiac examination was unremarkable. The initial suspicion was directed towards inflammatory myopathy. However, 4 days post-admission, the patient experienced sudden-onset dyspnea. She underwent intubation and initiation of invasive mechanical ventilation

Decision-making: An echocardiogram revealed global akinesia and apical ballooning with a left ventricular ejection fraction (LVEF) of 10%. It was decided to terminate the pregnancy via a cesarean section. An urgent transfer to the catheterization lab was arranged. During the procedure characteristic features of Takotsubo Syndrome were observed, including anteroapical ballooning of the left ventricle with hyperdynamic basal segments and no evidence of coronary lesions. Hemodynamic support was provided with the placement of an intra-aortic balloon pump and levosimendan was initiated. On the third day post-balloon pump placement, the echocardiogram revealed an LVEF of 55 percent. Vasopressor support and the intra-aortic balloon pump were gradually tapered and discontinued

Conclusion: Levosimendan and aortic counterpulsation balloons are viable options for providing support to patients with stress-induced cardiomyopathy

while awaiting improvement of systolic function



Session Title: **Complex Cases in Cardiac Arrhythmias, Heart Failure and Cardiomyopathies**

Topic 1: Heart Failure and Cardiomyopathies

Publishing Title: LEPTOSPIROSIS-INDUCED MYOCARDITIS PROGRESSING TO CARDIOGENIC SHOCK

Author Block: Jose Correa Guerrero, José de Jesús Bohórquez Rivero, Rafael Betancurt Mendoza, Jesús Bello Simanca, María Judith Palomino Vergara, Universidad de Cartagena, Cartagena de Indias, Colombia

Abstract Body:

Background: Leptospiral myocarditis is an underrecognized complication with high short-term mortality. Severe cardiac involvement can cause arrhythmias, heart failure, or cardiogenic shock.

Case: A 56-year-old male presented with a six-day history of fever, jaundice, and myalgias, with positive IgM *anti-Leptospira* serology. He arrived in shock, receiving antibiotics, fluids, and vasopressors for presumed septic shock. Persistent hypoperfusion prompted bedside echocardiography, revealing cardiac output of 1.9 L/min and severe biventricular dysfunction with a left ventricular ejection fraction (LVEF) of 25%, unrelated to hypovolemia. Troponin I was elevated (1334.1 ng/L). Differentials included fulminant myocarditis or sepsis-induced myocardial dysfunction (SIMD). Inotropic support improved tissue perfusion, allowing vasopressor withdrawal. After stabilization, cardiac magnetic resonance (CMR) confirmed acute myocarditis (Figure 1). The patient recovered, with LVEF of 55% at two weeks.

Decision-making: In leptospirosis-associated shock, persistent hypoperfusion warrants early bedside echocardiography to guide inotropes and avoid fluid overload. Diagnostically, distinguishing myocarditis from SIMD is challenging but necessary for accurate prognosis.

Conclusion: Acute myocarditis may cause cardiogenic shock in severe leptospirosis. CMR structural assessment effectively differentiates this primary primary myocardial involvement from secondary SIMD.

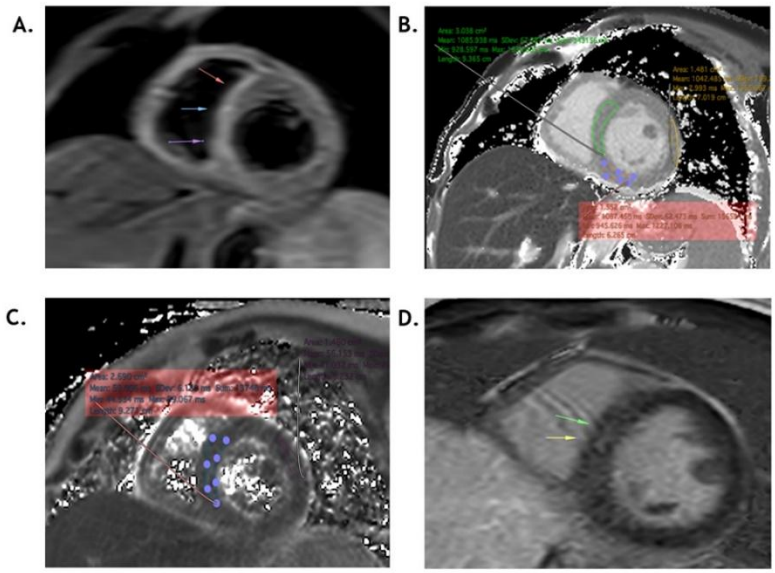


Figure 1. Cardiac magnetic resonance (1.5T). Panel A: T2-weighted sequence showing septal hyperintensity (edema). **Panel B:** Native T1 mapping with increased relaxation times (1,085 ms) in septal segments. **Panel C:** Elevated T2 mapping values (59 ms) indicating myocardial edema. **Panel D:** Early and late gadolinium enhancement demonstrating a non-ischemic subepicardial pattern in basal and mid-septal segments. Findings satisfy modified Lake Louise criteria for acute myocarditis.

Session Title:	**Complex Cases in Cardiac Arrhythmias, Heart Failure and Cardiomyopathies**
Topic 1:	Cardiac Arrhythmias
Publishing Title:	INTRAOPERATIVE CARDIAC ARREST UNMASKING FAMILIAL CONGENITAL LONG QT SYNDROME TYPE 2 IN AN ADOLESCENT: A CASE REPORT.
Author Block:	Brenda Burgos, Juan C. Ibarrola Pena, Jorge E. Leal, Carlos Guzman, Ramiro Flores, Hospital Universitario "Dr. José Eleuterio González", Universidad Autónoma de Nuevo León, Monterrey, Nuevo León, Mexico
Abstract Body:	**Background:** Congenital long QT syndrome (LQTS) is an inherited channelopathy associated with ventricular arrhythmias and sudden cardiac death. Perioperative stressors may unmask silent disease. **Case:** A 12-year-old previously healthy female underwent urgent surgery for suspected appendicitis. Preoperatively, she received metronidazole. Shortly after anesthetic induction with fentanyl, midazolam, propofol, cisatracurium and sevoflurane, she developed pulseless wide-complex tachycardia. She required cardiopulmonary resuscitation, defibrillation and epinephrine, achieving return of spontaneous circulation after 8 minutes. Initial evaluation revealed hypokalemia and hypocalcemia. Despite correction, electrocardiography demonstrated persistent QT prolongation. Echocardiography showed no structural heart disease. Family history revealed sudden cardiac death in a maternal aunt and implantable cardioverter-defibrillator implantation in the maternal grandfather. **Decision-making:** Persistent QT prolongation suggested congenital LQTS. Propranolol and temporary transvenous pacing were initiated. Implantable cardioverter-defibrillator implantation was performed. Genetic testing identified a pathogenic KCNH2 variant confirming long QT syndrome type 2. Family screening identified prolonged QT intervals in four siblings. **Conclusion:** Intraoperative cardiac arrest without structural heart disease

should prompt evaluation for inherited channelopathies.

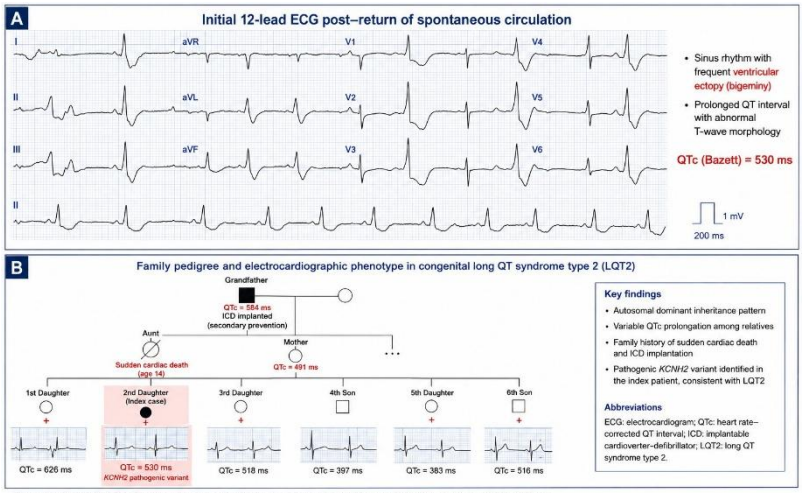


Figure. **(A)** Initial 12-lead ECG after return of spontaneous circulation showing sinus rhythm with ventricular bigeminy and prolonged QTc of 530 ms.
(B) Family pedigree with ECG phenotype. Multiple family members exhibit prolonged QTc intervals. The index patient (2nd daughter) carries a pathogenic *KCNH2* variant, confirming congenital long QT syndrome type 2.

Session Title:	**Valvular Diseases Oral Abstracts**
Topic 1:	Valvular Diseases
Publishing Title:	ECHOCARDIOGRAPHIC PHENOTYPES AND CORONARY CALCIUM SCORE FOR IDENTIFYING CORONARY ARTERY DISEASE IN SEVERE AORTIC STENOSIS: A HIGH-ALTITUDE LATIN AMERICAN COHORT
Author Block:	JONATHAN DAVID MELENA ZAPATA, GABRIELA CAROLINA SANTAMARIA NARANJO, MARIA BELEN MENA AYALA, MARIA SOL CALERO, LAURA ALEJANDRA GARCIA ROMO, PONTIFICIA UNIVERSIDAD CATOLICA DEL ECUADOR, QUITO, Ecuador
Abstract Body:	**Background:** Coronary artery disease (CAD) prevalence in severe aortic stenosis (AS) varies 25-50% in international series. Echocardiographic phenotypes and coronary calcium (CAC) score as predictors of CAD remain incompletely characterized, particularly in Latin American populations. **Methods:** A cross-sectional study including 390 patients with severe AS was performed at a referral center in Quito - Ecuador (2,850m), between January 2021 and March 2025. Significant CAD was defined as ≥ 70% stenosis in epicardial coronary arteries or ≥ 50% stenosis in the left main coronary artery by coronary angiography or computed tomography angiography. We assessed discriminative capacity of echocardiographic phenotypes and CAC score for identifying significant CAD. **Results:** Mean age was 69±12 years, 52% female, 79% resided ≥2,500m. CAD prevalence was 12% (47/390) significantly lower than international reports (40%). High altitude showed no significant association with CAD (OR 1.60, p=0.36). Low-flow low-gradient (LFLG) demonstrated the strongest echocardiographic association with CAD (OR 4.59, p<0.01) with CAD prevalence 32.6% versus 9.5% in patients without this pattern (AUC 0.725). Critical AS showed an inverse association with CAD (OR 0.24, p=0.04). Mean gradient and peak velocity demonstrated moderate discriminative capacity (AUC 0.742 and 0.736 respectively). Paradoxically**,** patients with CAD had significantly lower aortic valve calcium versus those without (2,238 vs 4,043 Agatston units, p<0.01), suggesting independent pathways. The CAC score demonstrated excellent discriminatory performance for CAD identification

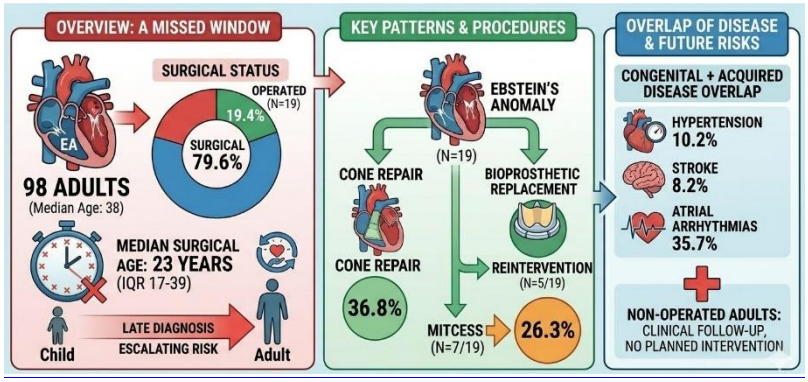
(AUC 0.942).
Conclusion: LFLG phenotype identifies high-risk subgroup for CAD, supporting systematic coronary assessment, while critical AS paradoxically associates with lower CAD prevalence. CAC score demonstrated an exceptional power, superior to echocardiography, enabling risk stratification to optimize preprocedural evaluation in resource-limited settings. The inverse relationship between aortic valve calcium burden and CAD suggests independent calcification pathways with important pathophysiological implications.

Session Title:	**Valvular Diseases Oral Abstracts**
Topic 1:	Valvular Diseases
Publishing Title:	INFECTIVE ENDOCARDITIS AT A TERTIARY REFERRAL CENTER IN SOUTHWESTERN COLOMBIA:CLINICAL, MICROBIOLOGICAL AND IN-HOSPITAL OUTCOMES IN A 96-PATIENT COHORT
Author Block:	Luis Armando Velasquez Trujillo, Sebastian Ayala, Juan Pablo Rosales Melo, Dario Fernando Andrade Hoyos, ORLANDO Castaño, Jenny Patricia muñoz, Alvaro Herrera, Hospital Universitario del Valle "Evaristo García" ESE, Cali, Colombia, CALI, Colombia, Universidad del Valle, Colombia
Abstract Body:	**Background:** Infective endocarditis (IE) carries high morbidity and mortality worldwide. Local epidemiological data from southwestern Colombia remain scarce, limiting the applicability of international guidelines to this population. **Methods:** Retrospective cohort study of 96 patients with definite or probable IE (modified Duke criteria, ESC 2023) admitted to Hospital Universitario del Valle, a tertiary referral center, between 2021 and 2025. Clinical, microbiological, echocardiographic and in-hospital outcomes were analyzed. Bivariate analysis compared survivors versus non-survivors using chi-square, Fisher's exact test and Mann-Whitney U as appropriate ($p<0.05$). **Results:** Mean age was 53.6 years (SD 16.3); 52% male. Hemodialysis was the leading local risk factor (32.3%). Vegetation was identified in 90.6%, with median size 13 mm (IQR 7.5-17.5). Mitral valve was most affected (44.8%), followed by aortic (35.4%). Blood cultures were positive in 78.1%; Staphylococcus aureus was the dominant pathogen (42.7% of the cohort), with methicillin-resistant strains (MRSA) accounting for 48.9% of all S. aureus isolates. Valve surgery was performed in 35.4%, with a median time to surgery of 28 days. Home-based antibiotic therapy was associated with lower mortality ($p<0.001$). Global in-hospital mortality was 39.6%; IE-attributable mortality was 19.8%. **Conclusion:** This cohort demonstrates a high MRSA prevalence and hemodialysis as the dominant risk factor, reflecting the distinct local epidemiology of IE in southwestern Colombia. IE-attributable mortality of

19.8% aligns with international registries, while global mortality reflects the high comorbidity burden of a tertiary referral center.

Session Title:	**Valvular Diseases Oral Abstracts**
Topic 1:	Valvular Diseases
Publishing Title:	CHARACTERISTICS OF PATIENTS WITH EBSTEIN ANOMALY TREATED AT A REFERRAL HOSPITAL IN PERU: RETROSPECTIVE COHORT STUDY
Author Block:	Emanuel Alessandro Arias Ulfe, Maria Renee Montesinos-Segura, Katherine Alcalá Marcos, Norma Gamarra-Valverde, Instituto Nacional Cardiovascular, Lima, Peru
Abstract Body:	**Background:** Ebstein's anomaly (EA) is a rare congenital heart defect representing 0.3%-0.6% of all congenital heart diseases. In Latin America, evidence is limited, and late diagnosis may lead to irreversible cardiovascular damage. **Methods:** We conducted a retrospective cohort study of adults with EA evaluated at Peru's national cardiac center between 2020 and 2024. Demographic, clinical, imaging, arrhythmic, and surgical data were analyzed descriptively. **Results:** Among 98 patients (median age: 38 years, IQR: 24-53), only 19.4% (n=19) had undergone surgery. The median surgical age was 23 years (IQR: 17-39), and only 36.8% received cone repair. Bioprosthetic replacement was required in 47.4% of cases, while 26.3% required reintervention. Common comorbidities included atrial arrhythmias (35.7%), hypertension (10.2%), and stroke (8.2%). Most non-operated patients remained under clinical follow-up without planned intervention. **Conclusion:** In this Latin American cohort, EA patients were frequently diagnosed and operated on too late for optimal valve repair. The overlap of congenital and acquired disease reflects a neglected population with

escalating risk and no current guideline-defined pathway.



Session Title:	**Valvular Diseases Oral Abstracts**
Topic 1:	Valvular Diseases
Publishing Title:	BEYOND VALVULAR SEVERITY: ECO-HEMODYNAMIC MACHINE LEARNING PROFILING USING VALVULOARTERIAL IMPEDANCE AND ENERGY LOSS INDEX TO PREDICT MYOCARDIAL MECHANICAL RECOVERY AFTER TAVI
Author Block:	Edil Rosalio Argueta Machado, Juan Manuel Castañeda Martinez, Carlos Haroldo Ixcamparij, Rocio Aceves-Millan, National Medical Center "20 de Noviembre" ISSSTE, Mexico City, Mexico
Abstract Body:	**Background:** Conventional echocardiographic measures incompletely characterize severe aortic stenosis. Valvuloarterial impedance (Zva) and Energy Loss Index (ELI) integrate global afterload and energy dissipation. We developed an interpretable machine learning model to predict myocardial mechanical recovery after transcatheter aortic valve implantation (TAVI). **Methods:** This study included 85 patients undergoing TAVI between 2023 and 2024. Models incorporated preprocedural echocardiographic and eco-hemodynamic variables including global longitudinal strain (GLS), left ventricular ejection fraction, mean gradient, Zva, and ELI. Recovery was defined as ≥3-point GLS improvement after TAVI. Models were based on Light Gradient Boosting Machine using SHapley Additive Explanations for interpretability. **Results:** Myocardial mechanical recovery occurred in 35 patients (41.2%). Recovery patients demonstrated higher baseline Zva (7.98 ± 3.21 vs 5.48 ± 1.98 mmHg/mL/m^2) and lower ELI (0.35 ± 0.11 vs 0.48 ± 0.13 cm^2/m^2), despite similar gradients. SHapley Additive Explanations identified Zva and ELI as influential predictors of recovery. This model showed good predictive performance (area under the curve: 0.80, sensitivity: 76.4%, positive predictive value: 84.1%). **Conclusion:** Eco-hemodynamic machine learning profiling using Zva and ELI may identify a reversible myocardial loading phenotype beyond conventional

aortic stenosis severity and predict myocardial recovery after TAVI.

A)

Variable	No Recovery (N=50)	Recovery (N=35)	p-value
DEMOGRAPHIC			
Age, years	76.1 ± 6.7	71.6 ± 7.8	0.006
Male sex	48.0%	68.6%	0.077
COMORBIDITIES			
Hypertension	72.0%	68.6%	0.811
Diabetes mellitus	46.0%	45.7%	1.000
Atrial fibrillation	12.0%	2.9%	0.231
ECHO-HEMODYNAMIC			
LVEF, %	57.3 ± 12.8	50.9 ± 17.3	0.056
GLS, %	−15.3 ± 7.9	−10.1 ± 5.5	0.001
AVA, cm^2	0.7 ± 0.2	0.6 ± 0.2	0.320
Mean gradient, mmHg	50.1 ± 19.9	52.3 ± 15.0	0.573
SVI, mL/m^2	21.1 ± 6.0	21.1 ± 2.9	0.990
Zva, $mmHg/mL/m^2$	5.48 ± 1.98	7.98 ± 3.21	0.001
ELI, cm^2/m^2	0.48 ± 0.13	0.35 ± 0.11	<0.001

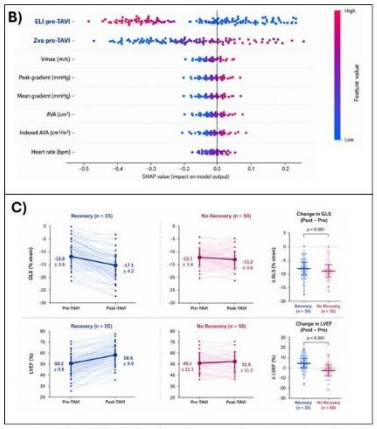
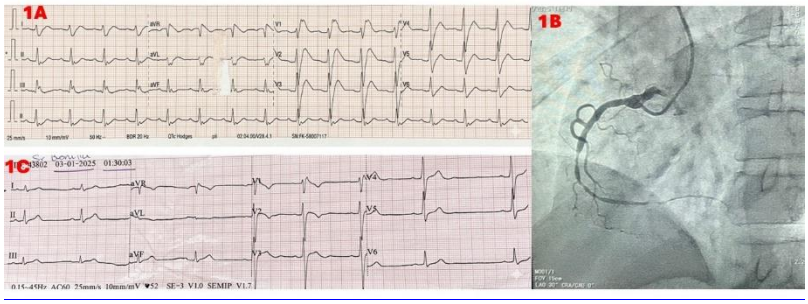


Fig. 1. Eco-hemodynamic machine learning profiling of myocardial mechanical recovery after TAVI. **A)** Baseline demographic and eco-hemodynamic characteristics according to recovery status. **B)** SHAP beeswarm analysis demonstrating Zva and ELI as the most influential predictors of myocardial mechanical recovery. **C)** Paired pre- and post-TAVI comparisons of GLS and LVEF according to recovery status. TAVI: transcatheter aortic valve implantation; GLS: global longitudinal strain; LVEF: left ventricular ejection fraction; Zva: valvuloarterial impedance; ELI: Energy Loss Index.

Session Title:	**Saturday Morning Poster Session**
Topic 1:	Cardiac Arrhythmias
Publishing Title:	NOT EVERYTHING IS AS IT SEEMS: ACUTE CORONARY SYNDROME MIMICKING A TYPE 1 BRUGADA PATTERN
Author Block:	Luisser Dainner Saavedra Cordova, Karen Alayo Rojas, Bryant Zinanyuca, Jeferson Cortelezzi, Walter Mejico, Hospital Nacional Edgardo Rebagliati Martins, Lima, Peru
Abstract Body:	**Background:** Severe coronary artery disease in patients with Brugada pattern presents an unusual clinical scenario and poses a diagnostic challenge in aborted sudden cardiac death. **Case:** A 60-year-old male with a medical history of hypertension and smoking was admitted following aborted sudden cardiac death and angina. The ECG showed a coved-type ST-segment elevation in leads V1-V2, consistent with a Type 1 Brugada pattern (Fig. 1A). Also, high levels of troponin T and creatine kinase-MB were detected. Transthoracic echocardiography demonstrated a preserved ejection fraction with hypokinesia in the basal segments of the posterior and inferior walls. Coronary angiography (Fig. 1B) revealed a severe lesion in the right coronary artery (RCA). Resolution of the ST-segment elevation occurred after percutaneous coronary intervention (PCI) (Fig. 1C). **Decision-making:** Following PCI of the RCA, an implantable cardioverter-defibrillator was placed for secondary prevention due to the persistent Type 1 Brugada pattern and aborted sudden death. To date, device evaluations have shown no ventricular arrhythmias. **Conclusion:** Brugada syndrome is a channelopathy with an extremely low prevalence; however, an acute coronary syndrome involving the RCA can mimic a Brugada pattern (phenocopy) due to compromised blood flow to the right

ventricular outflow tract.



Session Title: **Saturday Morning Poster Session**

Topic 1: Cardiac Arrhythmias

Publishing Title: FROM DYSSYNCHRONY TO RESCUE REVERSING PACEMAKER-INDUCED CARDIOMYOPATHY THROUGH LEFT BUNDLE BRANCH AREA PACING

Author Block: Carmen Melo, Pina Pamela, Fernando Agustin Vidal, Jimmy Santana, CEDIMAT, Santo Domingo, Dominican Republic

Abstract Body:

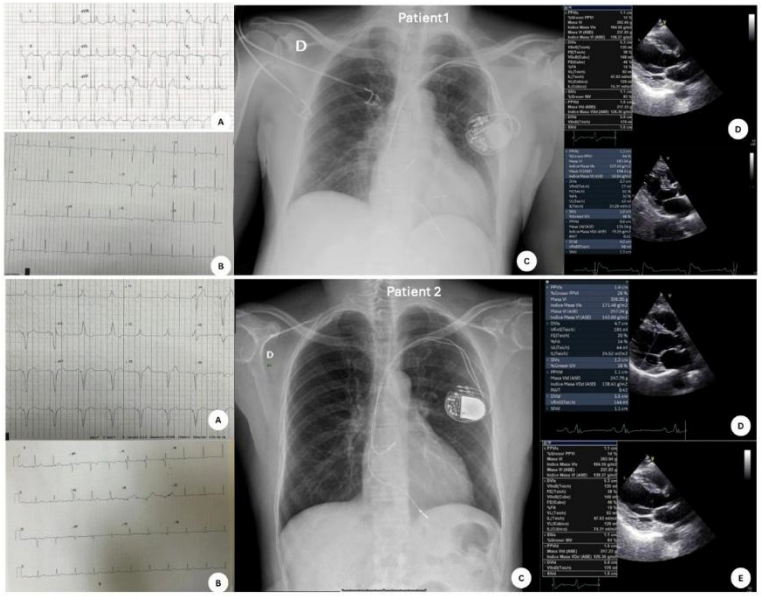
Background: Chronic right ventricular pacing (RVP) may cause pacemaker-induced cardiomyopathy (PiCMP) by non-physiologic ventricular activation, dyssynchrony, and adverse remodeling. Left bundle branch area pacing (LBBAP) is a physiologic alternative that may restore synchrony and improve ventricular function.

Case: We report 2 men with advanced AV block, >90% RVP burden, and progressive heart failure despite Guideline-Directed Medical Therapy (GDMT). Both had marked electrical dyssynchrony with paced QRS duration of 200 ms and reduced Left Ventricular Ejection Fraction (LVEF). Obstructive coronary disease was excluded, and both underwent upgrade to LBBAP. Immediate electrical resynchronization was achieved, with QRS narrowing to 110 ms and ventricular activation time of 60-70 ms. Follow-up echocardiography showed reverse remodeling with improvement in LVEF and reduction in ventricular volumes.

Decision-making: These cases illustrate the transition from pacing-induced dyssynchrony to functional recovery after physiologic pacing. The transition to LBBAP allows for a more physiological recruitment of the conduction system compared to conventional biventricular pacing. The marked reduction in QRS duration and activation time paralleled improvement in ventricular function.

Conclusion: PiCMP is an important and potentially reversible cause of heart failure. Early recognition and timely upgrade from chronic RVP to LBBAP may

improve systolic function and alter clinical trajectory



Patient 1: (A) Baseline electrocardiogram showing a ventricular paced rhythm with markedly prolonged QRS duration (~200 ms), consistent with chronic right ventricular pacing and severe electrical dyssynchrony. **(B)** Follow-up electrocardiogram before upgrade confirming persistent pacing dependency without recovery of intrinsic conduction. **(C)** Chest radiograph demonstrating a dual-chamber pacemaker with right atrial and right ventricular leads in conventional position. **(D)** Pre-upgrade echocardiography showing reduced left ventricular ejection fraction and mechanical dyssynchrony.**(E)** Post-upgrade imaging after LBBAP demonstrating electrical resynchronization, improvement in left ventricular systolic function, and reverse remodeling. **Patient 2: (A)** Initial electrocardiogram showing a ventricular paced rhythm with markedly prolonged QRS duration (~200 ms), reflecting chronic right ventricular pacing–related dyssynchrony. **(B)** Electrocardiogram at the time of clinical deterioration confirming persistent ventricular pacing and absence of native conduction. **(C)** Chest radiograph showing permanent pacemaker leads in the right atrium and right ventricle.**(D)** Pre-upgrade echocardiography demonstrating severely reduced left ventricular ejection fraction and marked dyssynchrony. **(E)** Post-upgrade echocardiography after LBBAP showing QRS narrowing, improved ventricular synchrony, increased left ventricular ejection fraction, and partial reverse remodeling.

Session Title:	**Saturday Morning Poster Session**
Topic 1:	Cardiac Arrhythmias
Publishing Title:	VENTRICULAR ARRHYTHMIAS ARISING FROM THE PAPILLARY MUSCLES A CHALLENGING ABLATION SUBSTRATE
Author Block:	Jose Alejandro Cordova, Juan Carlos Ibarrola-Pena, Jorge E. Leal, Martin Ortiz, Melissa Galindo, Francisco Valadez, Ana Gisselle Castillo Davila, Nardia Ornelas, Mauricio Cortes, Hospital ISSSTE Regional Monterrey, Monterrey, Mexico
Abstract Body:	**Background:** High-burden idiopathic premature ventricular contractions (PVCs) may lead to significant symptoms and functional impairment. Papillary muscle PVCs represent a challenging and under-recognized ablation substrate. **Case:** A 43-year-old man with type 2 diabetes and a family history of sudden cardiac death presented with long-standing, symptomatic PVCs. Holter monitoring showed an 18% PVC burden with bigeminy and non-sustained ventricular tachycardia. Symptoms persisted despite beta-blockers and dronedarone. ECG demonstrated monomorphic PVCs with R wave in V1, suggesting an anterolateral papillary muscle origin. Echocardiography showed preserved ventricular function without structural heart disease. **Decision-making:** Given persistent symptoms and high PVC burden, catheter ablation was pursued. A combined retroaortic and transseptal approach with intracardiac echocardiography enabled precise localization and catheter stability. Mapping identified the earliest activation at the apex of the anterolateral papillary muscle (−31 ms). Radiofrequency ablation resulted in immediate and complete suppression. **Conclusion:** Papillary muscle PVCs require precise mapping and imaging guidance. Early identification and use of intracardiac echocardiography are key to procedural success. Catheter ablation provides definitive symptom relief

and arrhythmia elimination in selected patients.

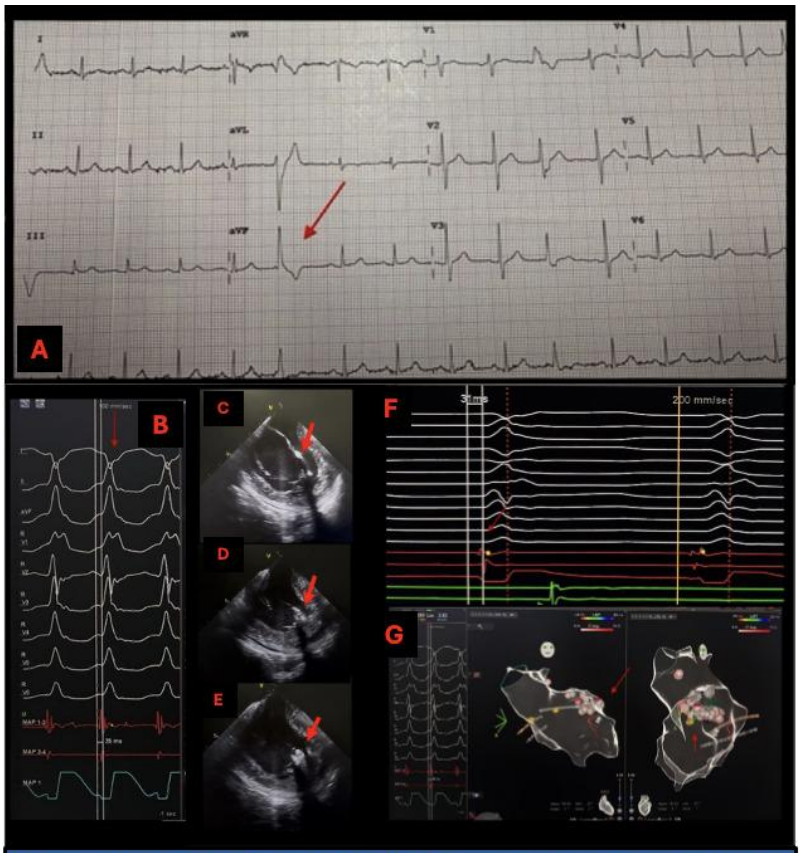


Figure 1. (A–B) ECG showing PVCs suggestive of an anterior papillary muscle origin. (C–E) Intracardiac echocardiography showing radiofrequency ablation at the apex of the anterior papillary muscle. (F) Intracardiac electrogram demonstrating PVCs with a local activation time of −31 ms. (G) Left ventricular electroanatomical map showing ablation lesions at the target site.

Session Title:	**Saturday Morning Poster Session**
Topic 1:	Cardiac Arrhythmias
Publishing Title:	NOT ALL PRE-EXCITATION IS MALIGNANT: SUDDEN CARDIAC ARREST REVEALING IDIOPATHIC VENTRICULAR TACHYCARDIA IN A PATIENT WITH WOLFF-PARKINSON-WHITE PATTERN.
Author Block:	Nelson Omar Reyes, Varun Mehta, Eric Pin-Shiuan Chen, Tushar Menon, roland filart, University of Central Florida/HCA Florida Healthcare, Orlando, FL, USA
Abstract Body:	**Background:** Identifying the mechanism of sudden cardiac arrest (SCA) is essential for risk stratification and management. Although Wolff-Parkinson-White (WPW) pattern is associated with malignant arrhythmias, not all accessory pathways confer high-risk electrophysiologic properties. **Case:** A 29-year-old man previously healthy active-duty military service member, presented after out-of-hospital cardiac arrest during physical training. Bystander cardiopulmonary resuscitation and one automated external defibrillator shock achieved return of spontaneous circulation within 2 minutes. Laboratory evaluation was unremarkable. Electrocardiogram demonstrated sinus rhythm with ventricular pre-excitation and diffuse T-wave inversion. Echocardiography showed preserved left ventricular function without valvular disease. Cardiac magnetic resonance imaging demonstrated mild mid-lateral left ventricular myocardial edema. Coronary angiography showed no obstructive disease. Electrophysiologic study demonstrated atrial fibrillation with a shortest pre-excited R-R interval >250 ms, consistent with low-risk antegrade accessory pathway conduction. Ventricular pacing showed AV node-dependent retrograde conduction without accessory pathway participation. However, right ventricular extrastimulation induced polymorphic ventricular tachycardia requiring cardioversion. **Decision-making:** Radiofrequency ablation eliminated antegrade accessory pathway conduction. Because accessory pathway properties were low risk, programmed ventricular stimulation was performed to evaluate for an alternative arrhythmogenic substrate and reproduced polymorphic ventricular tachycardia. An extravascular implantable cardioverter-defibrillator (EV-ICD)

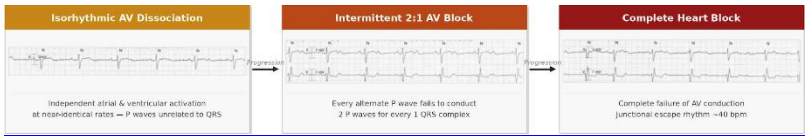
was implanted for secondary prevention.

Conclusion: In patients with SCA and WPW pattern with low-risk antegrade accessory pathway conduction, electrophysiologic evaluation is essential to identify the true arrhythmic substrate, as ventricular arrhythmia rather than accessory pathway conduction may be the primary mechanism of arrest.

Session Title:	**Saturday Morning Poster Session**
Topic 1:	Cardiac Arrhythmias
Publishing Title:	PROPRANOLOL IN ELECTRICAL STORM: A SCOPING REVIEW OF SUBSTRATE-DEPENDENT CLINICAL EVIDENCE
Author Block:	Cesar Julian Ortiz Castellanos, Luis Alejandro Pech Burgos, Luis Jesus Quintal Gamboa, Jonathan Alexander Guezguan Perez, Universidad Marista de Mérida, Mérida, Mexico, Central-East Integrated Health Services Subnetwork, Bogotá, Colombia
Abstract Body:	**Background:** Electrical storm (ES) carries up to 50% in-hospital mortality; current guidelines endorse beta-adrenergic blockade but do not specify which agent. This scoping review maps available clinical evidence on propranolol use across cardiac substrates. **Methods:** Scoping review following PRISMA-ScR 2020 and JBI methodology. Databases searched: PubMed (n=18), EBSCO (n=10), Cochrane (n=1), LILACS (n=24); 53 records total. After deduplication (n=22), 31 screened; 13 included. All study designs eligible. Quality appraisal performed with RoB 2, Newcastle-Ottawa Scale, and JBI checklists as an optional descriptive component. **Results:** Thirteen studies (1990-2024; 50 patients; 8 countries) met inclusion criteria. Designs: 1 randomized controlled trial (RCT), 1 cohort, 5 case reports, 1 case series, 3 reviews, 2 editorials. In structural heart disease (8/13 studies), favorable outcomes were documented: the sole RCT (n=60) reported 24-hour arrhythmia suppression of 90.0% vs. 53.3% with metoprolol (p=0.03), 6-fold faster median suppression (3h vs. 18h), and 57.2% fewer implantable cardioverter-defibrillator (ICD) shocks (p=0.004). A prospective cohort (n=49; post-myocardial infarction) documented 59.6% absolute 7-day mortality reduction versus advanced cardiac life support therapy. Two studies documented propranolol-precipitated ES in long QT syndrome (LQT) type 2 via bradycardia-induced QTc prolongation, a substrate-specific safety signal not previously identified in any prior review. **Conclusion:** Evidence maps to favorable reported outcomes with propranolol in structural heart disease and to adverse events in LQT type 2. A substrate-

stratified conceptual framework is proposed. Multicenter randomized trials are urgently needed.

Session Title:	**Saturday Morning Poster Session**
Topic 1:	Cardiac Arrhythmias
Publishing Title:	ISORHYTHMIC ATRIOVENTRICULAR DISSOCIATION AS A MANIFESTATION OF ADVANCED CONDUCTION SYSTEM DISEASE: A CASE REPORT
Author Block:	Pedro Duque Duque, Luis Pajaro, Carolina Cardona, Andrés Sánchez Muñoz, Danilo Weir Restrepo, Andres Miranda Arboleda, University of Antioquia, Medellin, Colombia
Abstract Body:	**Background:** Isorhythmic atrioventricular dissociation (IAVD) is an uncommon electrocardiographic finding typically considered benign. In symptomatic patients with baseline conduction abnormalities, it may reflect advanced His-Purkinje disease and predict high-grade atrioventricular block. **Case:** An 81-year-old man presented with recurrent unexplained syncope. Baseline ECG showed bifascicular block with first-degree atrioventricular block, consistent with advanced conduction disease. Telemetry documented progression from IAVD to intermittent 2:1 atrioventricular block and transient complete heart block with junctional escape rhythm. Echocardiography demonstrated preserved biventricular function without structural abnormalities. A dual-chamber permanent pacemaker was implanted with complete symptom resolution. **Decision-making:** Although classically benign, IAVD may represent a dynamic manifestation of diffuse His-Purkinje disease in elderly patients with syncope and bifascicular block. Electrocardiographic progression from IAVD to high-grade block supports advanced conduction system impairment rather than an isolated physiological phenomenon, highlighting the value of continuous telemetry for therapeutic decision-making. **Conclusion:** IAVD with trifascicular block and unexplained syncope warrants systematic evaluation. Dynamic progression to high-grade block supports timely permanent pacing.


Isorhythmic AV Dissociation
Independent atrial & ventricular activation
at near-identical rates — P waves unrelated to QRS
Progression
Intermittent 2:1 AV Block
Every alternate P wave fails to conduct
2 P waves for every 1 QRS complex
Progression
Complete Heart Block
Complete failure of AV conduction
Junctional escape rhythm ~40 bpm

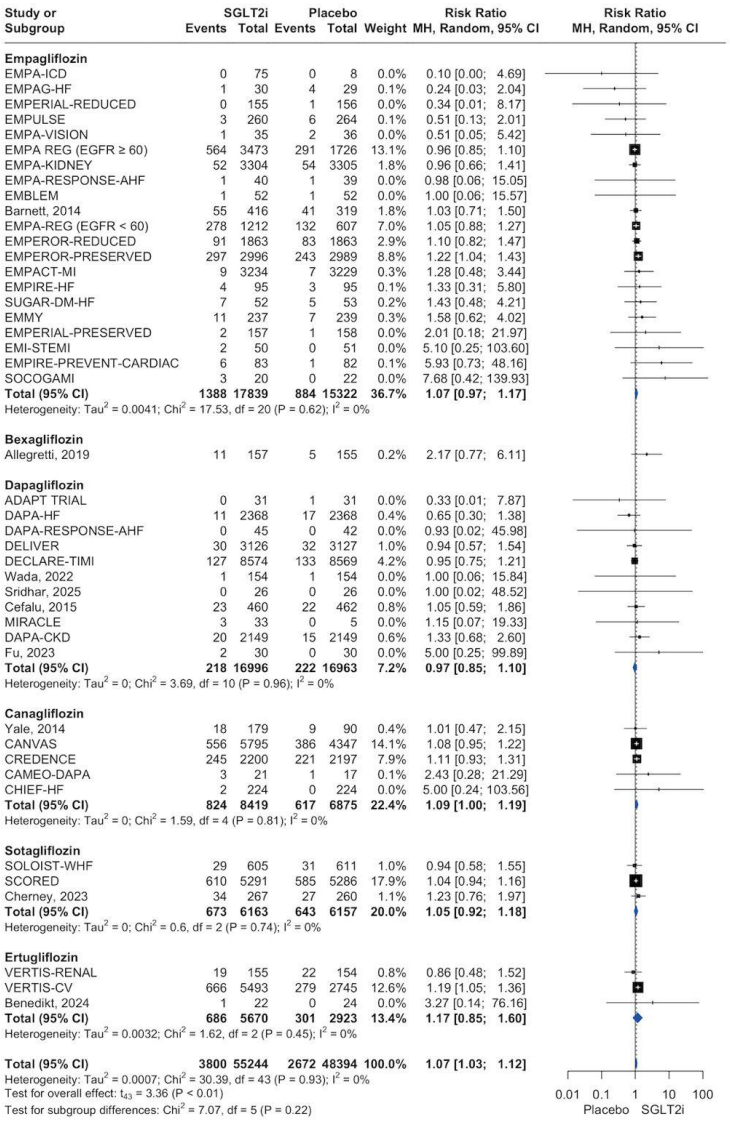
Session Title:	**Saturday Morning Poster Session**
Topic 1:	Cardiovascular Disease Prevention
Publishing Title:	GENETICALLY PREDICTED MAJOR DEPRESSIVE DISORDER AND HEART FAILURE: A DIRECT CAUSAL EFFECT LARGELY INDEPENDENT OF BODY MASS INDEX IN A MULTIVARIABLE MENDELIAN RANDOMIZATION STUDY
Author Block:	Jorge Alejandro Laguna Duarte, Jennifer J. Zarate Velandia, Juan P. Delgado Pardo, Elias D. Ordoñez Aguas, Johan S. Eslava Roa, Cristhian M. Castellanos Arenales, Jonathan A. Quintero Villamizar, Lina M. Vera Cala, Industrial University of Santander, Bucaramanga, Colombia
Abstract Body:	**Background:** Major depressive disorder (MDD) is a high-burden disease with a treatment gap; heart failure (HF) maintains a ~50% 5-year mortality. MDD coexists with HF in up to 30%, doubling mortality. MDD precedes HF by ~10.7 years (HR=1.25; meta-analysis n=2.6M). ACC/AHA/HFSA 2022 classifies it as a comorbidity, not a causal factor; prior univariable MR (Liu 2024, OR=1.17) did not decompose mediation. We evaluated whether genetically predicted MDD causally affects HF independently of body mass index (BMI), requiring different preventive strategies. **Methods:** Bidirectional two-sample Mendelian randomization (MR) with Sanderson multivariable MR (MVMR). Exposure: PGC-MDD 2025 (208 instruments; mean F=44). Outcomes: HERMES (47,309 HF cases/930,014 controls); secondary non-ischemic HFrEF/HFpEF (HERMES2). Mediator: BMI (Yengo 2018; sensitivity with GIANT 2015). Eight univariable and four MVMR estimators; conditional F across ρ. Mediation by difference, product, and bootstrap methods. PheWAS, E-values, STROBE-MR. **Results:** IVW MDD→HF OR=1.21 (95%CI 1.13-1.31; $p=2.4\times10^{-7}$); concordant across eight estimators (1.17-1.30; MR-Egger p=0.63). MVMR direct effect (BMI-adjusted) OR=1.19 (1.05-1.34; $p=5.7\times10^{-3}$); parallel BMI OR=1.69 ($p=6\times10^{-45}$). Conditional F-MDD=7.63; four MVMR sensitivities convergent (1.17-1.30). BMI mediation 12-20% (difference 12.1%; product 19.6%; GIANT 17.6%); direct effect survived Bonferroni (p-Bonf=7×10^{-7}), indirect did not. HFrEF (1.16) and HFpEF (1.17) directionally consistent. PheWAS <2.1%; E-value=1.65; positive control (CAD OR=1.42); negative control and reverse

direction null.

Conclusion: Genetically predicted MDD exerts a direct causal effect on HF predominantly through BMI-independent pathways (>80%); BMI acts as a parallel independent causal factor. Findings support integrating depression management into primary HF prevention as complementary to weight control, and justify the formal evaluation of depression as a Stage A risk factor. In Latin America (~660M, 5.3% MDD prevalence), the population impact is substantial; trans-ancestral replication (HCHS/SOL, MCPS) and primary prevention RCTs remain the evidentiary gap

Session Title:	**Saturday Morning Poster Session**
Topic 1:	Cardiovascular Disease Prevention
Publishing Title:	SGLT2 INHIBITOR ASSOCIATED URINARY TRACT INFECTION RISK AMONG PATIENTS WITH ELEVATED CARDIOVASCULAR BURDEN: A META-ANALYSIS OF 44 RANDOMIZED CONTROLLED TRIALS
Author Block:	Juan Pinilla, Gabriel Giraldo Ospino, Pooja Bajaj, srinivas Vunnam, Zaraith Coy, Sebastian Jaramillo, Mrunalini Dandamudi, Carlos A. Vergara Sanchez, CES University, Medellin, Colombia
Abstract Body:	**Background:** Although SGLT2 inhibitors (SGLT2i) provide established benefits in patients with elevated cardiovascular burden, urinary tract infections (UTI) remain a common cause of discontinuation, and the true magnitude of this risk is uncertain. **Methods:** We systematically searched PubMed, the Cochrane Library, and ClinicalTrials.gov for placebo-controlled Phase II/III randomized controlled trials (RCTs) of SGLT2i in adults with elevated cardiovascular burden. We pooled the risk ratios (RR) for UTI with 95% confidence intervals (CIs) using a random-effects model, with pre-specified subgroup analysis by agent. Heterogeneity was assessed using the I^2 statistic. **Results:** Forty-four trials were included (SGLT2i: 55,244 patients; placebo: 48,394 patients). Overall, SGLT2i were associated with a statistically significant increase in UTI risk (RR 1.07; 95% CI 1.03-1.12; $p<0.01$), with no significant heterogeneity ($I^2=0\%$). By agent: empagliflozin RR 1.07 (0.97-1.17), dapagliflozin RR 0.97 (0.85-1.10), canagliflozin RR 1.09 (1.00-1.19), sotagliflozin RR 1.05 (0.92-1.18), and ertugliflozin RR 1.19 (0.85-1.60). **Conclusion:** Among patients with elevated cardiovascular burden, SGLT2i were associated with a modest but statistically significant increase in UTI risk. These findings may inform individualized benefit-risk discussions when considering

SGLT2i therapy in this population.



Session Title:	**Saturday Morning Poster Session**
Topic 1:	Cardiovascular Disease Prevention
Publishing Title:	EVALUATING CARDIOVASCULAR RISK IN PSORIATIC ARTHRITIS: COMPARING THE FRAMINGHAM RISK SCORE, QRISK3 AND PREVENT EQUATIONS IN A LATIN AMERICAN COHORT
Author Block:	Felix Liu Wu, Jorge Luis Vallee Cedeño, Carlos Guerra, Gabriel E. Frago, Olmedo Almengor, Hospital Santo Tomas, Panama, Panama
Abstract Body:	**Background:** Psoriatic arthritis (PsA) increases cardiovascular risk (CVR) due to systemic inflammation, but tools like the Framingham Risk Score (FRS) often underestimate it, whereas QRISK3 and the Predicting Risk of Cardiovascular Disease Events (PREVENT) equation may be more accurate. This study compares the estimated CVR using these three tools in a Panamanian cohort, where no previous studies exist. **Methods:** A retrospective, observational study was conducted in adult patients (25 to 84 years) with PsA diagnosed by CASPAR criteria, without prior cardiovascular disease, evaluated at an outpatient Rheumatology clinic between 2018 and 2024. Clinical and laboratory variables were collected to calculate the 10-year CVR. **Results:** Out of 64 patients evaluated, 20 met the inclusion criteria (75% female, mean age 52 years). FRS classified 85% as low risk (<10%), 15% intermediate (10-19.9%), and 0% high. In contrast, QRISK3 classified 55% as low, 35% intermediate, and 10% high risk (>20%). PREVENT classified 40% as low (<5%), 25% borderline (5-7.4%), 25% intermediate (7.5-19.9%), and 10% high risk (≥20%). Notably, 100% of the high-risk patients (according to QRISK3 or PREVENT) were not receiving statins, and 21.4% of patients with hypertension were not prescribed antihypertensive treatment. **Conclusion:** QRISK3 and PREVENT identified a higher proportion of patients with PsA at intermediate and high CVR compared to FRS. The findings highlight a critical gap in primary prevention, as no high-risk patient was receiving lipid-lowering therapy and a significant proportion of hypertensive patients lacked

antihypertensive treatment. These results emphasize the need to reevaluate current clinical protocols and warrant larger, prospective studies.

Session Title:	**Saturday Morning Poster Session**
Topic 1:	Cardiovascular Disease Prevention
Publishing Title:	PRECISION THERAPY FOR APOLIPOPROTEIN A5 ASSOCIATED CHYLOMICRONEMIA: EARLY OLEZARSEN RESPONSE IN A PUERTO RICAN WOMAN
Author Block:	Milton Rivera Valentin, Karen Yelton, Gretchen Abarca Riancho, Jose Garcia Mateo, Luis Alfredo Acevedo Soto, Damas Hospital, Ponce, PR, PR
Abstract Body:	**Background:** Severe hypertriglyceridemia beginning in childhood should raise concern for genetic chylomicronemia, especially when response to standard therapy is limited. Reports in Hispanic patients remain sparse. **Case:** A 37-year-old Puerto Rican woman was referred for persistent hypertriglyceridemia since childhood despite fenofibrate 160 mg daily and omega-3 fatty acids 1 g daily. Family history was notable for maternal hypertriglyceridemia and pancreatitis. Examination showed no eruptive xanthomas or lipemia retinalis. Baseline studies showed total cholesterol 283 mg/dL, triglycerides 1,117 mg/dL, and apolipoprotein B 114 mg/dL. Genetic testing identified a heterozygous APOA5 c.56C>G p.(Ser19Trp) variant. A very low-fat diet and Olesazan 80 mg monthly were started. **Decision-making:** Within 1 week, triglycerides fell from 1,117 to 749 mg/dL, a 33% reduction, and the patient reported no early adverse effects. The marked improvement after inadequate control of fibrate and omega-3 therapy supported a clinically meaningful response to APOC3-targeted treatment. This case highlights the diagnostic value of genetic testing in adults with lifelong severe hypertriglyceridemia and suggests that APOA5-associated chylomicronemia may benefit from precision therapy. **Conclusion:** In underrepresented Hispanic populations, recognizing genetic chylomicronemia can refine diagnosis and guide treatment. Olezarsen may provide effective early triglyceride lowering and reduce the risk of pancreatitis in selected patients.

Session Title: **Saturday Morning Poster Session**

Topic 1: Cardiovascular Disease Prevention

Publishing Title: WHEN EVIDENCE OUTPACES PRACTICE: VACCINATION IN CARDIOVASCULAR HEALTHCARE SETTINGS

Author Block: Valeria Azcarate-Rodriguez, Juan Andrés Muñoz-Ordoñez, Santiago Duque, Brayan Daniel Cordoba Melo, Mario Miguel Barbosa, Daniela Piedrahita García, Paula Luna, Alexandra Pérez, Clara Ines Inés Saldarriaga Giraldo, Jose Luis Torres, Homero Luis Puello-Galarcio, Juan Esteban Gomez, Sociedad Colombiana de Cardiología y Cirugía Cardiovascular, Bogota, Colombia, Fundación Valle del Lili, Cali, Colombia

Abstract Body:

Background: Adult vaccination (VC) is central to cardiovascular (CV) prevention, but its implementation in outpatient care remains poorly characterized in Latin America. We assessed VC status, knowledge, attitudes, and recommendation practices among Colombian health care providers (HCPs) working with patients with CV disease.

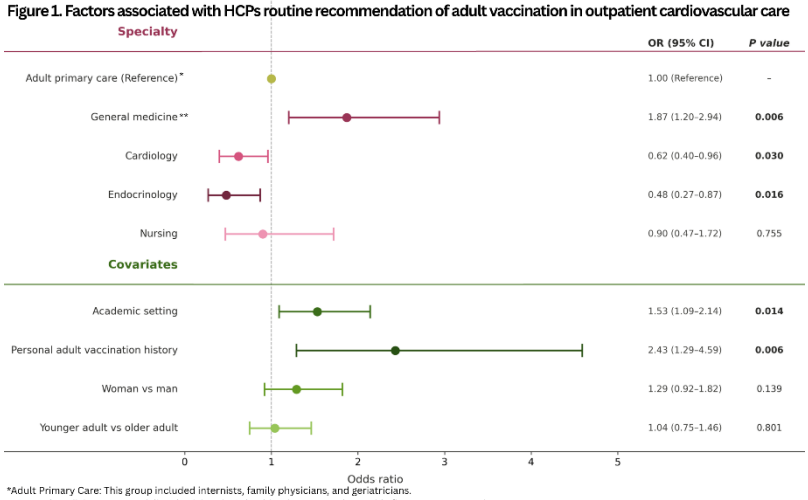
Methods: We conducted a nationwide, anonymous electronic survey of HCPs in ambulatory settings from January 2026 to April 2026 to assess personal vaccination status, attitudes, knowledge, and vaccine recommendation frequency. Multivariable logistic regression (MLR) was performed to identified predictors of routine recommendation.

Results: 1,175 HCPs completed the survey. Median age was 46 years, 52.2% were women. Self-reported COVID-19 VC was near universal (98.2%), and lower for influenza (61.8%), pneumococcal (41.0%), and herpes zoster vaccines (13.3%). Regarding their VC recommendation practices, although 97.9% considered adult VC important, only 77.1% routinely recommended VC, and 53.5% reported partial or absent knowledge of the adult VC schedule. MLR results in Figure 1.

Conclusion: Despite evidence supporting VC, gaps remain in HCPs vaccine uptake and adult CV vaccination recommendations. These findings highlight the need for HCP education, institutional immunization programs, and routine

VC counseling in preventive CV care.

Figure 1. Factors associated with HCPs routine recommendation of adult vaccination in outpatient cardiovascular care



*Adult Primary Care: This group included internists, family physicians, and geriatricians.
**General medicine: non-specialist physicians in Colombia who commonly provide first-contact outpatient care.

Session Title:	**Saturday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	LATE DIAGNOSIS OF NOONAN SYNDROME PRESENTING AS OBSTRUCTIVE HYPERTROPHIC CARDIOMYOPATHY AND SEVERE PERICARDIAL EFFUSION
Author Block:	Katherin Narváez, Giovanni Escorza, Joffre Arequipa, Hospital de Especialidades Carlos Andrade Marín, Quito, Ecuador

Abstract Body:

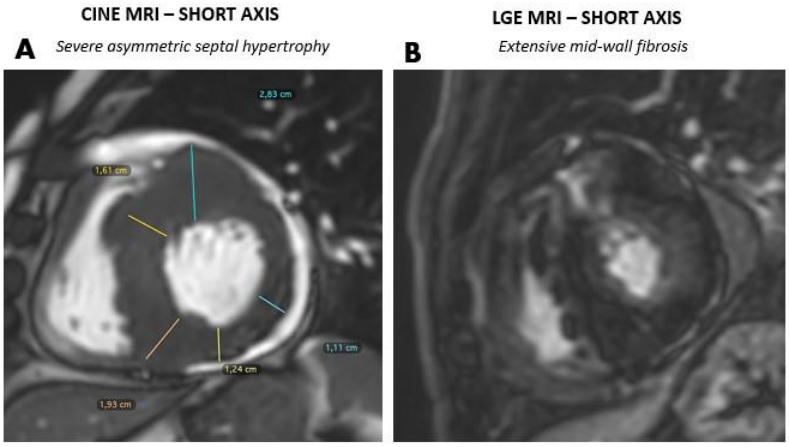
Background: Noonan syndrome is a RASopathy associated with congenital heart disease and hypertrophic cardiomyopathy (HCM), but diagnosis in adulthood is uncommon.

Case: A 49-year-old man with intellectual disability presented with dyspnea and orthopnea. Physical examination revealed triangular face, low-set ears, webbed neck, pectus excavatum and short stature. Transthoracic echocardiography showed severe asymmetric septal hypertrophy with dynamic left ventricular outflow tract obstruction (gradient 70 mmHg), preserved ejection fraction and large circumferential pericardial effusion with early right chamber compression. Speckle-tracking echocardiography demonstrated reduced global longitudinal strain without apical sparing. Cardiac magnetic resonance confirmed obstructive HCM with extensive myocardial fibrosis. Tc-99m pyrophosphate scintigraphy was negative for transthyretin amyloidosis.

Decision-making: Given the dysmorphic phenotype and unexplained HCM, genetic testing identified a pathogenic NRAS mutation confirming Noonan syndrome. Due to early tamponade physiology, the patient underwent surgical pericardial drainage with evacuation of 500 mL xanthochromic fluid. Pericardial studies were negative.

Conclusion: This case highlights late adult diagnosis of Noonan syndrome presenting with obstructive HCM and severe pericardial effusion. Recognition of dysmorphic features and multimodality imaging were essential for diagnosis

and management.



Session Title:	**Saturday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	SAFETY AND EFFICACY OF CARDIAC MYOSIN INHIBITORS IN SYMPTOMATIC NONOBSTRUCTIVE HYPERTROPHIC CARDIOMYOPATHY: A SYSTEMATIC REVIEW AND META-ANALYSIS
Author Block:	Eduardo Sirena, Nicole Perazolo, Cauã Fernandes, Jefferson Luis Vieira, Hospital de Messejana, Fortaleza, Brazil, Universidade de Fortaleza, Fortaleza, Brazil
Abstract Body:	**Background:** Cardiac myosin inhibitors (CMIs) are effective and safe in obstructive hypertrophic cardiomyopathy (HCM), but their efficacy and safety in nonobstructive HCM (nHCM) remain unclear. **Methods:** We systematically searched PubMed, CENTRAL, and LILACS through September/2025. A random-effects model was applied. Primary outcomes were efficacy endpoints (peak VO_2, KCCQ-CSS, NYHA class improvement); secondary outcomes were safety endpoints (treatment-emergent adverse events, serious adverse events, and mortality). **Results:** A total of 2 RCTs and 2 single-arm trials comprising 713 patients were included, of whom 403 received CMIs (mavacamten: 329; aficamten: 74). Among 402 participants with nHCM, 84% (95% CI: 0.76-0.90) experienced ≥1 treatment-emergent adverse event, 17% (95% CI: 0.14-0.21) ≥1 serious adverse event, while fatal events were rare (0%, 95% CI: 0.00-0.02). Across the MAVERICK-HCM and ODYSSEY-HCM RCTs, mavacamten showed non-significant trends toward improved peak VO_2 (MD 0.36 ml/kg/min; 95% CI: −0.20-0.92), KCCQ-CSS (MD 2.11 points; 95% CI: −1.00-5.22), and NYHA class improvement (RR 1.15; 95% CI: 0.93-1.43). Heterogeneity was absent across trials (I^2=0% for all endpoints). **Conclusion:** CMIs appear safe in patients with symptomatic nHCM, with most adverse events being non-serious. While trends toward functional and symptomatic improvement were observed, these effects were not statistically

significant.

Figure 1: Incidence of Adverse Events in Nonobstructive HCM Trials with Cardiac Myosin Inhibitors

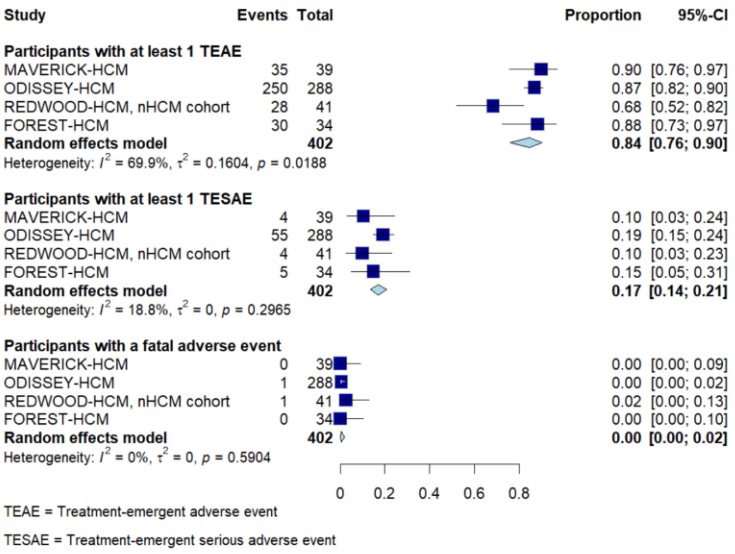


Figure 2: Effect of Mavacamten on Improvement of ≥1 NYHA Functional Class Level

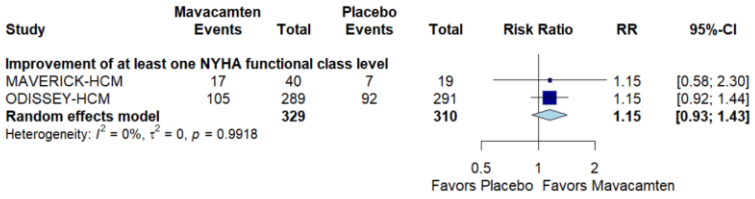
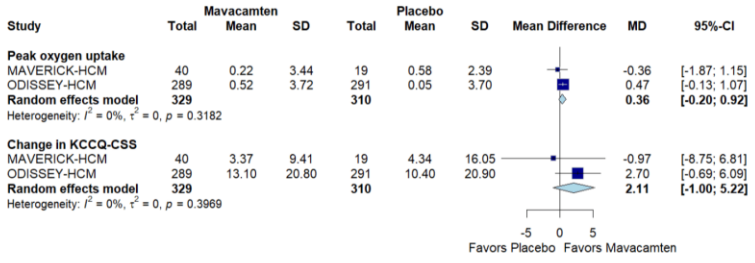


Figure 3: Effect of Mavacamten on Improvement of Peak Oxygen Uptake and KCCQ-CSS

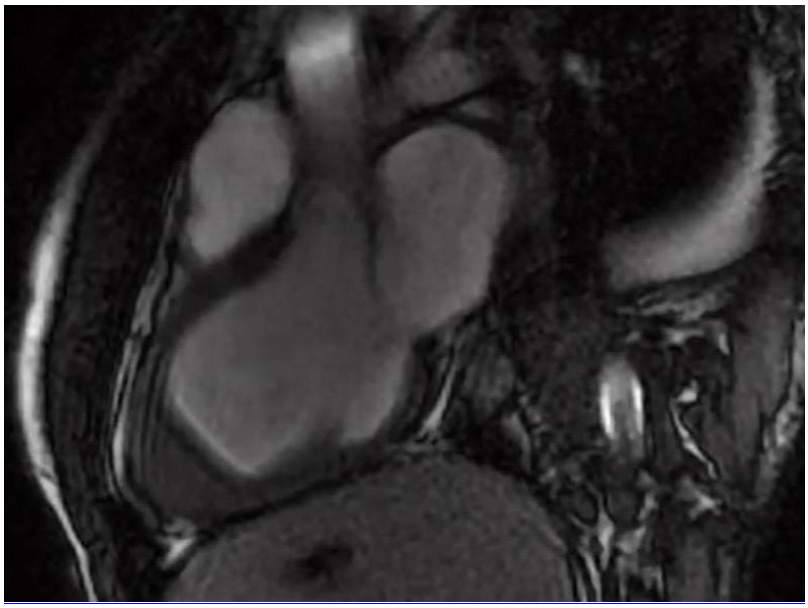


Session Title:	**Saturday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	ONE-YEAR DYNAMIC CHANGES IN RIGHT VENTRICULOARTERIAL COUPLING IN HEART FAILURE: THE AMERICCAASS REGISTRY
Author Block:	Brayan Daniel Cordoba Melo, Juan Andrés Muñoz-Ordoñez, Valeria Azcarate-Rodriguez, Juan Daniel Caicedo, Sebastian Seni-Molina, Mario Miguel Barbosa Rengifo, Daniel Quesada Chaves, Eduardo R. Perna, Victor A. Rossel, Mark H. Drazner, Walter Alberto Alarco Leon, Luis Guillermo Muñoz, Alberto A Fernandez, Jose R. Romano, Juan Esteban Gomez, Fundación Valle del Lili, Cali, Colombia
Abstract Body:	**Background:** Right ventricular-arterial (RVA) coupling, assessed as tricuspid annular plane systolic excursion (TAPSE) to pulmonary artery systolic pressure (PASP) ratio, has prognostic value in heart failure (HF), but its longitudinal behavior remains poorly characterized. We aimed to describe 1-year RVA coupling trajectories and identify determinants of favorable coupling. **Methods:** Prospective multicenter cohort study from the AMERICCAASS registry. We included hospitalized and outpatient patients with HF across the left ventricular ejection fraction (LVEF) spectrum and available baseline and 12-month TAPSE and PASP data. Coupling was defined as TAPSE/PASP >0.32 mm/mmHg. Patients were classified into four trajectories. Favorable 1-year coupling was defined as persistent or recovered coupling. Associated factors were assessed using multivariable Poisson regression with robust variance. **Results:** Among 393 patients, most remained coupled (87.5%). Persistent uncoupling occurred in 6.9%, recovery in 3.8%, and new uncoupling in 1.8%. Overall, 15% were hospitalized at inclusion; uncoupled trajectories were more frequent among hospitalized patients, whereas favorable trajectories predominated in ambulatory patients ($q<0.001$). Compared with persistently coupled patients, those with persistent uncoupling had lower baseline LVEF (28% vs 44%), higher PASP (55 vs 29 mmHg), and more severe valvular disease (41% vs 9%) (all $q<0.001$). Median absolute LVEF change was +2 percentage points in coupled→coupled, +5 in uncoupled→coupled, and -5 in coupled→uncoupled ($q=0.003$). NT-proBNP at 12 months was highest in

coupled→uncoupled (3,343 pg/mL) vs coupled→coupled (384 pg/mL; q=0.001). Ambulatory status (adjusted risk ratio [aRR] 1.37, 95% CI 1.10-1.71; p=0.005) and absence of severe valvular disease (aRR 1.23, 95%CI 1.02-1.47; p=0.029) were independently associated with favorable coupling.
Conclusion: In HF, RVA uncoupling is uncommon but tends to persist and is linked to advanced disease. Ambulatory status and absence of severe valvular disease independently predict favorable 1-year RVA coupling. These findings support serial RVA coupling assessment in HF follow-up.

Session Title:	**Saturday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	EOSINOPHILIC INFILTRATIVE CARDIOMYOPATHY IN A YOUNG PATIENT WITH ANGIOIMMUNOBLASTIC T CELL LYMPHOMA AND HYPEREOSINOPHILIA
Author Block:	Rafael Perez, Carlos A. Madariaga, Juan Sebastian Acosta, Alvaro Hernan Rodriguez, Instituto Nacional de Cancerologia, Bogota, Colombia, Hospital cardiovascular de Cundinamarca, Soacha, Colombia
Abstract Body:	**Background:** Cardiac involvement in hypereosinophilic states may cause endomyocardial fibrosis, intracardiac thrombosis, and heart failure. Differentiating eosinophilic myocardial infiltration from anthracycline related cardiotoxicity remains challenging. **Methods:** A 32 year old man with angioimmunoblastic T cell lymphoma treated with R CHOP and EPOCH presented with decompensated heart failure and persistent hypereosinophilia. Transthoracic echocardiography and cardiac magnetic resonance (CMR) were performed. **Results:** Echocardiography showed severe biventricular remodeling, left ventricular ejection fraction of 28%, and intracavitary thrombus. CMR revealed diffuse subendocardial late gadolinium enhancement compatible with endomyocardial fibrosis associated with left ventricular apical thrombus and biventricular systolic dysfunction (Figure 1). Mixed cardiomyopathy secondary to eosinophilic infiltrative cardiac disease and probable anthracycline-related cardiotoxicity was diagnosed. Treatment with pralatrexate achieved partial oncologic and cardiovascular improvement, with persistent residual thrombus. **Conclusion:** This case highlights the role of multimodality imaging, particularly CMR, in differentiating eosinophilic infiltrative cardiomyopathy from anthracycline cardiotoxicity and guiding management in cardio oncology

patients.



Session Title: **Saturday Morning Poster Session**

Topic 1: Heart Failure and Cardiomyopathies

Publishing Title: VERY HIGH-RISK PREGNANCY IN UNCORRECTED UNIVENTRICULAR HEART: LIMITS OF CARDIOVASCULAR ADAPTATION

Author Block: Raúl Pinales Salas, Pablo Emilio Reyes Guzmán, Leonardo Elihu Perales Rendon, Cesar cortes, Miguel Esau Vazquez Rosales, JUAN ALEJANDRO MARTINEZ ROMERO, Miriam Zuñiga Salcedo, Edgar Francisco Carrizales-Sepulveda, Alejandro Ordaz Farías, Ramiro Flores Ramírez, Servicio de Cardiología HU, Monterry, Mexico, Hospital Universitario "Dr. José Eleuterio González", Monterry, Mexico

Abstract Body: **Background:** Pregnancy in uncorrected univentricular heart disease carries extremely high maternal risk. Data in patients with a systemic right ventricle remain scarce.

Case: A 28-year-old woman at 15 weeks of gestation presented with dyspnea and epigastric pain. Examination showed jugular venous distention, pulmonary crackles, clubbing, and SpO2 of 88%. Electrocardiogram showed right ventricular hypertrophy with conduction abnormalities. Transthoracic echocardiography revealed an uncorrected univentricular heart with a dominant systemic right ventricle, severe systolic dysfunction with fractional area change of 23%, pulmonary hypertension, and pulmonary edema. NT-proBNP was 1901 ng/L. The patient was classified as mWHO class IV.

Decision-making: Intravenous diuretics were initiated for stabilization. A multidisciplinary Pregnancy Heart Team determined that continuation of pregnancy represented prohibitive maternal risk. Pregnancy termination was successfully performed without complications. Guideline-directed medical therapy was initiated after termination. Follow-up cardiac magnetic resonance demonstrated improvement in right ventricular ejection fraction to 36% (Figure 1), and the patient remained in NYHA functional class II at 6 months.

Conclusion: Uncorrected univentricular heart with a systemic right ventricle carries catastrophic maternal risk. Early multidisciplinary evaluation and risk stratification are essential to prioritize maternal survival.

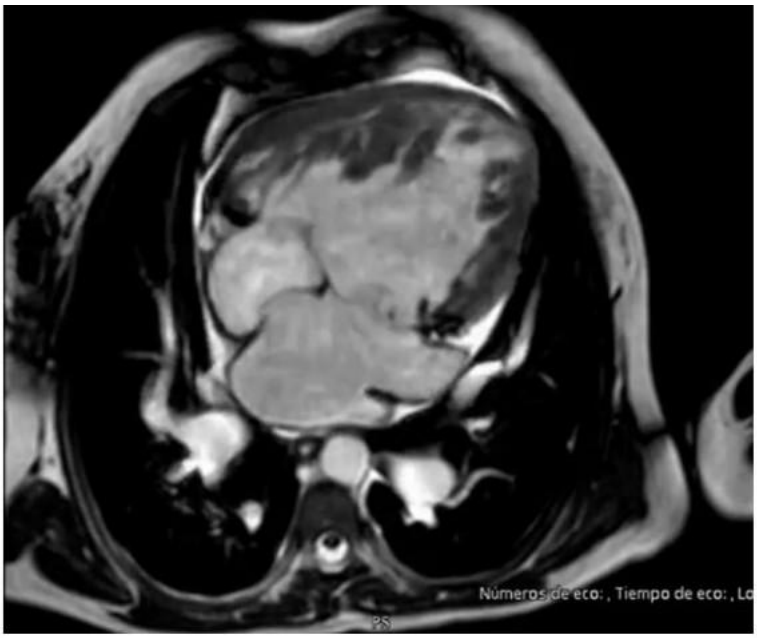


Figure 1. Outpatient Cardiac magnetic resonance.

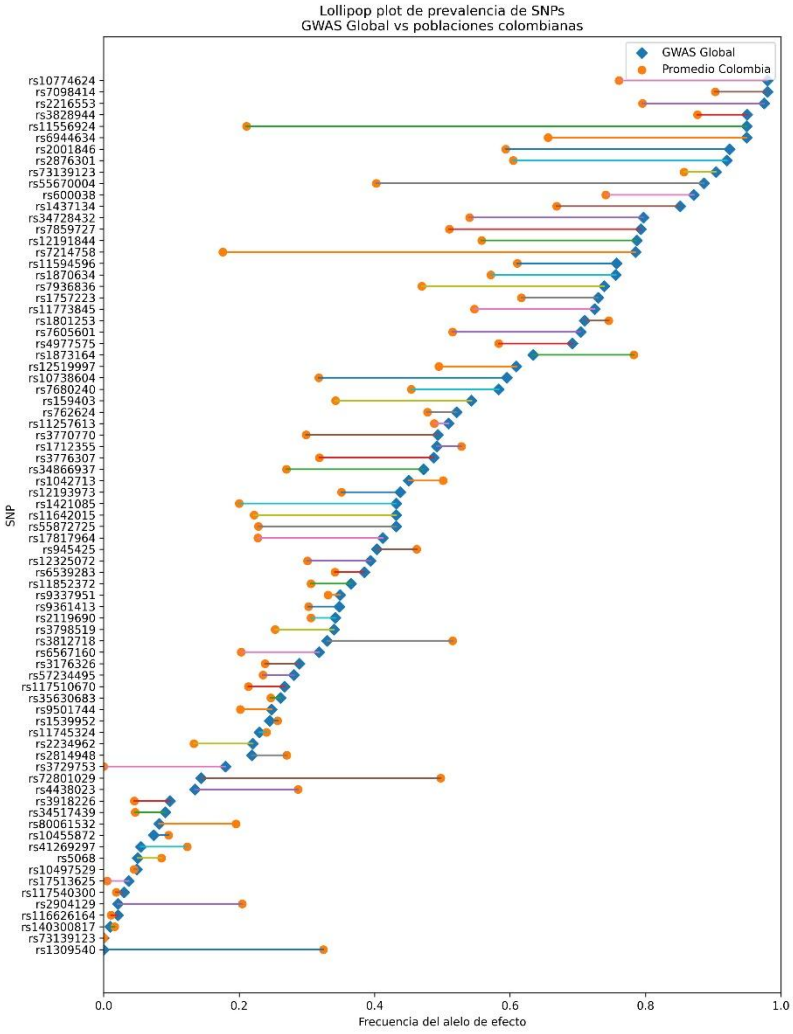
Showing a right ventricular ejection fraction of 36%.

Session Title:	**Saturday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	FULMINANT MYOCARDITIS ASSOCIATED WITH PARAINFLUENZA INFECTION REQUIRING VENOARTERIAL EXTRACORPOREAL MEMBRANE OXYGENATION.
Author Block:	Francisco Villadiego, Fernan del Cristo Mendoza-Beltran, Claudia Poveda, Mario Mercado, Claudia Jaramillo, ANA MARIA GARCIA JAGUA, Daniel Forero, Mauricio Manrique, Juan David Lopez, Andrea Lasso, Monica Narvaez, Fundación Clínica Shaio, Bogotá, Colombia, Universidad El Bosque, Bogotá, Colombia
Abstract Body:	**Background:** Fulminant myocarditis (FM) is a life-threatening syndrome characterized by rapid hemodynamic deterioration and severe ventricular dysfunction. Viral etiologies are common, although parainfluenza remains an underrecognized cause. Venoarterial extracorporeal membrane oxygenation (VA-ECMO) is an established bridge to recovery strategy in refractory cardiogenic shock. **Case:** A 27-year-old male with no prior history presented with fever, diarrhea, and asthenia. Initial evaluation showed leukocytosis and elevated C-reactive protein. Empiric antibiotics were initiated for suspected bacterial infection. The patient rapidly progressed to shock requiring vasopressors and mechanical ventilation. Point-of-care ultrasound demonstrated severe left ventricular (LV) dysfunction with elevated troponin, consistent with mixed septic and cardiogenic shock. Despite inotropic support, he deteriorated and was transferred for advanced care. Peripheral VA-ECMO was initiated; however, limb ischemia required conversion to central ECMO. Transesophageal echocardiography revealed LV ejection fraction of 6%. Continuous renal replacement therapy was started for acute kidney injury. All bacterial cultures remained negative, while multiplex polymerase chain reaction identified parainfluenza virus. After 7 days of support, he was successfully weaned from ECMO, followed by discontinuation of vasopressors and ventilation. Follow-up echocardiography showed EF recovery to 45%. **Decision-making:** This case illustrates the challenge of differentiating septic from cardiogenic shock during early presentation. The coexistence of systemic

inflammation and myocardial depression may delay recognition of FM. Prompt escalation to VA-ECMO was crucial to maintain end-organ perfusion and allow myocardial recovery. Although uncommon, parainfluenza should be considered as viral etiology of FM.

Conclusion: FM may mimic septic shock and rapidly progress to refractory circulatory collapse. Early recognition of myocardial involvement and timely initiation of VA-ECMO enabled significant ventricular recovery, as an effective bridge to recovery in reversible acute heart failure.

Session Title:	**Saturday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	DIVERGENT ALLELE FREQUENCIES OF HEART FAILURE RISK VARIANTS IN THE COLOMBIAN POPULATION: AN IN SILICO COMPARISON WITH GLOBAL GWAS REFERENCES
Author Block:	Wilmer Javier Albor, Hector A. Castrillo, Diego F. Garcia, Vladimir G. Robles, Luis G. Giraldo, Elías D. Ferreira, Cristina Del Toro, Antonio C. Madera, María A. Valeta, Yara Y. Ramírez, Maria V. Castillo, Rafael Betancurt, Marco Blanquicett, Universidad de Cartagena, Cartagena, Colombia
Abstract Body:	**Background:** Heart failure (HF) imposes a high burden in Colombia, yet genetic risk stratification in Latin American populations is limited by the European bias of genome-wide association studies (GWAS). We compared allele frequencies of single nucleotide polymorphisms (SNPs) associated with HF in Colombian vs global references. **Methods:** In silico cross-sectional study. Seventy-eight SNPs (p<5x10-8) for HF and cardiac remodeling were retrieved from the GWAS Catalog, cross-referenced with the Colombian CÓDIGO cohort, and functionally annotated in Ensembl. Allele frequencies were compared through proportion tests and pairwise genetic distances. **Results:** Most SNPs showed allele frequency divergence between Colombian and global references, with absolute differences up to 0.74 and a bidirectional pattern, several HF-associated variants were markedly less frequent in Colombia, while others were substantially more frequent or near-fixation despite being rare globally. African-ancestry variants showed the largest discordance and European-ancestry variants were less frequent in admixed subpopulations. Pharmacogenomic markers were consistent across populations. **Conclusion:** The Colombian population displays a bidirectionally divergent genetic risk profile for HF versus European-centered GWAS. Locally calibrated polygenic risk scores are needed for clinical translation in admixed Latin American populations.


Lollipop plot de prevalencia de SNPs
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Session Title:	**Saturday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	ARTIFICIAL INTELLIGENCE FOR BIOMARKER AND IMAGING PHENOTYPING IN HEART FAILURE WITH PRESERVED EJECTION FRACTION (HFPEF): A SYSTEMATIC REVIEW AND META-ANALYSIS OF DIAGNOSTIC AND PROGNOSTIC PERFORMANCE
Author Block:	Jorge Eduardo Zapata Arango, Universidad Cooperativa de Colombia, Medellín, Colombia
Abstract Body:	**Background:** Heart failure with preserved ejection fraction (HFpEF) accounts for >50% of all heart failure cases. Diagnosis remains challenging due to heterogeneous pathophysiology, and conventional biomarkers and imaging have moderate accuracy. Artificial intelligence (AI) may integrate multimodal data to improve phenotyping and risk prediction. **Methods:** Following PRISMA 2020 guidelines, six databases (EMBASE, Scopus, Cochrane, ScienceDirect, Epistemonikos, IEEE Xplore) were searched from inception to May 2026. Eligible studies used AI on any biomarker or imaging modality for HFpEF diagnosis, phenotyping, or outcome prediction. **Results:** From 2,482 identified records, 68 studies met inclusion criteria. Multimodal AI (imaging + biomarkers + clinical) achieved pooled diagnostic AUC of 0.94 (95%CI 0.91-0.96), significantly outperforming conventional clinical scores (AUC 0.78, $p<0.001$). Imaging-only AI (echocardiography/CMR) achieved AUC 0.91. Prognostic models predicted 1-year HF hospitalization with C-statistic 0.86 (95%CI 0.82-0.90). Unsupervised learning identified 3-4 reproducible phenogroups with distinct outcomes and treatment responses. **Conclusion:** AI substantially improves HFpEF diagnosis and risk prediction compared to conventional approaches. Multimodal integration yields the highest accuracy. External validation in diverse populations is urgently needed.

Session Title:	**Saturday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	ARTIFICIAL INTELLIGENCE VERSUS CONVENTIONAL ECHOCARDIOGRAPHY FOR EARLY CARDIOTOXICITY DETECTION IN HER2-POSITIVE BREAST CANCER: A SYSTEMATIC REVIEW AND META-ANALYSIS OF DIAGNOSTIC PERFORMANCE AND CLINICAL UTILITY
Author Block:	Jorge Eduardo Zapata Arango, Universidad Cooperativa de Colombia, Medellín, Colombia
Abstract Body:	**Background:** Women with HER2-positive breast cancer receiving anthracyclines and/or trastuzumab are at high risk of cancer therapy-related cardiac dysfunction (CTRCD), and conventional left ventricular ejection fraction (LVEF) detects injury late. This systematic review and meta-analysis compared the diagnostic performance and clinical utility of artificial intelligence (AI)-assisted speckle-tracking echocardiography (global longitudinal strain, GLS) versus conventional LVEF for early cardiotoxicity detection. **Methods:** Following PRISMA 2020 guidelines, we searched six databases from inception to May 2026. Eligible studies included prospective/retrospective cohorts, diagnostic accuracy studies, and pragmatic trials evaluating AI-assisted GLS versus LVEF. Primary outcome was diagnostic sensitivity/specificity for ≥15% GLS reduction at 3 months predicting subsequent CTRCD. **Results:** From 2,156 records, 47 studies (5,843 patients) met inclusion criteria. Conventional LVEF at 3 months had a pooled sensitivity of 43% (95%CI 34-52%) for predicting CTRCD at 12 months. Manual GLS achieved sensitivity 82% (95%CI 77-87%) and specificity 79% (95%CI 73-84%). AI-assisted GLS was non-inferior to manual GLS (sensitivity 81%, specificity 80%) but significantly improved inter-observer reproducibility (ICC 0.94 vs. 0.80, $p<0.001$) and reduced analysis time by 63% (from 12 to 4.4 minutes). One pragmatic trial showed AI-guided surveillance reduced the number of echocardiograms by 40% without missing any CTRCD events. **Conclusion:** AI-assisted GLS is non-inferior to manual GLS for detecting early

cardiotoxicity and superior to conventional LVEF, offering major advantages in standardization, reproducibility, and workflow efficiency. However, external validation in Latin American populations is urgently needed.

Session Title:	**Saturday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	CORRELATION OF DETERMINATION OF CA 125 AND FUNCTIONAL CLASS MEASURED BY VE/VCO2 SLOPE AND PEAK OXYGEN CONSUMPTION IN PATIENTS OF THE HEART FAILURE CLINIC.
Author Block:	María Alejandra Monroy Jiménez, Sandra Berenice Somarriba Dominguez, Julieta Danira Morales Portano, Jorge Antonio Lara Vargas, Jose Javier Ik Yahalkab Zamora Diaz, Saul Yair Guillot Castillo, Centro Médico Nacional 20 de Noviembre, Ciudad de México, Mexico
Abstract Body:	**Background:** Interest has grown in CA-125 as a potential indicator of congestion, inflammation, and adverse cardiac remodeling. Cardiopulmonary exercise testing (CPET) provides established prognostic metrics, including peak oxygen consumption (VO_2 peak) and ventilatory efficiency (VE/VCO_2 slope), which reflect functional capacity in chronic HF. **Methods:** Patients underwent CPET to assess VO_2 peak and VE/VCO_2 slope. Serum CA-125 and NT-proBNP levels were measured within two months of CPET, and quality of life was subjectively assessed. Descriptive statistics were expressed as mean ± standard error. Pearson or Spearman correlation analyses were applied. Analyses were performed using GraphPad Prism 9. **Results:** Forty-two patients were included (76.2% male), with a mean FEVI of 33.6% ± 1.37. Average weight was 71.9 kg, height 167 cm, and BMI 25.9. Mean VO_2 peak was 4.79 ± 0.23 mL/kg/min and VE/VCO_2 slope was 44 ± 1.65, consistent with reduced functional capacity and impaired ventilatory efficiency. Mean CA-125 was 14.6 ± 2.09 U/mL and NT-proBNP 2861 ± 648 pg/mL. CA-125 showed a moderate, significant inverse correlation with VO_2 peak ($r = -0.43$, $p = 0.004$) and a significant direct correlation with VE/VCO_2 slope ($r = 0.478$, $p = 0.0016$). **Conclusion:** Elevated CA-125 levels are associated with lower functional capacity and poorer ventilatory efficiency in patients with chronic HF. These findings support the potential role of CA-125 as an integrative biomarker

reflecting clinical and functional status.

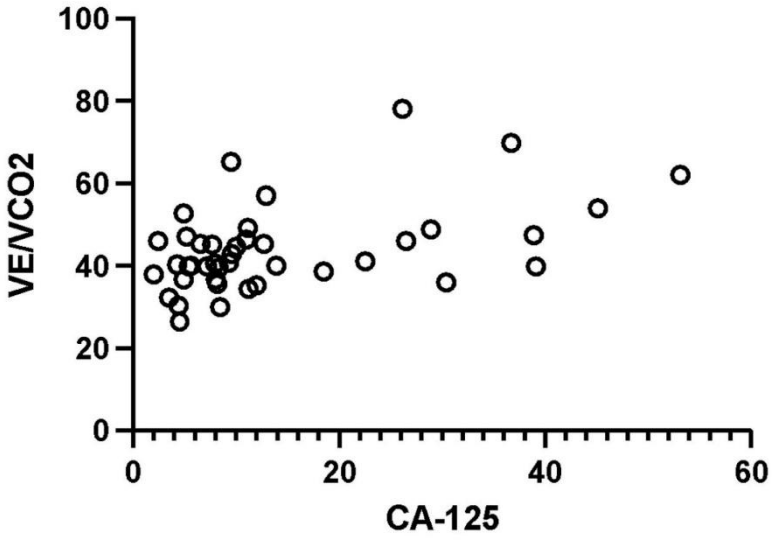


Fig.1. Correlation between VE/VCO2 slope and CA-125. VE/VCO2 and CA-125 values of the study population are shown using Spearman's correlation analysis (r=0.478,p=0.0016).

Session Title:	**Saturday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	CLINICAL AND ECHOCARDIOGRAPHIC PROFILE OF ACUTE DECOMPENSATED HEART FAILURE WITH PRESERVED EJECTION FRACTION
Author Block:	Jaime Alberto Gómez Rosero, Mateo Morales, Veronica lopez cardona, Alejandro Jaramillo, Natalia Mejia, Juan Martinez, Juan Castrillon, Maria Clara Gaviria, Clinica Las Vegas, Medellin, Colombia

Abstract Body:

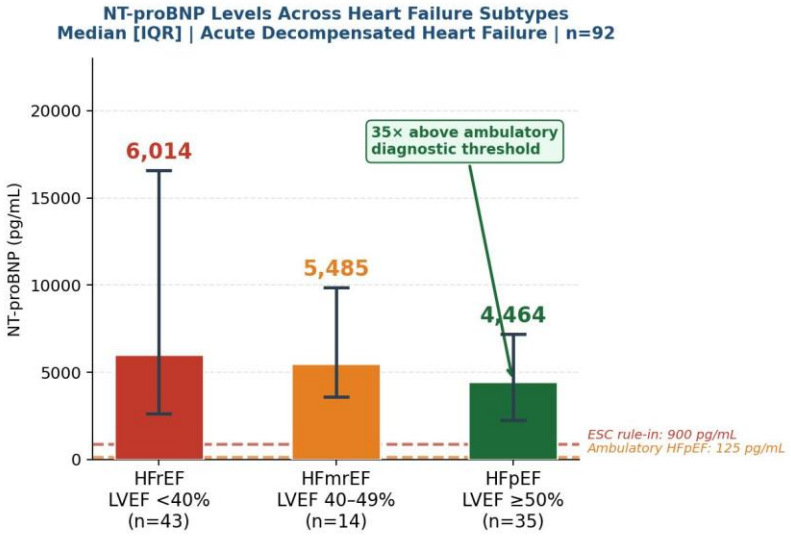
Background: Heart failure with preserved ejection fraction (HFpEF) predominantly affects elderly patients with multiple comorbidities and is underrepresented in clinical trials. Clinical and echocardiographic characterization in Latin American populations is limited.

Methods: Prospective single-center registry of patients hospitalized for acute decompensated heart failure in Medellín, Colombia. Patients with left ventricular ejection fraction (LVEF) ≥50% were analyzed. Echocardiographic parameters, comorbidity burden, and clinical outcomes were described

Results: Of 106 patients, 35 (33 %) had HFpEF, mean age 75±13 years, 46 % male. Dominant etiology was hypertensive (25.7 %) and valvular (25.7 %). Comorbidities: hypertension 74.3%, atrial fibrillation 40 %, type 2 diabetes 45.7 %, chronic kidney disease 40 %, anemia 48.6 %. Echocardiography showed mean E/e' 13.8±5.9, indexed left atrial volume 48.2±15 ml/m^2, pulmonary artery systolic pressure 41.2±16 mmHg. Median NT-proBNP was 4,464 pg/mL. In-hospital mortality was 8.8 %; intensive care unit admission 28.6 %.

Conclusion: HFpEF patients in this Colombian registry were predominantly elderly women with high cardiometabolic burden, elevated filling pressures, and pulmonary hypertension. Notably, median NT-proBNP was markedly elevated, challenging the notion that natriuretic peptides may be normal or near-normal in HFpEF, a concept derived from ambulatory settings that does

not apply in acute decompensated heart failure.



Session Title:	**Saturday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	DE NOVO ACUTE HEART FAILURE VS ACUTE DECOMPENSATED HEART FAILURE: CLINICAL PHENOTYPING IN A COLOMBIAN REGISTRY
Author Block:	Jaime Alberto Gómez Rosero, Veronica lopez cardona, Mateo Morales, Juan Castrillon, Juan Martinez, Alejandro Jaramillo, Natalia Mejia, Maria Clara Gaviria, Clinica Las Vegas, Medellin, Colombia

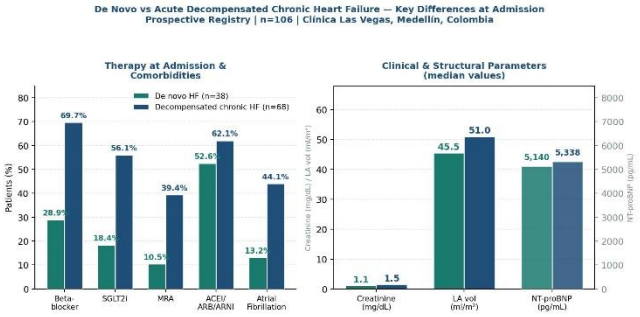
Abstract Body:

Background: Patients presenting with de novo heart failure (HF) differ clinically from those with acute decompensation HF. Characterizing these phenotypes in real world Latin American settings may guide targeted management strategies

Methods: Prospective single-center registry of 106 patients hospitalized for acute decompensated HF in Medellín, Colombia. De novo HF was defined as a first confirmed diagnosis at the index hospitalization. Demographic, clinical, echocardiographic, and pharmacological variables were compared between groups using Mann-Whitney U and Fisher exact tests

Results: Thirty-eight patients (35.8%) had de novo HF and 68 (64.2%) had decompensated HF. De novo patients had lower prevalence of atrial fibrillation (13.2% vs 44.1%, p=0.002), better renal function (creatinine 1.1 vs 1.5 mg/dL, p=0.005), and less left atrial remodeling (indexed left atrial volume 45.5 vs 51 ml/m^2, p=0.039). Chronic patients were significantly more likely to be on beta-blockers (69.7% vs 28.9%), SGLT2i (56.1% vs 18.4%), and MRA (39.4% vs 10.5%). Mortality (8.1% vs 6.1%) and intensive care unit admission (26.3% vs 26.9%) were similar

Conclusion: De novo HF patients had less structural remodeling and better renal function. The near-absence of foundational therapy in this group likely reflects delayed diagnosis rather than therapeutic omission, consistent with evidence that heart failure symptoms precede formal diagnosis by months to years.



SGLT2i: sodium-glucose cotransporter-2 inhibitor. MRA: mineralocorticoid receptor antagonist. ACEi: ACE inhibitor. ARB: angiotensin receptor blocker. LA vol: indexed left atrial volume. NT-proBNP: N-terminal pro-B-type natriuretic peptide. Bars represent median values.

Session Title:	**Saturday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	TORRENTIAL TRAUMATIC TRICUSPID REGURGITATION AND REFRACTORY RIGHT HEART FAILURE AFTER TRAUMA: MEDICAL THERAPY WHEN SURGERY IS NOT AN OPTION
Author Block:	Lithey Cristina Poveda Conde, Diana Vargas Vergara, Jaime Andres Nieto Zarate, Ingrid Carolina Rojas Chaverra, Juan David Guerrero Peña, Fabio Camilo Romo Escorcia, Fundacion Universitaria Sanitas, BOGOTA, Colombia, Clinica Universitaria Colombia, BOGOTA, Colombia
Abstract Body:	**Background:** Traumatic tricuspid regurgitation (TR) is an uncommon complication of blunt chest trauma, but it may rapidly lead to acute right ventricular (RV) failure and cardiogenic shock. **Case:** A 36-year-old man presented with severe polytrauma following a high-energy motorcycle accident, complicated by subarachnoid hemorrhage. Transthoracic and transesophageal echocardiography demonstrated rupture of the tricuspid subvalvular apparatus with torrential tricuspid regurgitation and right ventricular systolic dysfunction, consistent with acute right-sided heart failure secondary to traumatic tricuspid regurgitation. **Decision-making:** Although surgery is the first-line treatment for symptomatic severe primary tricuspid regurgitation, the multidisciplinary Heart Team considered both surgical intervention and mechanical circulatory support contraindicated because of active intracranial hemorrhage and suspected hypoxic-ischemic encephalopathy. Therefore, advanced medical management with vasoactive and inotropic support was pursued. **Conclusion:** Traumatic tricuspid regurgitation may progress to refractory right ventricular failure and cardiogenic shock. Early echocardiographic assessment and multidisciplinary decision-making are essential to identify candidates for intervention. In patients with major extracardiac contraindications, management may ultimately be limited to advanced medical therapy and palliative care.

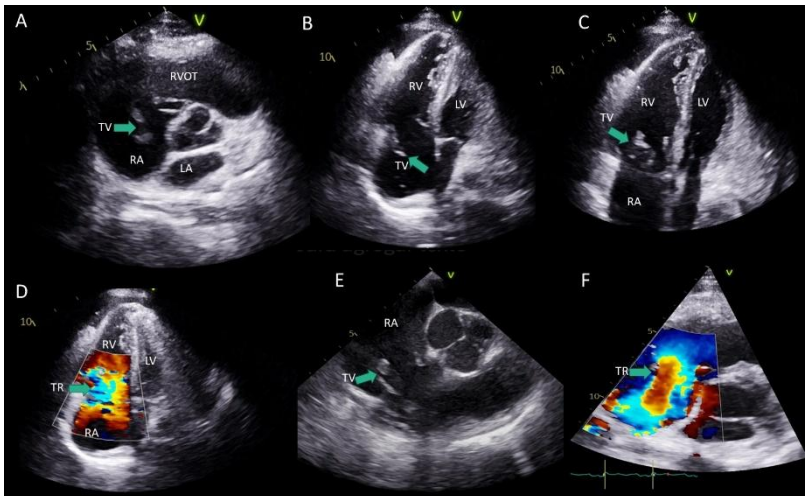
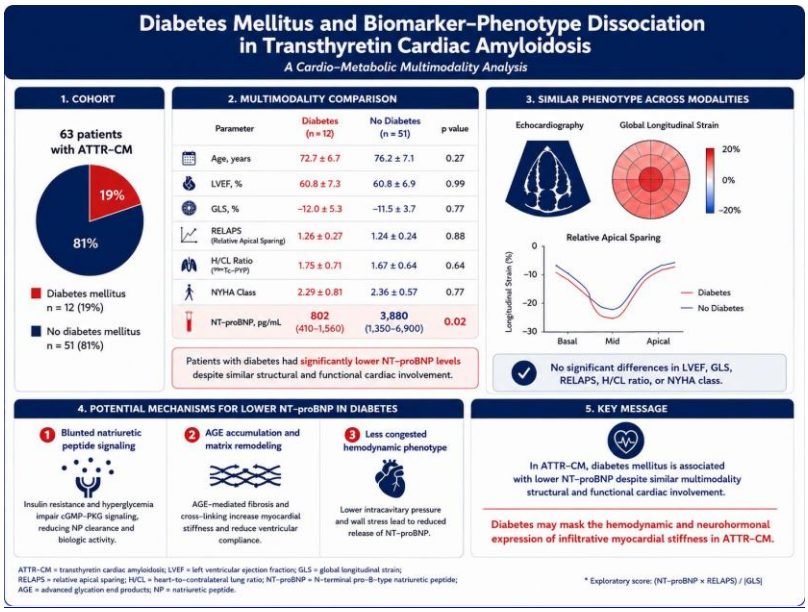


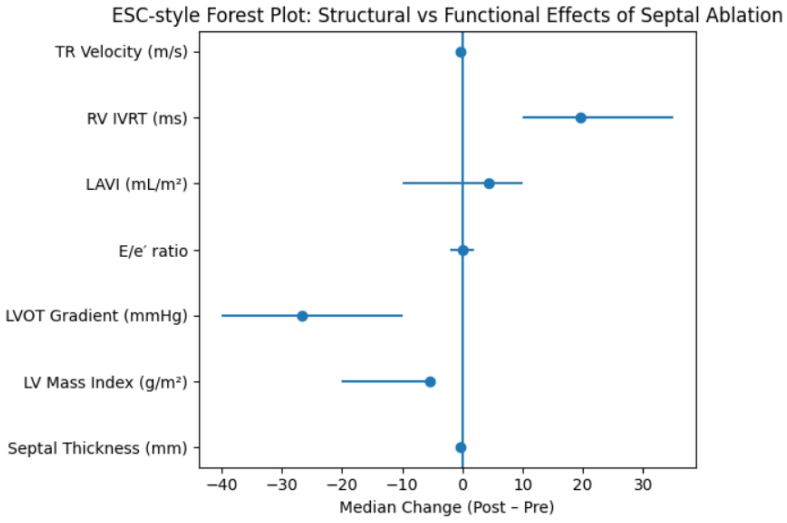
Figure 1. (A–D) Transthoracic echocardiography parasternal short-axis and apical four-chamber views demonstrating rupture of the tricuspid subvalvular apparatus with flail tricuspid leaflet and torrential tricuspid regurgitation on Color Doppler imaging. (E–F) Transesophageal echocardiography mid-esophageal short-axis view at 47° confirming disruption of the tricuspid subvalvular apparatus and torrential tricuspid regurgitation. The green arrow indicates the tricuspid valve and TR.
Abbreviations: LA, left atrium; LV, left ventricle; RA, right atrium; RV, right ventricle; RVOT, right ventricular outflow tract; TR, tricuspid regurgitation, TV, tricuspid valve.

Session Title:	**Saturday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	MULTIMODALITY EVIDENCE OF BIOMARKER-PHENOTYPE DISSOCIATION IN DIABETIC ATTR-CM
Author Block:	Katihurca Almonte Montes de Oca, Rosa Noemi Cueto Payano, Natividad Diaz Estrella, Luz Del Alba Javier, Sara Divanne González, Josue Pichardo, Oscar Ortega, Luis Cuello, Maria Eugenia Linares, Wilnelia Acosta, Nelson Acosta, Miguel Arias, ASOCIACION INSTITUTO DOMINICANO DE CARDIOLOGIA, SANTO DOMINGO, Dominican Republic
Abstract Body:	**Background:** Diabetes mellitus (DM) promotes myocardial fibrosis, oxidative stress, extracellular matrix remodeling, and advanced glycation end-product (AGE) accumulation, all of which contribute to ventricular stiffness and adverse cardio-metabolic remodeling. The influence of DM on the structural and biomarker profile of transthyretin cardiac amyloidosis (ATTR-CM) remains poorly understood. **Methods:** We analyzed 63 patients with ATTR-CM. Clinical, echocardiographic, strain, biomarker, and scintigraphic parameters were compared between diabetic and non-diabetic patients.Variables analyzed included left ventricular ejection fraction (LVEF) global longitudinal strain (GLS),relative apical sparing (RELAPS), NYHA functional class and NT-proBNP .Continuous variables were compared using Student's t-test. Statistical significance was defined as $p<0.05$. **Results:** Diabetes mellitus was present in 12 patients (19%).No significant differences were observed in structural or deformation parameters between 2 groups. Diabetic patients demonstrated significantly lower NT-proBNP levels compared with non-diabetic patients (802 vs 3880 pg/mL, $p=0.02$). **Conclusion:** In ATTR-CM, diabetes patients exhibited markedly lower NT-proBNP levels despite comparable structural disease severity.These findings suggest a cardio-metabolic biomarker-phenotype dissociation in diabetic ATTR-CM. DM may mask the hemodynamic expression with potential implications for

biomarker interpretation.



Session Title:	**Saturday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	IMPACT OF SEPTAL ABLATION ON BIVENTRICULAR DIASTOLIC FUNCTION: DISSOCIATION BETWEEN STRUCTURAL SUCCESS AND FUNCTIONAL RECOVERY IN HYPERTROPHIC CARDIOMYOPATHY
Author Block:	Yancy Yuliana Erazo Dorado, Karen Garro Almendaro, Roberto Ivan Ibarra Sanchez, SR, Freddy Javier Medina Santos, Julieta Danira Morales Portano, Rodrigo Antonio Bonilla, Kevin J. Acevedo Gomez, Centro Médico Nacional 20 de Noviembre, Ciudad de México, Mexico
Abstract Body:	**Background:** Septal reduction therapy is an established treatment for obstructive hypertrophic cardiomyopathy (HCM), although its impact on diastolic recovery remains uncertain. We evaluated haemodynamic improvement and persistent filling abnormalities after septal ablation. **Methods:** Prospective study including 55 patients with HCM undergoing alcohol or radiofrequency septal ablation. Echocardiographic and biochemical parameters were assessed before and after intervention using the Wilcoxon signed-rank test. **Results:** Septal reduction therapy produced significant haemodynamic improvement. LVOT gradient decreased by 43%, from 61.6 [19-91] to 35 mmHg [14.5-73] (p=0.001), while LVOT obstruction prevalence fell from 67.3% to 30.9% (p=0.02). Septal thickness and LV mass index also decreased significantly. However, no significant improvement was observed in LV filling indices, including E/e' ratio (p=0.7) and left atrial volume index (p=0.1), suggesting persistent myocardial stiffness. The right ventricle showed adaptive remodelling with prolonged RV isovolumic relaxation time and lower tricuspid regurgitation velocity (both p=0.04). **Conclusion:** In HCM, successful LVOT gradient reduction does not translate into immediate recovery of diastolic function.


ESC-style Forest Plot: Structural vs Functional Effects of Septal Ablation
TR Velocity (m/s)
RV IVRT (ms)
LAVI (mL/m²)
E/e′ ratio
LVOT Gradient (mmHg)
LV Mass Index (g/m²)
Septal Thickness (mm)
−40
−30
−20
−10
0
10
20
30
Median Change (Post – Pre)

Session Title:	**Saturday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	A BRIDGE TO A BROKEN HEART, TAKOTSUBO CARDIOMYOPATHY AND MYOCARDIAL BRIDGING PRESENTING AS STEMI
Author Block:	Kristian Guzman, Elswee Luis Vazquez Vega, Ariana Cotto, Hospital Damas, Ponce, PR, PR

Abstract Body:

Background: Takotsubo cardiomyopathy may mimic acute coronary syndrome, while myocardial bridging can produce dynamic ischemia and recurrent chest pain. Their coexistence may complicate diagnosis in patients presenting with ST-elevation myocardial infarction STEMI like symptoms and non obstructive coronary arteries.

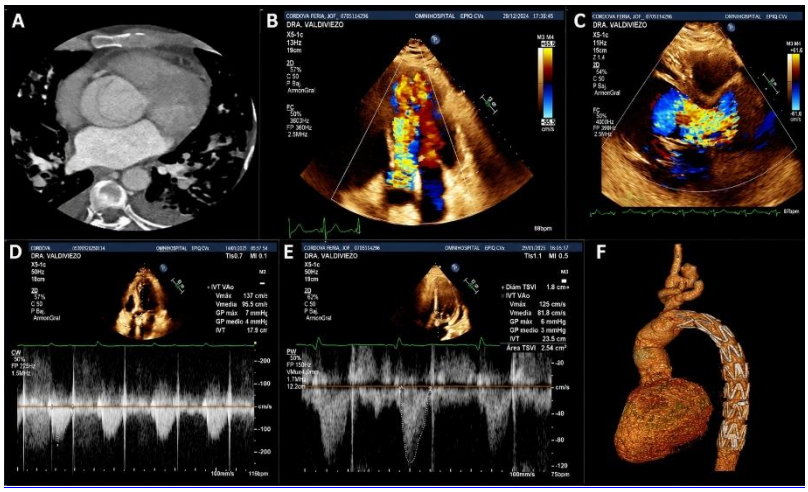
Methods: We report a 77-year-old woman with hypertension, type 2 diabetes mellitus, dyslipidemia, chronic kidney disease, and post surgical hypothyroidism presenting with recurrent oppressive chest pain radiating to the back and left arm associated with dyspnea and palpitations. Symptoms were frequently precipitated by emotional stress or exertion.

Results: Electrocardiography demonstrated ST-segment elevations concerning for STEMI, prompting emergent coronary angiography. Left heart catheterization revealed no acute coronary occlusion, although a mid-left anterior descending artery lesion with suspected myocardial bridging was identified. Left ventriculography showed an ejection fraction of 45% with severe apical hypokinesis. Transthoracic echocardiography demonstrated preserved basal wall motion with akinesis of the mid and apical left ventricular segments, consistent with Takotsubo cardiomyopathy. The patient remained hemodynamically stable without arrhythmias or cardiogenic shock and was discharged on medical therapy with outpatient cardiology follow-up.

Conclusion: This case highlights the diagnostic challenge of recurrent STEMI like presentations with non-obstructive coronary arteries and emphasizes a possible association between Takotsubo cardiomyopathy and myocardial bridging. Recognition of this overlap may prevent unnecessary intervention and support individualized medical management.

Session Title:	**Saturday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	POST-MI-HF: A SEX-INCLUSIVE PROGNOSTIC ALGORITHM FOR PREDICTING HEART FAILURE
Author Block:	İlyas Mammadyarovb[1], Babak Bahrami [2], SheydaBabayeva [3], Babak Bahrami, Nakhchivan State University, Nakhchivan, Azerbaijan, Nakhchivan health center, Nakhchivan, Azerbaijan
Abstract Body:	**Background:** Heart failure (HF) rehospitalization following a myocardial infarction (MI) is a frequent and serious complication. While the risk is higher in women, current risk scores are not sex-sensitive and lack a specific focus on HF. This study aims to develop a simple, clinically applicable prognostic algorithm (POST-MI-HF) for all post-MI patients, incorporating biological sex as a predictor. **Methods:** The algorithm is built upon eight variables with proven independent associations with post-MI HF admission that are measurable in routine clinical practice: age, sex (female), LVEF (preserved or reduced), diastolic dysfunction grade \ge2, depression (PHQ-9 \ge10), living alone, admission Killip class \ge \text{II}, and discharge NT-proBNP \ge1000 \text{ pg/mL}. Weighted points (0-2) were assigned to variables based on hazard ratios found in literature. The total score (0-12) is divided into four risk categories. **Results:** The algorithm proposes four risk categories:Low risk (0-2 points): 5-10% risk of HF admissionModerate risk (3-5 points): 15-25% riskHigh risk (6-8 points): 30-40% riskVery high risk (9-12 points): >45% riskFemale sex was added to the score as +1 point. Follow-up and intervention recommendations (phone monitoring, initiation of SGLT2i, depression treatment, home visits) are provided based on the risk category. **Conclusion:** POST-MI-HF is the first sex-aware algorithm to predict the risk of HF rehospitalization in all post-MI patients. Prospective validation and randomized trials are required to demonstrate its clinical efficacy.

Session Title:	**Saturday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	ACUTE TYPE A AORTIC DISSECTION COMPLICATED BY SEVERE AORTIC REGURGITATION AND REFRACTORY CARDIOGENIC SHOCK REQUIRING VENOARTERIAL EXTRACORPOREAL MEMBRANE OXYGENATION
Author Block:	JONATHAN CASTILLO, JUAN J. ZUÑIGA, ELSIE A. VALDIVIESO, HERMOGENES T. MUÑIZ, FREDDY A. BALDA, PAMELA N. BALDA, OMNIHOSPITAL, Guayaquil, Ecuador
Abstract Body:	**Background:** Acute type A aortic dissection complicated by severe aortic regurgitation may progress to refractory cardiogenic shock **Case:** A 38-year-old man presented with chest pain radiating to the jaw and back associated with pneumonia and respiratory failure. Computed tomography demonstrated Stanford type A aortic dissection involving the aortic root and ascending aorta with severe aortic regurgitation confirmed by echocardiography. Surgical intervention was initially delayed for respiratory stabilization. He subsequently underwent valve-sparing aortic root and arch reconstruction. During the immediate postoperative period, he developed refractory Society for Cardiovascular Angiography and Interventions stage D/E cardiogenic shock with severe biventricular dysfunction despite maximal vasoactive support. Echocardiography demonstrated left ventricular ejection fraction of 30%, vasoactive-inotropic score of 750 and cardiac power output of 0.35 watts. Rescue femorofemoral venoarterial extracorporeal membrane oxygenation was initiated with successful recovery **Decision-making:** Mechanical circulatory support provide a bridge to myocardial recovery and end-organ perfusion in refractory postoperative shock following acute aortic syndrome repair **Conclusion:** Multidisciplinary management and timely venoarterial extracorporeal membrane oxygenation support may be lifesaving in catastrophic acute aortic syndromes complicated by refractory cardiogenic shock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Session Title:	**Saturday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	REAL-WORLD THIRTY-DAY OUTCOMES ASSOCIATED WITH OUTPATIENT SGLT2 INHIBITOR THERAPY IN HEART FAILURE
Author Block:	Laura Yazmin Alonso Osorio, Irving E. Ortiz Y Cruz, Secondary-care hospital 53 IMSS Instituto Mexicano del Seguro Social, mexico, Mexico
Abstract Body:	**Background:** Despite growing evidence supporting sodium-glucose cotransporter-2 inhibitor (SGLT2i) therapy in heart failure, real-world outpatient outcome data remain limited **Methods:** We conducted a one-year retrospective observational study including adults hospitalized with clinically diagnosed heart failure. Patients were classified according to outpatient SGLT2i therapy at discharge. The primary outcome was 30-day rehospitalization **Results:** Fifty-one patients were included. Patients receiving SGLT2i therapy showed lower 30-day rehospitalization compared with patients without SGLT2i therapy (5.9% vs 29.4%). Patients receiving SGLT2i therapy also showed greater freedom from rehospitalization at 30 days (73.5% vs 29.4%). Mortality findings should be interpreted cautiously given the small sample size and baseline comorbidity burden **Conclusion:** Outpatient SGLT2i therapy was associated with favorable real-world thirty-day outcomes among patients hospitalized with clinically diagnosed heart failure

Session Title:	**Saturday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	POSTPARTUM HEART FAILURE OR TAKOTSUBO SYNDROME? A DIAGNOSTIC CHALLENGE IN THE PUERPERIUM
Author Block:	carlos manuel restrepo guette, Brian D. Viana, Jose David Carrillo, Frank David Baldovino Santis, Department of Internal Medicine, Universidad del Norte, Barranquilla, Colombia
Abstract Body:	**Background:** Takotsubo syndrome may rarely present during the postpartum period and closely mimic peripartum cardiomyopathy, creating diagnostic uncertainty in acute heart failure. **Case:** A 35-year-old woman presented presented in the late postpartum period with acute dyspnea and progressive heart failure symptoms following emotional stress. She required intensive care monitoring for acute decompensated heart failure. Electrocardiography showed nonspecific ST-segment abnormalities, while high-sensitivity troponin and B-type natriuretic peptide levels were elevated. Transthoracic echocardiography revealed severely reduced left ventricular systolic function with extensive apical and midventricular akinesia extending beyond a single coronary territory. Basal hypercontractility produced classic apical ballooning, initially raising suspicion for peripartum cardiomyopathy. Coronary angiography demonstrated no obstructive coronary artery disease. The patient received supportive heart failure therapy with progressive clinical improvement. Follow-up echocardiography at one month demonstrated complete recovery of left ventricular systolic function, confirming reversible stress-induced cardiomyopathy. **Decision-making:** The postpartum presentation and severe ventricular dysfunction strongly favored peripartum cardiomyopathy. However, apical ballooning, segmental wall motion abnormalities beyond a single vascular territory, absence of obstructive coronary disease, and complete ventricular recovery supported Takotsubo syndrome. **Conclusion:** Takotsubo syndrome should be considered in postpartum

patients presenting with acute heart failure and severe ventricular dysfunction to avoid misdiagnosis as peripartum cardiomyopathy.

Session Title: **Saturday Morning Poster Session**

Topic 1: Heart Failure and Cardiomyopathies

Publishing Title: PHYSICAL VS EMOTIONAL TRIGGERS IN TAKOTSUBO SYNDROME: INSIGHTS FROM A CARIBBEAN REGISTRY

Author Block: Joel Emilio Santana Fernandez, Pamela Pina Santana, Dary Deivy Varela Arache, Miguel Delgado, SR, Francisco Jose Mañan, Carlos Garcia Lithgow, SR, Cesar J. Herrera, CEDIMAT Cardiovascular Center, Santo Domingo, Dominican Republic

Abstract Body:

Background: Takotsubo syndrome (TS) remains undercharacterized in LATAM particularly in reference to triggers and clinical phenotypes. We described a Caribbean cohort and compared ventricular function by physical versus emotional triggers.

Methods: We analyzed 62 consecutive patients from a Dominican tertiary-center in the registry between 2016 and 2026. Demographic, clinical, triggers, and imaging variables were assessed. Comparisons between physical and emotional triggers excluded idiopathic/unidentified cases.

Results: Pts were predominantly women (92%), mean age 68.7 years, and most presented in Killip class I. Physical stressors were more frequent than emotional triggers (48% vs 27%), while 24% cases were classified as unidentified. Apical ballooning was the predominant morphologic pattern (68%), although non-apical variants accounted for nearly one-third of presentations. Among patients with identifiable triggers, physically triggered Takotsubo presented with lower LVEF than emotionally triggered cases (41% vs 47%, p=0.007). Follow-up LVEF, absolute EF improvement and normalization rates were similar between groups.

Conclusion: In this Caribbean registry, physical stressors were the most common identifiable trigger and were associated with greater initial systolic dysfunction, yet recovery was similar in both groups. Trigger type may influence initial severity more than short-term reversibility and highlight the clinical

heterogeneity of TS in this cohort.

Baseline Clinical Characteristics and Patients Phenotype for Takotsubo Syndrome

Variable	Parameter	Value / Frequency
Demographics	Mean age, years	68.7 ± 14.2
Baseline Risk Factors	Female sex	57 (92%)
	Hypertension	37 (59%)
	Diabetes	15 (24%)
	Prior cerebrovascular disease	3 (5%)
Clinical Status	Coronary angiography performed	45 (73%)
	Cardiac magnetic resonance performed	17 (27%)
	Killip class I at admission	48/60 (80%)
Trigger Factors†	Physical stressors	30 (48%)
	Emotional stressors	17 (27%)
	Idiopathic / unidentified	15 (24%)
Echocardiography	Baseline LVEF, %	44.2 ± 11.9
	Follow-up LVEF at 6 weeks, %‡	62.8 ± 7.7
	P value for LVEF recovery‡	<0.0001
Morphologic Patterns	Apical ballooning	42 (68%)
	Mid-ventricular	8 (13%)
	Basal / focal variants	12 (19%)

‡ Follow-up echocardiography available in 39 patients.
Values are presented as mean ± standard deviation or n (%), as appropriate. LVEF indicates left ventricular ejection fraction.

Session Title:	**Saturday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	GUIDELINE-DIRECTED MEDICAL THERAPY INTENSITY AT HOSPITAL DISCHARGE AND CLINICAL OUTCOMES IN HEART FAILURE: *A SYSTEMATIC REVIEW AND NETWORK META-ANALYSIS*
Author Block:	Sergio A. Gomez-Ochoa, Lyda Z. Rojas, Carlos A. Corona-Arias, Lizeth N. Quiroga-Pico, Laura V. Arciniegas-Landínez, Angie Y. Serrano, Angie C. Mendoza-Quiñonez, Katherin A. Gamboa, Alexandra Contreras, Juliana A. Hernandez-Vargas, Silvia J. Trujillo-Cáceres, Luisa Aguilera, Luis Eduardo Echeverria, Fundación Cardiovascular de Colombia, Floridablanca, Colombia
Abstract Body:	**Background:** Contemporary heart failure (HF) guidelines recommend early initiation of four foundational drug classes in HF with reduced ejection fraction. However, real-world prescription rates of comprehensive guideline-directed medical therapy (GDMT) at discharge remain low, and comparative data in this setting is limited. We aimed to synthesize the association between GDMT intensity prescribed at or before hospital discharge and clinical outcomes. **Methods:** MEDLINE and EMBASE were searched through March 2026 (PROSPERO CRD420261352137). A frequentist random-effects network meta-analysis estimated pooled effect ratios across four treatment nodes (single/none, double, triple, quadruple therapy) for all-cause mortality (ACM; primary), the composite of ACM and heart failure hospitalization (HFH), HFH alone, and cardiovascular (CV) mortality. **Results:** Twenty-seven studies (26 observational, 1 RCT), including 73,174 patients, were analyzed. Compared with single/no GDMT, quadruple therapy was associated with lower ACM (relative effect [RE] 0.129; 95% confidence interval [CI] 0.060-0.278), composite ACM/HFH (RE 0.520; 95% CI 0.360-0.751), HFH (RE 0.552; 95% CI 0.399-0.764) and CV mortality (RE 0.081; 95% CI 0.016-0.399). A consistent ordinal gradient was observed across outcomes, favoring quadruple therapy, followed by triple, double, and single/no therapy. This ranking was preserved in sensitivity analyses restricted to hazard ratios, stratified by follow-up duration, and in an alternative network anchored to

incomplete therapy.
Conclusion: Greater GDMT intensity at or before discharge was associated with progressively lower mortality and HFH, with quadruple therapy ranking first across all outcomes. These findings support in-hospital optimization of foundational HF therapies before discharge, while underscoring the need for adequately powered randomized trials of protocolized quadruple initiation.

Session Title:	**Saturday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	A SILENT PERFORATION WITH AN INFECTIOUS TWIST: RECURRENT MASSIVE HEMOPERICARDIUM AND DEVICE-RELATED ENDOCARDITIS
Author Block:	Santiago Duque, Juan Andres Muñoz-Ordoñez, Gabriel R. Lopez-Mora, Valeria Azcarate-Rodriguez, Camilo A. Calderon-Miranda, Alvaro D. Peña-Gonzalez, Juan Esteban Gomez-Mesa, Fundación Valle del Lili, Cali, Colombia
Abstract Body:	**Background:** Late right ventricular (RV) lead perforation is an exceptional complication in implantable cardioverter-defibrillator (ICD) carriers. **Case:** A 52-year-old man with obstructive hypertrophic cardiomyopathy (HCM) and a 5-year-old dual-chamber ICD presented asymptomatic with massive pericardial effusion. Transthoracic echocardiography (TTE) showed >60 mm effusion with systo-diastolic RV wall compression (Figure 1A); cardiac computed tomography (CCT) showed the lead crossing the RV apex, confirming perforation (Figure 1B). Pericardiocentesis drained 900 mL. Minithoracotomy completed lead removal after failed transvenous extraction due to RV collapse with ventricular tachycardia. Post-extraction transesophageal echocardiography (TEE) showed bilateral vegetations consistent with device-related endocarditis. Six weeks of intravenous meropenem led to recovery. The patient reported hemopericardium 3 and 4 years after ICD implantation, requiring pericardiocentesis. **Decision-making:** Late perforation reflects chronic stress at the thin RV apex. CCT is the diagnostic gold standard because TTE may miss mural perforation. If extraction fails by fibrotic adherence, hybrid surgery is curative. Post-extraction TEE may reveal occult lead endocarditis. **Conclusion:** Late lead perforation should be suspected in ICD carriers with recurrent hemopericardium. Multimodality imaging guides diagnosis and

management; extraction and TEE may be essential when endocarditis coexists.

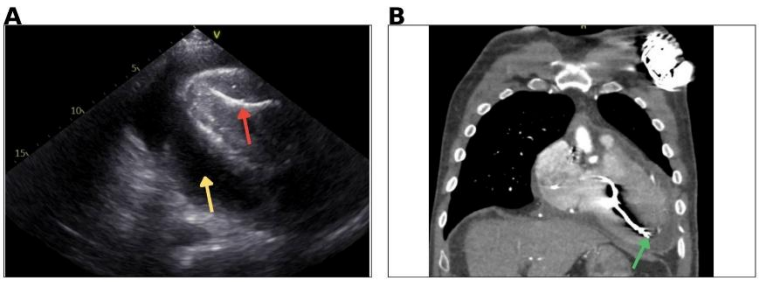

Figure 1. Multimodality imaging of late right ventricular defibrillator lead perforation. A: Transthoracic echocardiography showing massive pericardial effusion (yellow arrow) and the defibrillator lead in contact with the right ventricular myocardium (red arrow). B: Chest computed tomography confirming right ventricular apical lead perforation, with the lead tip extending beyond the myocardial contour (green arrow).

Session Title:	**Saturday Morning Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	BETWEEN TRAUMA AND INFLAMMATION: THE MYSTERY BEHIND A MASSIVE PERICARDIAL EFFUSION
Author Block:	PABLO BELLO, Mildred Ileana Urena Rivera, Clara Luz Encarnacion, Edgar D. Cadena Barranco, Katihurca Almonte Montes de Oca, Katerin Sánchez Jiménez, Vielka Vanessa Cabral Rodriguez, felixander abreu, Alexander Valentin Nova Torres, Seily Nova, Ivan Nuñez, Eladia Reinoso Evangelista, Yahina Sofia Duarte, Carla Marquez Figuereo, Grace Paredes, Cornelia Vasquez, mauricia valdez poche, Asociación instituto Dominicano de Cardiologia, Santo Domingo, Dominican Republic
Abstract Body:	**Background:** COVID-19 MAY CAUSE SEVERE CARDIOVASCULAR COMPLICATIONS, INCLUDING CARDIAC TAMPONADE, EVEN IN PREVIOUSLY HEALTHY INDIVIDUALS. **Case:** A 32-YEAR-OLD MAN WITH NO PRIOR MEDICAL HISTORY PRESENTED WITH PROGRESSIVE DYSPNEA. TWO MONTHS EARLIER, HE SUSTAINED THORACIC TRAUMA IN A MOTOR VEHICLE ACCIDENT FOLLOWED BY MILD PLEURITIC CHEST PAIN. ECG SHOWED LOW-VOLTAGE QRS COMPLEXES AND ELECTRICAL ALTERNANS. CHEST RADIOGRAPHY DEMONSTRATED CARDIOMEGALY, WHILE TRANSTHORACIC ECHOCARDIOGRAPHY REVEALED MASSIVE CIRCUMFERENTIAL PERICARDIAL EFFUSION, RIGHT-SIDED CHAMBER COLLAPSE, AND SWINGING HEART, CONSISTENT WITH CARDIAC TAMPONADE. CHEST CT CONFIRMED SEVERE PERICARDIAL EFFUSION WITH COMPRESSION OF RIGHT CARDIAC CHAMBERS. **Decision-making:** URGENT PERICARDIECTOMY WAS PERFORMED WITH DRAINAGE OF 1,800 CC OF SEROHEMATIC FLUID; AN ADDITIONAL 4,000 CC WERE DRAINED DURING HOSPITALIZATION. EXTENSIVE ETIOLOGIC WORKUP, INCLUDING AUTOIMMUNE, NEOPLASTIC, AND TUBERCULOSIS STUDIES, WAS NEGATIVE. SARS-COV-2 WAS THE ONLY POSITIVE TEST. PERICARDIAL BIOPSY DEMONSTRATED CHRONIC PERICARDITIS. **Conclusion:** THIS CASE HIGHLIGHTS THE POSSIBLE COMBINED ROLE OF PRIOR THORACIC TRAUMA AND COVID-19-RELATED INFLAMMATION IN THE

DEVELOPMENT OF MASSIVE PERICARDIAL EFFUSION AND CARDIAC TAMPONADE IN A YOUNG PATIENT. EARLY DIAGNOSIS, MULTIMODALITY IMAGING, AND PROMPT SURGICAL INTERVENTION ARE ESSENTIAL FOR FAVORABLE OUTCOMES.

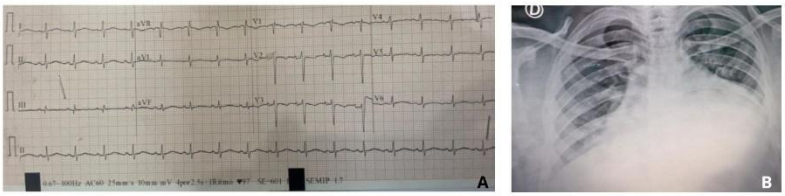

Figure 1.

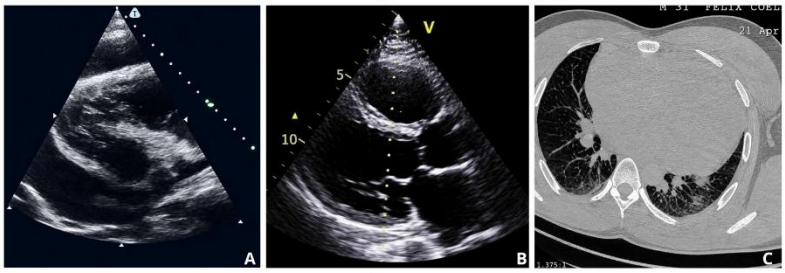

Figure 2.

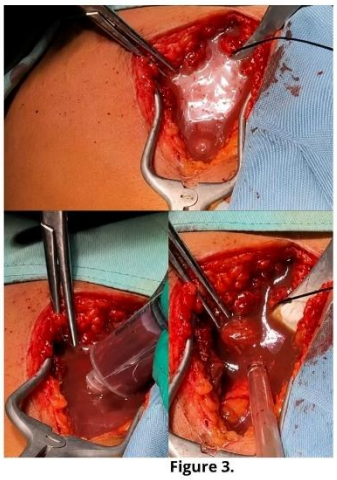

Figure 3.

Figure 1. A. Electrocardiogram showing sinus rhythm with low voltage and electrical alternans. **B. Chest radiograph** demonstrating severe cardiomegaly with signs of pulmonary congestion. **Figure 2. A. Transthoracic echocardiogram** The parasternal long-axis view showing severe pericardial effusion with chamber collapse and a "swinging heart," findings suggestive of cardiac tamponade. **B.** Follow-up transthoracic echocardiogram in the parasternal long-axis view demonstrating mild pericardial effusion, left ventricular ejection fraction of 76%, and findings suggestive of concentric left ventricular hypertrophy. **C. Chest computed tomography** demonstrating severe pericardial effusion with cardiomegaly and compression of the right-sided cardiac chambers. **Figure 3. Pericardiectomy** with opening of the pericardial sac and drainage of abundant serohematic fluid, consistent with severe pericardial effusion, in addition to a thickened and inflamed pericardium.

Session Title:	**Saturday Morning Poster Session**
Topic 1:	Interventions and Ischemic Heart Diseases
Publishing Title:	BEFORE THE BALLOON: DELAYED SYMPTOM-TO-CARE PRESENTATION AND OUTCOMES IN STEMI: LESSONS FROM A LATIN AMERICAN NATION
Author Block:	Marlon Miguel Espaillat, Miguel Delgado, SR, Pamela Pina Santana, Sara Divanne González, Carlos M. Martinez, Carlos Garcia Lithgow, SR, Cesar J. Herrera, CEDIMAT Cardiovascular Center, Santo domingo, Dominican Republic
Abstract Body:	**Background:** Prehospital delay contributes substantially to total ischemic time in STEMI, yet it remains less studied than in-hospital reperfusion metrics, particularly in resource-limited settings. **Methods:** We retrospectively analyzed consecutive STEMI patients admitted to a PCI-capable tertiary CV center in Santo Domingo, Dominican Republic. Symptom-to-care time was defined as self-reported symptom onset to first medical contact; delayed presentation (DP) was defined as >120 minutes. **Results:** Among 268 reperfusion-eligible patients, 161 (60%) presented late. Baseline risk profile and admission severity were similar between delayed and early presenters, but interhospital transfer was more frequent among DP patients (52% vs 38%; p=0.032); DP was associated with a less favorable in-hospital course, including a trend towards higher mortality (14% vs 7.5%), cardiogenic shock (16% vs 10%), and acute kidney injury (14% vs 7.6%) although these differences were not statistically significant. Age (aOR 1.05; 95% CI 1.02-1.09; p = 0.004) and cardiogenic shock on admission(aOR 39.5, 95% CI 14.0-126, p<0.001) were independent predictors of mortality. **Conclusion:** In this STEMI cohort, prehospital delay affected 3 in 5 patients, clustered with interhospital transfer and it was associated with worse clinical outcomes, supporting national STEMI network policies to reduce symptom-to-care delay. **$$MISSING OR BAD GRAPHIC SPECIFICATION (8ACDED80-6517-462B-A641-**

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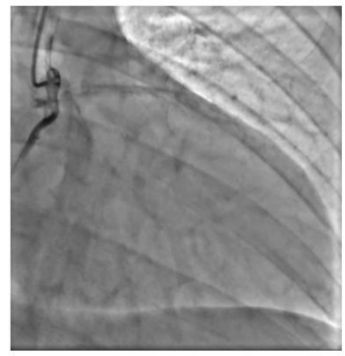
Symptom-to-Care Presentation Status Among Patients With STEMI

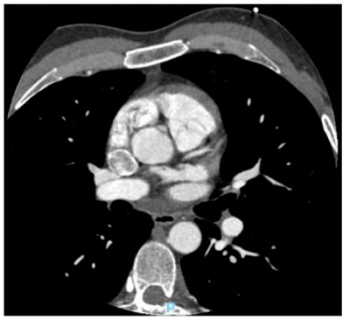
Variables	Delayed (>120 min) n=161	Early (≤120 min) n=107	p-value
Baseline characteristics			
Age, years	64 (55, 72)	63 (56, 72)	0.9
Sex			0.071
Female sex	52 (32)	23 (21)	
Male sex	109 (68)	84 (79)	
Hypertension	132 (82)	83 (78)	0.4
Diabetes mellitus	98 (61)	61 (57)	0.6
Dyslipidemia	63 (39)	41 (38)	1.00
Self-reported obesity	7 (26)	20 (56)	0.023
Current smoking	31 (19)	30 (28)	0.2
Direct admission route	77 (48)	65 (62)	0.032
Transfer admission route	83 (52)	40 (38)	
Clinical severity at presentation			
Killip class			0.6
I	116 (72)	80 (75)	
II	28 (17)	15 (14)	
III	11 (6.8)	5 (4.7)	
IV	6 (3.7)	7 (6.5)	
Cardiogenic shock on admission	18 (11)	9 (8.4)	0.5
Cardiac arrest on arrival	15 (9.3)	9 (8.4)	1.00
In-hospital outcomes			
Death	23 (14)	8 (7.5)	0.12
Acute heart failure	32 (21)	21 (20)	1.0
Cardiogenic shock	25 (16)	11 (10)	0.3
Major arrhythmias	27 (17)	21 (20)	0.6
Major bleeding	2 (1.3)	4 (3.8)	0.2
Stroke	2 (1.3)	2 (1.9)	1.0
Acute kidney injury	22 (14)	8 (7.6)	0.12
Prolonged hospitalization >10 days	31 (19)	15 (14)	0.3
Length of stay, days	6.0 (4.0, 8.0)	6.0 (4.0, 8.0)	0.7

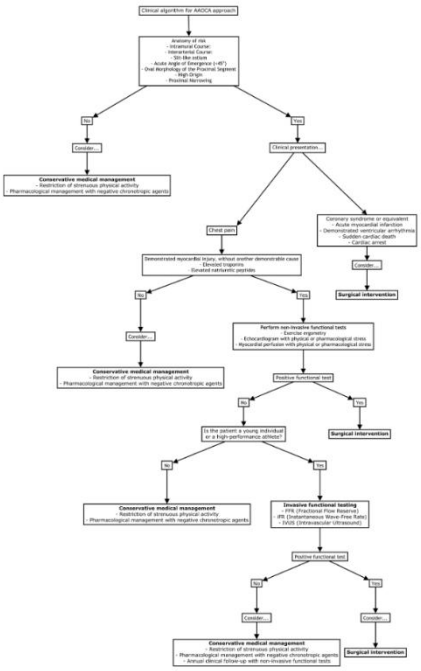
Values are presented as median (Q1, Q3) or n/N (%). p-values were obtained using Wilcoxon rank sum test for continuous variables and Fisher's exact test for categorical variables.

Session Title:	**Saturday Morning Poster Session**
Topic 1:	Interventions and Ischemic Heart Diseases
Publishing Title:	ANOMALOUS AORTIC ORIGIN OF CORONARY ARTERIES CASE REPORT AND DECISION MAKING ALGORITHM
Author Block:	Sebastian Arenas, Diana Vargas Vergara, Jarvi Jimenez, Nelson Moreno, Fundación Universitaria Sanitas, Bogotá, Colombia, Clínica Universitaria Colombia, Bogotá, Colombia
Abstract Body:	**Background:** Anomalous aortic origin of the coronary arteries is a rare anomaly associated with ischemia and cardiovascular events during exercise. **Case:** A 41 year old male patient, a high performance athlete, presented with chest pain with intense exercise, dyspnea, diaphoresis, and a significant elevation of troponins consistent with NSTEMI type 2. The electrocardiogram showed no ischemic changes, and the echocardiogram demonstrated preserved ventricular function. Coronary angiography ruled out obstructive disease and showed a high anomalous origin of the right coronary artery. Coronary CT angiography documented origin in the ascending aorta with non atherosclerotic proximal stenosis suggestive of an intramural course. Although myocardial perfusion was negative for inducible ischemia, the case was discussed by the cardiac team, and surgical correction was decided upon. **Decision-making:** AAOCA can manifest as acute coronary syndrome in the absence of significant atherosclerosis. Coronary CT angiography allows the identification of high risk anatomical findings not always evident on angiography or functional tests. **Conclusion:** AAOCA remains a diagnostic and therapeutic challenge. Multimodal evaluation and multidisciplinary discussion are essential;

therefore, a diagnostic and management algorithm is proposed.







Session Title:	**Saturday Morning Poster Session**
Topic 1:	Interventions and Ischemic Heart Diseases
Publishing Title:	HYBRID REVASCULARIZATION (SURGERY + HEMODYNAMICS) IN MULTIVESSEL CORONARY ARTERY DISEASE: CARDIOVASCULAR OUTCOMES AND GRAFT PATENCY AT 5 YEARS: A SYSTEMATIC REVIEW
Author Block:	Jorge Eduardo Zapata Arango, Universidad Cooperativa de Colombia., Medellín., Colombia
Abstract Body:	**Background:** Hybrid coronary revascularization (HCR) combines LIMA-LAD grafting with drug-eluting stents for non-LAD lesions. This systematic review compares 5-year outcomes of HCR versus conventional CABG in left main multivessel disease (intermediate SYNTAX score 23-32). **Methods:** Systematic search of six databases (Jan 15, 2026) identified 12 studies (1 RCT, 2 meta-analyses, 9 cohorts) comparing HCR vs. CABG. Outcomes: MACE, graft patency (angio-CT at 1 and 5 years), hospital stay. **Results:** Five-year LIMA-LAD patency ranged 90-98%. The HREVS trial showed non-inferior MACCE (51.1% vs. 51.1%). A meta-analysis (4,226 patients) found shorter hospital stay (2-4 days) and lower transfusion rates with HCR, with similar mortality (HR 1.09). However, repeat revascularization was higher with HCR (HR 2.01). Complete revascularization predicted better survival (91% vs. 64% at 5 years). **Conclusion:** HCR achieves excellent 5-year LIMA-LAD patency and comparable survival to CABG in selected patients, with faster recovery but higher repeat revascularization. Complete revascularization is essential for optimal outcomes.

Session Title:	**Saturday Morning Poster Session**
Topic 1:	Interventions and Ischemic Heart Diseases
Publishing Title:	BILATERAL CORONARY-PULMONARY FISTULAS CONTRIBUTING TO DILATED CARDIOMYOPATHY: PERCUTANEOUS COIL EMBOLIZATION WITH INTENTIONAL PARTIAL OCCLUSION
Author Block:	Juan Pinilla, JAIME PARRA, Cesar Hernandez, CES University, Medellin, Colombia
Abstract Body:	**Background:** Coronary-pulmonary fistulas (CPFs) are rare congenital anomalies, particularly when bilateral. Although patients may remain asymptomatic, hemodynamically significant fistulas can produce ventricular volume overload and dilated cardiomyopathy. When intervention is warranted, transcatheter closure has emerged as the preferred therapeutic strategy. **Case:** A 60-year-old woman with a history of hypertension and heavy smoking presented with new-onset heart failure symptoms and a continuous murmur. Echocardiography showed dilated cardiomyopathy with an ejection fraction of 30%. Coronary angiography excluded significant atherosclerotic disease and revealed bilateral CPFs: a small, tortuous fistula arising from the proximal left circumflex artery (LCX) and a medium-sized, two-branch fistula arising from the right coronary artery (RCA), both draining into the main pulmonary artery. Right heart catheterization confirmed a significant left-to-right shunt. **Decision-making:** Following heart team discussion, percutaneous coil embolization was performed via left radial access under anticoagulation. The LCX fistula was completely occluded using 4x10 mm and 3x10 mm coils, without compromise of native coronary flow. The RCA fistula was partially occluded using 6x20 mm and 8x30 mm coils; a small residual shunt was intentionally preserved because of the fistula's proximity to the conduction system. The patient tolerated the procedure well, with no complications, arrhythmias, or conduction disturbances in the post-procedural period. Guideline-directed medical therapy for heart failure was initiated. **Conclusion:** Bilateral CPFs are rare but important causes of ventricular volume overload and should be considered in the evaluation of non-ischemic dilated cardiomyopathy. Percutaneous coil embolization is a feasible and

effective treatment option, and in selected cases, intentional partial occlusion may represent a reasonable and safe strategy when complete closure poses an unacceptably high risk to the conduction system. Follow-up imaging is required to confirm reverse remodeling and clinical benefit after closure.

Session Title:	**Saturday Morning Poster Session**
Topic 1:	Interventions and Ischemic Heart Diseases
Publishing Title:	SEX DISPARITIES AMONG YOUNG STEMI PATIENTS ACROSS LATIN AMERICA

Author Block: Sara Divanne González, Pamela Pina Santana, Alexandra Arias-Mendoza, Marlon Miguel Espaillat, Miguel Delgado, SR, Ana M. Coeto, Edith Tonalli Adame-Avilés, Dulce Renee Soto Gonzalez, Hector González, Paula Polanco-Lou, Sebastian Pérez, Sonia Margarita Moreno-Díaz, Jose Alfaro, Iván Paredes Heredia, Diego Rengifo, Diana Llumipanta, Cristian Eduardo Vimos Gagñay, Liliana Cardenas, JAIME SALGUEIRO BUSTILLOS, Jose Antonio Cornejo-Guerra, Carlos Garcia Lithgow, SR, Cesar J. Herrera, LATAM-STEMI Network, CEDIMAT Cardiovascular Center, Santo Domingo, Dominican Republic, Instituto Nacional de Cardiología Ignacio Chavez, Ciudad de México, Mexico

Abstract Body:

Background: Young patients with STEMI represent a distinct population, yet the interplay between sex, coronary artery features, and short-term outcomes in Latin America remains poorly defined.

Methods: We retrospectively analyzed consecutive young STEMI patients (<45 years) from 4 Latin American regions: Caribbean, Central America, South America and Mexico. Baseline characteristics, clinical presentation, angiographic findings, treatment metrics, and in-hospital outcomes were compared by sex.

Results: Out of 5,766 subjects, 445 were young, 74 (16.6%) women. Median age was similar between sexes (41 vs 40 years, p>0.9). Compared to men, women suffered more hypertension, diabetes, prior stroke/TIA, higher obesity burden, markedly higher rates of suspected/confirmed spontaneous coronary artery dissection and less presence of multivessel disease. Clinical severity at presentation, reperfusion strategy, LVEF, and in-hospital mortality were similar between sexes. Importantly, no sex-based differences were observed in door-to-device or door-to-needle times.

Conclusion: In this series, young women represented a minority of STEMI cases, showed a distinct profile characterized by greater cardiometabolic burden, a higher prevalence of non-atherosclerotic coronary artery disease,

with similar reperfusion times and in-hospital outcomes when compared to men.

Sex-based differences among young STEMI patients in Latin America

Variable	Overall N = 445[1]	Sex		p-value[2]
		Women N = 74[1]	Men N = 371[1]	
Age (years)	40.0 [37.0, 43.0]	41.0 [37.0, 43.0]	40.0 [37.0, 43.0]	1.0
BMI (kg/m²)	26.8 [24.9, 30.0]	28.7 [24.1, 32.5]	26.4 [24.9, 29.5]	0.2
Hypertension	139 (31.2)	33 (44.4)	106 (28)	0.010
Diabetes mellitus	97 (21.8)	26 (35.1)	71 (19.1)	0.004
Dyslipidemia	56 (12.6)	6 (8.1)	50 (13.5)	0.3
Smoking history (Former/Current)	176 (39.6)	10 (13.5)	166 (44.7)	<0.001
Self-reported obesity	21 (27.3)	9 (45.0)	12 (21.1)	0.076
Chronic kidney disease	4 (0.9)	1 (1.4)	3 (0.8)	1.00
Prior MI	25 (5.6)	1 (1.4)	24 (6.5)	0.14
Prior stroke/TIA	3 (0.7)	3 (4.7)	0 (0.0)	0.001
Atypical presentation	14 (3.4)	4 (6.3)	10 (2.9)	0.3
Killip class				0.7
I	289 (65.5)	44 (61.1)	245 (66.4)	
II	134 (30.4)	25 (34.7)	109 (29.5)	
III-IV	18 (4.1)	3 (4.2)	15 (4.1)	
LVEF <40%	112 (28.3)	16 (25.0)	96 (28.9)	0.6
ECG location				0.8
Anterior	191 (46.6)	32 (50.8)	159 (45.8)	
Inferior	203 (49.5)	30 (47.6)	173 (49.9)	
Inferolateral/Lateral	13 (3.2)	1 (1.6)	12 (3.5)	
Posterior	2 (0.5)	0 (0.0)	2 (0.6)	
Cardiogenic shock on arrival	15 (3.5)	3 (4.2)	12 (3.3)	1.00
Cardiac arrest on arrival	6 (1.4)	0 (0.0)	6 (1.7)	0.6
LDL cholesterol (mg/dL)	112.0 [86.0, 136.0]	104.0 [81.0, 135.8]	113.0 [87.0, 136.0]	0.3
HDL cholesterol (mg/dL)	35.5 [30.9, 43.0]	39.0 [32.8, 47.5]	35.3 [30.0, 41.7]	0.019
Triglycerides (mg/dL)	158.0 [117.0, 216.0]	147.0 [108.0, 215.0]	160.0 [119.0, 219.0]	0.3
Reperfusion strategy				0.8
Primary PCI	143 (33.0)	22 (31.4)	121 (33.3)	
Only Thrombolysis	29 (6.7)	4 (5.7)	25 (6.9)	
Pharmaco-Invasive	147 (33.9)	22 (31.4)	125 (34.4)	
None	114 (26.3)	22 (31.4)	92 (25.3)	
Door-to-device time (min)	62.0 [40.0, 90.0]	74.0 [40.0, 115.0]	62.0 [40.0, 87.0]	0.4
Door-to-needle time (min)	45.0 [30.0, 90.0]	40.0 [28.0, 90.0]	45.0 [30.0, 90.0]	1.0
Multivessel disease	128 (31.1)	17 (24.3)	111 (32.6)	0.2
Obstructive atherosclerosis	172 (44.0)	25 (42.4)	147 (44.3)	0.9
Suspected/confirmed SCAD	18 (4.6)	11 (18.6)	7 (2.1)	<0.001
MINOCA / non-obstructive	23 (6.0)	3 (5.2)	20 (6.2)	1.0
In-hospital mortality	10 (2.3)	1 (1.4)	9 (2.4)	0.9
In-hospital complications*	63 (15.8)	10 (15.6)	53 (15.8)	1.0
Length of stay (days)	6.0 [4.0, 9.0]	7.0 [4.0, 10.0]	6.0 [4.0, 9.0]	0.036

[1]Median [IQR]; n (%)

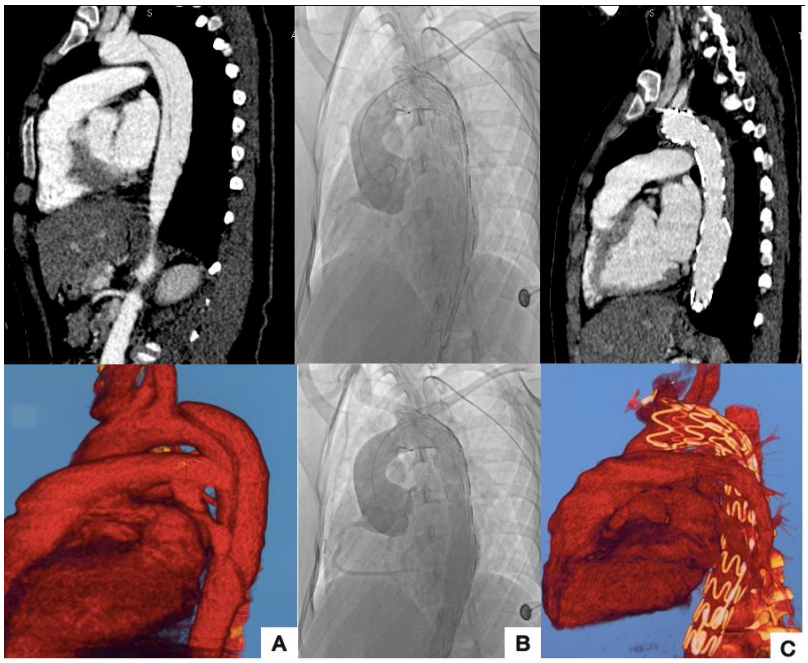
[2]Wilcoxon rank sum test; Pearson's Chi-squared test.

*In-hospital complications included acute heart failure, in-hospital cardiogenic shock, major arrhythmias, or acute kidney injury.

Abbreviations: BMI, body mass index; CKD, chronic kidney disease; ECG, electrocardiogram; HDL, high-density lipoprotein; IQR, interquartile range; LDL, low-density lipoprotein; LVEF, left ventricular ejection fraction; MI, myocardial infarction; MINOCA, myocardial infarction with non-obstructive coronary arteries; PCI, percutaneous coronary intervention; RF, risk factors; SCAD, spontaneous coronary artery dissection; STEMI, ST-segment elevation myocardial infarction; TIA, transient ischemic attack.

Session Title:	**Saturday Morning Poster Session**
Topic 1:	Interventions and Ischemic Heart Diseases
Publishing Title:	BREAKING NEW GROUND: FIRST CASE OF ENDOPROSTHESIS PLACEMENT IN AORTIC DISSECTION IN A PUBLIC HOSPITAL IN A POSTPARTUM PATIENT WITH MARFAN SYNDROME
Author Block:	Rafael Jose Hernandez, Roosevelt Hospital, Guatemala, Guatemala
Abstract Body:	**Background:** Type B aortic dissection is a life-threatening condition. Advances in its detection and treatment increase life expectancy. Ten percent of patients with Marfan syndrome (MFS) have this type of dissection, and pregnancy itself increases the risk of developing it fivefold. **Case:** A 19-year-old female patient with MFS, history of mother who died from aortic dissection during her second pregnancy, patient gave birth outside of hospital, 1 week later consulted due to history of chest pain lasting 4 hours with lancinating interscapular radiation. A thoracic angiotomography was performed, documenting a Stanford type B aortic dissection with an entry point in the region distal to the left subclavian artery up to the T8 level. Intravenous therapy was therefore initiated immediately, achieving heart rate and blood pressure targets so that an endoprosthesis could be placed. **Decision-making:** However, pregnancy continues to be a significant risk factor, for which endovascular treatment is the least invasive method compared to surgery. In our context, due to the risk involved, it was decided to use endovascular treatment, thus achieving the first case of endovascular thoracic aortic repair (TEVAR) in MFS in a public hospital. **Conclusion:** TEVAR improves survival compared to surgery; however, it is not available in the public sector in developing countries, so timely diagnosis and multidisciplinary and interinstitutional management will standardize this

procedure in our context.



A. Diagnostic angiotomography in sagittal plane showing aortic dissection with 3D reconstruction. **B.** Aortography with endoprosthesis in place. **C.** Angiotomography after endoprosthesis placement with 3D reconstruction.

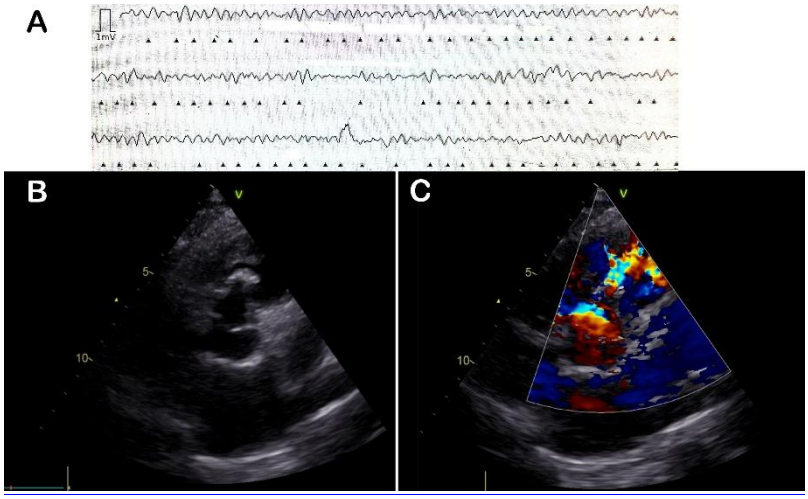
Session Title:	**Saturday Morning Poster Session**
Topic 1:	Interventions and Ischemic Heart Diseases
Publishing Title:	BEYOND NORMAL CORONARIES: AUTOIMMUNE MICROVASCULAR ISCHEMIA PRESENTING AS MINOCA
Author Block:	carlos manuel restrepo guette, Juan Camilo Garcia Dominguez, Fabiana Curvelo, Orlando Gomez, Maria Paula Avila Bareño, Juan David Lopez, Internal Medicine Department - Universidad del Norte, Barranquilla, Colombia
Abstract Body:	**Background:** Myocardial infarction with non-obstructive coronary arteries (MINOCA) is a heterogeneous syndrome requiring identification of the underlying ischemic mechanism. Coronary microvascular dysfunction related to autoimmune disease remains an underrecognized cause of myocardial ischemia. **Case:** A 49-year-old woman with hypertension, diabetes, dyslipidemia, and obesity presented with recurrent chest pain and mild troponin elevation. Electrocardiography showed nonspecific repolarization abnormalities, while transthoracic echocardiography demonstrated preserved biventricular function without regional wall motion abnormalities. Coronary angiography revealed non-obstructive coronary arteries, consistent with MINOCA. Cardiac magnetic resonance showed preserved ventricular structure and function with focal inferolateral perfusion abnormalities compatible with coronary microvascular ischemia. During hospitalization, the patient developed radial artery and inferior vena cava thrombosis. Additional findings included recurrent oral ulcers, livedo reticularis, alopecia, and leukopenia. Immunologic evaluation confirmed systemic lupus erythematosus with persistent lupus anticoagulant positivity. Medical management included high-intensity lipid-lowering therapy, beta-blockade, trimetazidine, and long-term anticoagulation. **Decision-making:** MINOCA should be considered a working diagnosis requiring further evaluation beyond coronary angiography. In this case, multimodality imaging and systemic thrombotic manifestations suggested autoimmune-mediated endothelial injury and coronary microvascular dysfunction as the mechanism of myocardial ischemia. Recognition of

systemic inflammatory and prothrombotic disorders is critical in patients with MINOCA and persistent ischemic symptoms despite non-obstructive coronary arteries.

Conclusion: Autoimmune-mediated coronary microvascular dysfunction should be considered in patients presenting with MINOCA and systemic thrombotic manifestations, as early recognition may significantly alter diagnostic evaluation and long-term management.

Session Title:	**Saturday Morning Poster Session**
Topic 1:	Interventions and Ischemic Heart Diseases
Publishing Title:	EMERGENCY SURGICAL REPAIR IN A POST-CARDIAC ARREST PATIENT WITH RUPTURE SINUS OF VALSALVA ANEURYSM
Author Block:	Gustavo Adrian Medina Avalos, Demian Casanova Campos, Alberto Isaí Rodríguez Vázquez, Azucena Maribel Perez Perez, Jose Abraham Luna Herbert, Lizbeth Moreno Cuevas, José Alfredo Delgado Cruz, SR, Carlos Ramirez, Universidad Autónoma de Baja California, Tijuana, Mexico, Instituto Nacional de Cardiología - Ignacio Chávez, Mexico City, Mexico
Abstract Body:	**Background:** The Sinus Valsalva Aneurysms (SVA) are a rare disorder with an incidence of 0.6-3% of all congenital heart defects. Rupture can cause acute heart failure, tamponade, acute coronary syndrome, or sudden death, making it a surgical emergency. **Case:** Emergency medical services attended a 33-year-old man who suffered cardiac arrest after exercising in a park; he was found in ventricular fibrillation and successfully cardioverted on site. In the emergency room, auscultation revealed a continuous murmur. An echocardiogram showed a rupture of a right SVA and bicuspid aortic valve. **Decision-making:** Given the poor prognosis without treatment, the patient was taken for emergency surgery. He underwent open aortic root replacement with implantation of a mechanical aortic valve with a satisfactory postoperative recovery. Notably, approximately 10% of ruptured SVA cases are associated with a bicuspid aortic valve. **Conclusion:** SVA that could be fatal if the diagnosis is delayed. Early

recognition and timely management are crucial for patient survival.



Session Title:	**Saturday Morning Poster Session**
Topic 1:	Interventions and Ischemic Heart Diseases
Publishing Title:	ENDOVASCULAR RENAL DENERVATION AS A TARGETED THERAPY FOR REFRACTORY LOIN PAIN HEMATURIA SYNDROME: A CASE REPORT
Author Block:	Juan Pinilla, JAIME PARRA, Miguel Botero Londoño, JUAN SEBASTIAN GOMEZ VILLALOBOS, Cesar Hernandez, CES University, Medellin, Colombia
Abstract Body:	**Background:** Loin Pain Hematuria Syndrome (LPHS) is a rare entity characterized by debilitating flank pain and hematuria in the absence of identifiable urological pathology. Conventional management is frequently limited to high-dose opioid therapy, while surgical interventions such as renal autotransplantation carry substantial morbidity. Catheter-based renal denervation (RDN), traditionally used for resistant hypertension, has emerged as a minimally invasive strategy with potential neuromodulatory benefit. **Case:** A 26-year-old man with a history of ankylosing spondylitis and rheumatoid arthritis presented with persistent right-sided loin pain and recurrent gross hematuria with predominantly isomorphic erythrocytes. Extensive diagnostic evaluation, including angio-computed tomography, renal duplex ultrasonography, and ureteroscopy, excluded Nutcracker syndrome, vascular malformations, and obstructive urolithiasis. Renal biopsy demonstrated no significant pathological abnormalities, and polymerase chain reaction testing for genitourinary tuberculosis was negative. Despite multimodal pain management, including opioid rotation, ketamine infusions, and intravenous lidocaine, symptoms remained refractory. **Decision-making:** Following multidisciplinary discussion, endovascular RDN was pursued as a neuromodulatory strategy for refractory LPHS. The procedure was performed using the Symplicity Spyral RDN system. High-density circumferential ablation was achieved with 24 radiofrequency applications in the right renal artery and 10 in the left renal artery, targeting distal and branch vessel segments to maximize interruption of adventitial sympathetic afferent pathways. The procedure was completed without immediate complications. **Conclusion:** LPHS remains a challenging diagnosis with limited therapeutic

options for patients refractory to conventional medical therapy. This case highlights the technical feasibility of catheter-based RDN as a minimally invasive treatment strategy for refractory visceral renal pain. In selected patients, RDN may represent a safe and promising alternative.

Session Title: **Saturday Morning Poster Session**

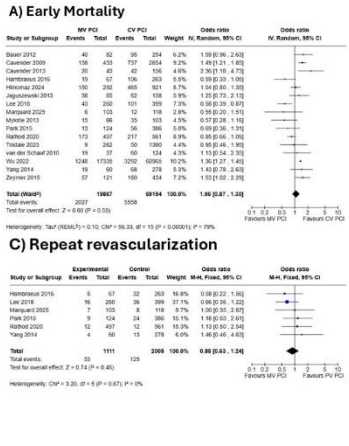
Topic 1: Interventions and Ischemic Heart Diseases

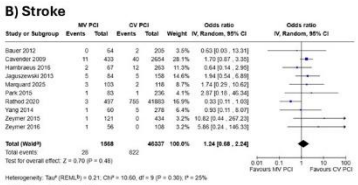
Publishing Title: OUTCOMES OF CULPRIT-ONLY COMPARED WITH MULTIVESSEL PCI IN ST-ELEVATION MYOCARDIAL INFARCTION COMPLICATED BY CARDIOGENIC SHOCK: AN UPDATED SYSTEMATIC REVIEW AND META-ANALYSIS OF 89,021 PATIENTS

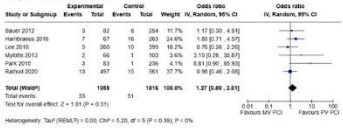
Author Block: Gustavo Adrian Medina Avalos, Alberto Isaí Rodriguez Vazquez, Omar Sáenz, José Alfredo Delgado Cruz, SR, Jose Abraham Luna Herbert, Demian Casanova Campos, Mario Alberto Verber Arano, Azucena Maribel Perez Perez, Guadalupe Karime Gil Garduño, Antonio Jordan-Rios, Sofía Montiel, Universidad Autónoma de Baja California, Tijuana, Mexico, Instituto Nacional de Cardiología - Ignacio Chávez, Mexico City, Mexico

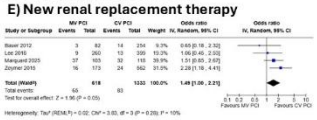
Abstract Body: **Background:** The preferred revascularization strategy for patients presenting with acute ST-elevation myocardial infarction (STEMI) complicated by cardiogenic shock (CS) remains controversial. Previous investigations comparing multivessel (MV) versus culprit-vessel-only (CV-only) revascularization have reported heterogeneous and inconclusive results.
Methods: A comprehensive search of major data bases was performed through May 2026 to identify studies evaluating MV versus CV-only percutaneous coronary intervention (PCI) in patients with STEMI and CS. Two independent reviewers performed data extraction and quality assessment. Dichotomous outcomes were pooled as odds ratios (ORs) with 95% confidence intervals (CIs) using a Mantel-Haenszel random-effects model.
Results: Results: A total of 16 studies comprising 89,021 patients were included. Compared with CV-only PCI, MV PCI was not associated with a significant difference in early mortality (OR 1.06). Similarly, no significant differences were identified between strategies for stroke, repeat revascularization, or reinfarction. However, MV PCI was associated with a higher incidence of new renal replacement therapy compared with CV-only PCI.
Conclusion: In STEMI complicated by CS, MV PCI did not improve mortality or ischemic outcomes compared with CV-only PCI; however, further studies are needed to better define the optimal PCI strategy given the observed

heterogeneity.

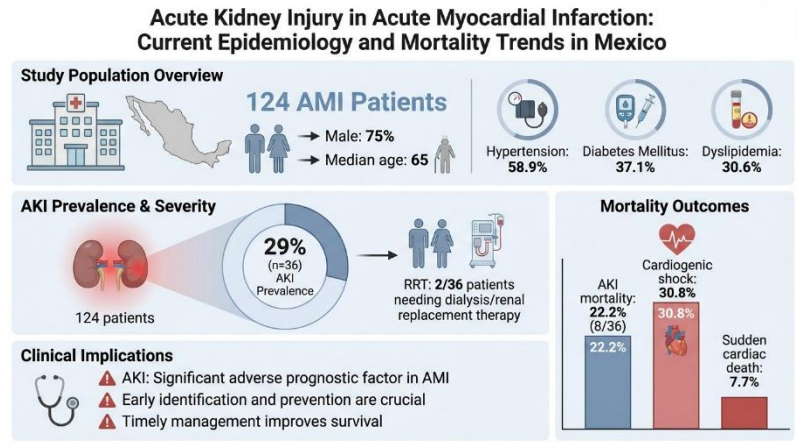








Session Title:	**Saturday Morning Poster Session**
Topic 1:	Interventions and Ischemic Heart Diseases
Publishing Title:	ACUTE KIDNEY INJURY IN ACUTE MYOCARDIAL INFARCTION: CURRENT EPIDEMIOLOGY AND MORTALITY TRENDS IN MEXICO.
Author Block:	Jesús Alberto Martinez Alvarez, Karla Viridiana Rascon Medina, Fernando Manuel Calderon Osorio, ALBERTO ESTEBAN BAZZONI RUIZ, Melisa Alejandra Muñoz Hernandez, MEXICAN SOCIAL SECURITY INSTITUTE, TORREON, COAHUILA, Mexico
Abstract Body:	**Background:** Acute kidney injury (AKI) is a frequent complication in patients hospitalized for acute myocardial infarction (AMI) and is independently associated with higher in-hospital mortality, necessitating this study to describe its prevalence and clinical impact in a Mexican specialized care setting. **Methods:** This retrospective, observational study included 124 adult patients with AMI admitted to the Coronary Care Unit of UMAE No. 71 in Torreón, Mexico, from January to July 2025, utilizing international KDIGO criteria based on serum creatinine and urine output to define and stage AKI cases. **Results:** The study population was 75% male with a median age of 65 years, frequently presenting with comorbidities such as systemic hypertension (58.9%) and diabetes mellitus (37.1%). The prevalence of AKI was found to be 29.0% (n=36), and although only 5.6% of these patients required renal replacement therapy, the mortality rate specifically associated with AKI was 22.2%. AKI was confirmed as a significant independent adverse prognostic factor, with cardiogenic shock (30.8%) being identified as the leading cause of death among cases unrelated to renal failure. **Conclusion:** AKI has a high prevalence among patients hospitalized for AMI in this cohort and serves as a critical independent predictor for in-hospital mortality. These findings highlight the vital importance of implementing early identification, hemodynamic optimization, and prevention strategies to reduce complications.


Acute Kidney Injury in Acute Myocardial Infarction:
Current Epidemiology and Mortality Trends in Mexico
Study Population Overview
124 AMI Patients
Male: 75%
Median age: 65
Hypertension: 58.9%
Diabetes Mellitus: 37.1%
Dyslipidemia: 30.6%
AKI Prevalence & Severity
124 patients
29%
(n=36)
AKI
Prevalence
RRT: 2/36 patients needing dialysis/renal replacement therapy
Mortality Outcomes
AKI mortality: 22.2% (8/36)
22.2%
Cardiogenic shock: 30.8%
30.8%
Sudden cardiac death: 7.7%
Clinical Implications
AKI: Significant adverse prognostic factor in AMI
Early identification and prevention are crucial
Timely management improves survival

Session Title:	**Saturday Morning Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	BEYOND THE MYXOMA: MULTIMODAL IMAGING IN THE DIAGNOSIS OF RARE LEFT ATRIAL TUMORS
Author Block:	Luisser Dainner Saavedra Cordova, Karen Alayo Rojas, Javier Torres, Hospital Edgardo Rebagliati Martins, Lima, Peru

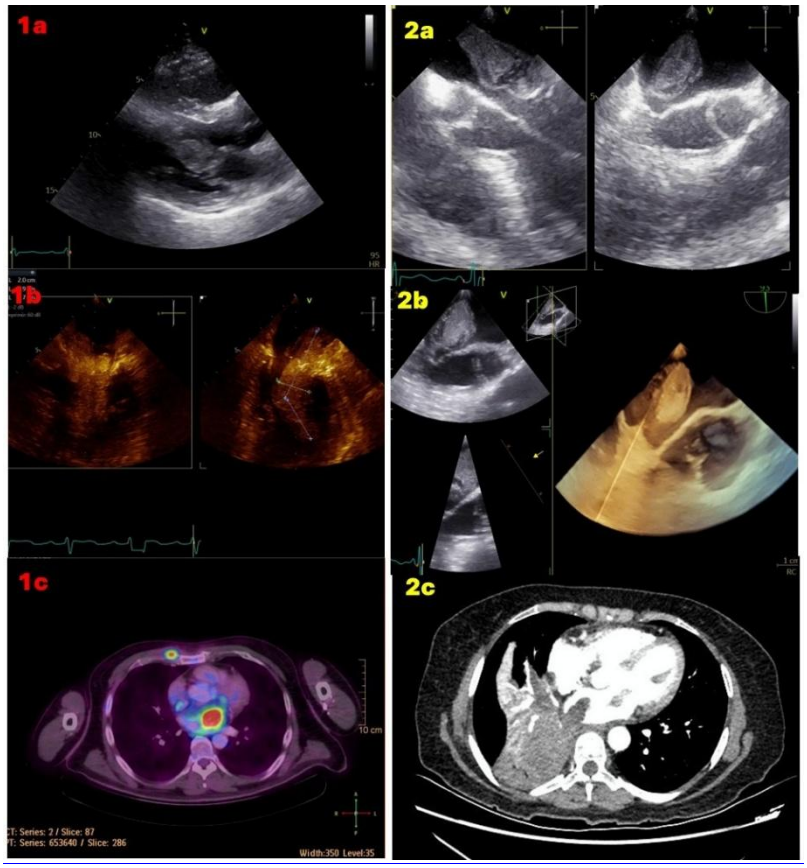
Abstract Body:

Background: Primary cardiac tumors are rare, often misdiagnosed as myxomas, and represent a diagnostic and therapeutic challenge in cardio-oncology

Case: We present two cases of left atrial (LA) tumors that were initially suspected to be benign; however, multimodal imaging evaluation demonstrated otherwise. Case 1: A 51-year-old male with a history of myxoma removal presented with heart failure. TTE/TEE revealed a large heterogeneous tumor attached to the interatrial septum, involving the mitral valve resulting in significant stenosis (Fig. 1a,b). PET/CT confirmed a neoplastic mass in the LA with metastases in the ribs (Fig. 1c), diagnosed as a primary cardiac leiomyosarcoma via histopathology. Case 2: A 62-year-old female presented with dyspnea. Initial TTE suggested a pedunculated LA tumor prolapsing through the mitral valve (Fig. 2a). However, TEE revealed a heterogeneous tumor extending into the left atrium from the right inferior pulmonary vein (Fig. 2b), originating from a right lower lobe tumor identified on CT (Fig. 2c). Biopsy confirmed squamous cell carcinoma

Decision-making: Both patients died despite therapeutic intervention: the first following chemotherapy, and the second due to pulmonary complications precluding surgical intervention

Conclusion: These fatal cases underscore that intracardiac masses require a multimodal imaging approach for accurate diagnosis beyond the myxoma and strategic therapeutic planning.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Session Title:	**Saturday Morning Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	ANOMALOUS RIGHT CORONARY ARTERY WITH SLIT LIKE OSTIUM ASSOCIATED WITH ADVANCED VENTRICULAR REMODELING: THE ROLE OF MULTIMODALITY IMAGING.
Author Block:	Carla Marquez Figuereo, Cleisy Galva, Edgar Cadena, Pedro Corniel, Yahina Duarte, Alexander Valentin Nova Torres, Seily Nova, Eladia Reinoso Evangelista, Katerin Sánchez Jiménez, Vielka Vanessa Cabral Rodriguez, felixander abreu, PABLO BELLO, Ivan Nuñez, Asociación Instituto Dominicano de Cardiología, Santo Domingo, Dominican Republic
Abstract Body:	**Background:** Congenital coronary artery anomalies are uncommon. Anomalous origin of the right coronary artery from the left coronary sinus with interarterial course and slit-like ostium is a malignant variant associated with ischemia, arrhythmias and sudden cardiac death. Multimodality imaging is essential for diagnosis and surgical planning. **Case:** A 54-year-old woman presented with dyspnea, chest pain, and palpitations. Evaluation included multimodality imaging. **Decision-making:** Holter supraventricular and ventricular premature complexes. Echocardiography dilated cardiomyopathy, LVEF 41%, moderate aortic regurgitation. Coronary computed tomography angiography anomalous origin of the right coronary artery from the left coronary sinus with slit-like ostium and interarterial course between the ascending aorta and pulmonary trunk. Invasive coronary angiography confirmed. Cardiac magnetic resonance ventricular dysfunction, reduced SGL, myocardial fibrosis, without inducible ischemia. The patient underwent mechanical aortic valve replacement and right coronary artery reimplantation with satisfactory postoperative. **Conclusion:** Anomalous origin of the right coronary artery is a rare malignant coronary anomaly that may present in adulthood with heart failure and ventricular remodeling. Multimodality imaging allowed accurate diagnosis, risk

stratification, and successful surgical management.

FIGURE 1

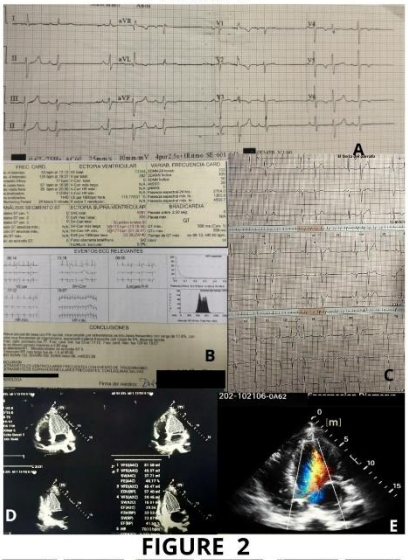


FIGURE 2

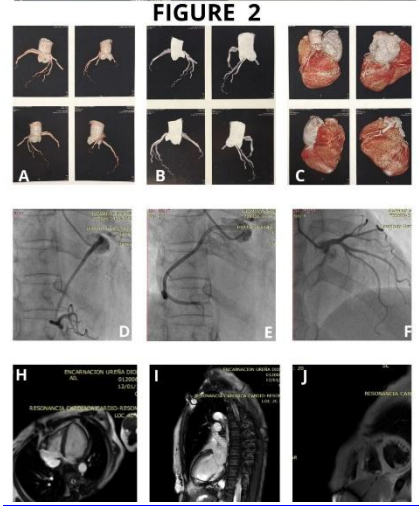
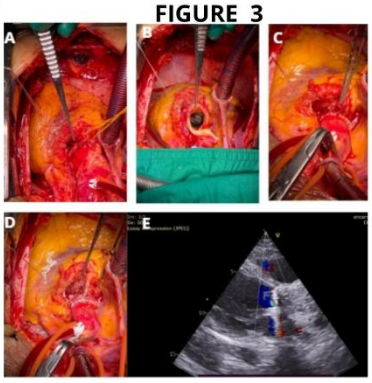


FIGURE 3



Electrocardiography irregular sinus rhythm with supraventricular premature complexes **(FIGURE 1A)**. Holter supraventricular and ventricular premature complexes **(FIGURE 1B)**. Transthoracic echocardiography dilated left ventricle, global hypokinesia, left ventricular ejection fraction of 39–41%, and moderate aortic regurgitation **(FIGURE 1D-E).** Coronary computed tomography angiography anomalous origin of the right coronary artery from the left coronary sinus with slit-like ostium and interarterial course, consistent with a malignant coronary anomaly (**FIGURE 2A-C).** Invasive coronary angiography confirmed the findings **(FIGURE 2D-F).** Cardiac magnetic resonance imaging with left ventricular dysfunction, reduced strain, myocardial fibrosis, and basal septal late gadolinium enhancement without inducible ischemia **(FIGURE 2H-J).** The patient underwent mechanical aortic valve replacement and right coronary artery reimplantation **(FIGURE 3A-D)**. Postoperative echocardiography demonstrated satisfactory prosthetic valve function and adequate (**FIGURE 3E).**

Session Title:	**Saturday Morning Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	PULMONARY ARTERY DISSECTION IN UNREPAIRED PATENT DUCTUS ARTERIOSUS: INTRAOPERATIVE HEMODYNAMIC ASSESSMENT GUIDING DUCTAL CLOSURE
Author Block:	Diego Alejandro Rodríguez Barajas, Nelson Jose Villarraga Marquez, Hector Andres Castañeda Camacho, Diego Alejandro Ortega Gomez, Carlos Hernan Calderon, Angel Alberto Garcia Peña, Edward Cáceres Méndez, Hospital Universitario San Ignacio, Bogotá, Colombia, Pontificia Universidad Javeriana, Bogotá, Colombia
Abstract Body:	**Background:** Pulmonary artery dissection is rare and fatal, especially in severe pulmonary hypertension (PH), pulmonary artery aneurysm and congenital heart disease **Case:** A 30-year-old man with unrepaired patent ductus arteriosus (PDA) presented with sudden interscapular pain, dyspnea and differential cyanosis. Oxygen saturation was 91% in upper limbs and 75% in lower limbs. Computed tomography showed a 60-mm aneurysmal main pulmonary artery with intimal flap and a 20-mm PDA. Echocardiography showed right ventricular dysfunction, severe pulmonary regurgitation, bidirectional PDA flow and pulmonary artery systolic pressure of 80 mmHg. Catheterization was deferred because of rupture risk **Decision-making:** Urgent surgery confirmed pulmonary artery dissection, contained perforation and severe pulmonary valve insufficiency. Pulmonary valve replacement and pulmonary artery reconstruction were performed. Intraoperatively, transient PDA occlusion was well tolerated; reopening caused hemodynamic deterioration, near-systemic pulmonary pressures and worsening right ventricular function. Reocclusion reduced pulmonary pressure to 76/21 mmHg, supporting definitive closure. Postoperatively, residual PH and right ventricular dysfunction improved with vasoactive and pulmonary vasodilator support **Conclusion:** In PDA-associated severe PH complicated by pulmonary artery dissection, intraoperative hemodynamic testing can guide closure when

conventional assessment is unsafe

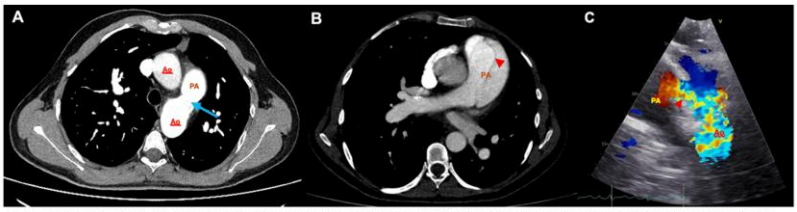


Figure. Multimodal imaging. A. CTA showing a large patent ductus arteriosus (blue arrow). B. CTA showing main pulmonary artery aneurysm with intimal dissection flap (red arrowhead). C. Suprasternal color Doppler showing ductal flow between the aorta and pulmonary artery (red arrowhead). Ao: aorta; PA: pulmonary artery.

Session Title:	**Saturday Morning Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	WHEN FONTAN FAILURE HIDES IN THE LYMPHATICS, MULTIMODAL IMAGING IN AN ADULT FONTAN PATIENT
Author Block:	Edgar Alejandro Sáenz Ordóñez, Andrea Magdalena Luna Hernández, Miguel Angel Cruz Marmolejo, Edgar Garcia Cruz, Alexandra Arias-Mendoza, Jose Garcia, Instituto Nacional de Cardiología Ignacio Chávezvez, Ciudad de México, Mexico
Abstract Body:	**Background:** Late Fontan failure may occur with low resting pressures; lymphatic disease is an underrecognized driver of cyanosis and plastic bronchitis. **Case:** A 30-year-old woman with pulmonary atresia and intact ventricular septum underwent systemic-to-pulmonary shunt in infancy and fenestrated extracardiac Fontan at age 3. Postoperative atrioventricular block required epicardial pacing, later discontinued after chronotropic independence. She developed plastic bronchitis, chronic cyanosis and congestion. At 29 years, she presented with abdominal pain, ascites and pleural effusion. Echocardiography showed preserved systemic ventricular function and a patent fenestration. Cardiovascular magnetic resonance with 4D flow showed slow flow through the extracardiac conduit, large atrial communication, right coronary-to-right ventricular fistula, ejection fraction 47%, hepatopathy and splenomegaly. T2-weighted imaging demonstrated type 3 thoracic lymphatic perfusion. Catheterization showed unobstructed cavopulmonary connections, mean Fontan pressure 12 mmHg and fenestration gradient 2.2 mmHg. A covered stent was implanted **Decision-making:** Without major obstruction or severe ventricular dysfunction, findings favored lymphatic-dominant Fontan failure and explained prior plastic bronchitis **Conclusion:** Advanced cardiovascular and lymphatic imaging should complement catheterization in adults with Fontan circulation to define

phenotype and guide intervention

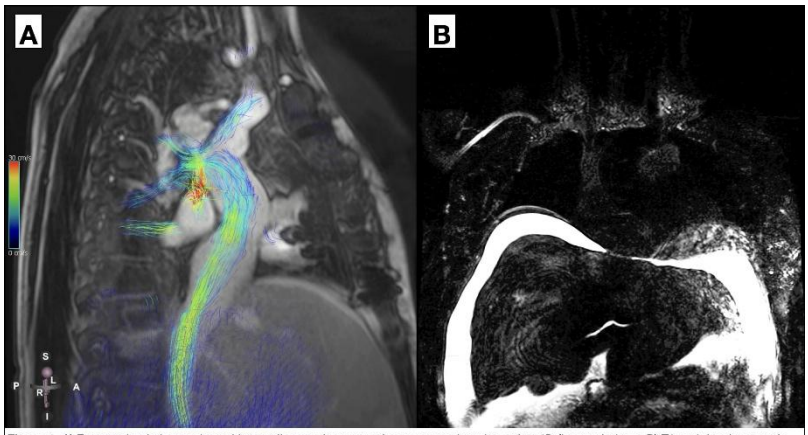
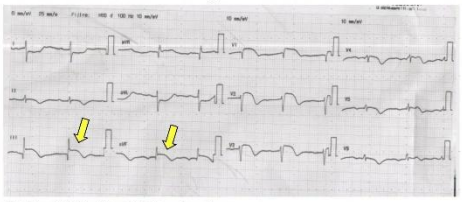


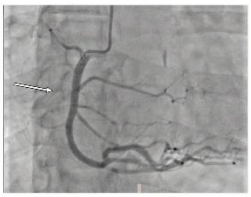
Figure 1. A) Fontan circulation evaluated by cardiovascular magnetic resonance imaging using 4D flow technique. B) T2-weighted magnetic resonance imaging with SPACE sequence demonstrating a type 3 lymphatic circulation pattern.

Session Title:	**Saturday Morning Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	PRIMARY CARDIAC LYMPHOMA AS AN ACUTE CORONARY SYNDROME MIMIC
Author Block:	Nicolás Alarcón Palomino, Diego E. Garnica, Fundación Cardioinfantil Instituto de Cardiología, Bogotá, Colombia, Universidad del Rosario, Bogotá, Colombia
Abstract Body:	**Background:** Primary cardiac lymphoma is a rare malignancy that may mimic acute coronary syndrome when right-sided infiltration compromises the coronary vasculature. Multimodal imaging is essential for diagnosis and treatment planning. **Case:** A 59-year-old woman with hypertension presented with functional decline, epigastric pain, and weight loss. Electrocardiogram showed diffuse ST-segment elevation with reciprocal lateral depression. Coronary angiography revealed no obstructive coronary artery disease (NOCAD). Transthoracic echocardiography identified a right-sided intracardiac mass. Cardiac magnetic resonance demonstrated a 94 × 34 mm infiltrative lesion involving the right atrium and ventricle with pericardial effusion and encasement of the right coronary artery, without infarction. Computed tomography showed no extracardiac disease. Histopathology confirmed diffuse large B-cell lymphoma. Cytoreductive therapy followed by R-CHOP chemotherapy was initiated. **Decision-making:** NOCAD prompted further imaging, allowing differentiation between ischemia and malignancy guiding biopsy and early treatment. This case highlights the need to suspect primary cardiac lymphoma in acute coronary syndrome-like presentations with cardiac masses and unobstructed arteries. **Conclusion:** Multimodal imaging enabled early diagnosis and timely oncologic management of primary cardiac lymphoma.

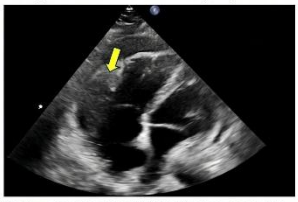
A. Twelve-lead ECG: diffuse ST-segment elevation



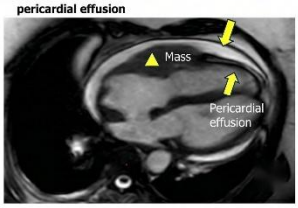
B. Patent RCA without obstructive disease



C. Right-sided intracardiac mass (TTE)

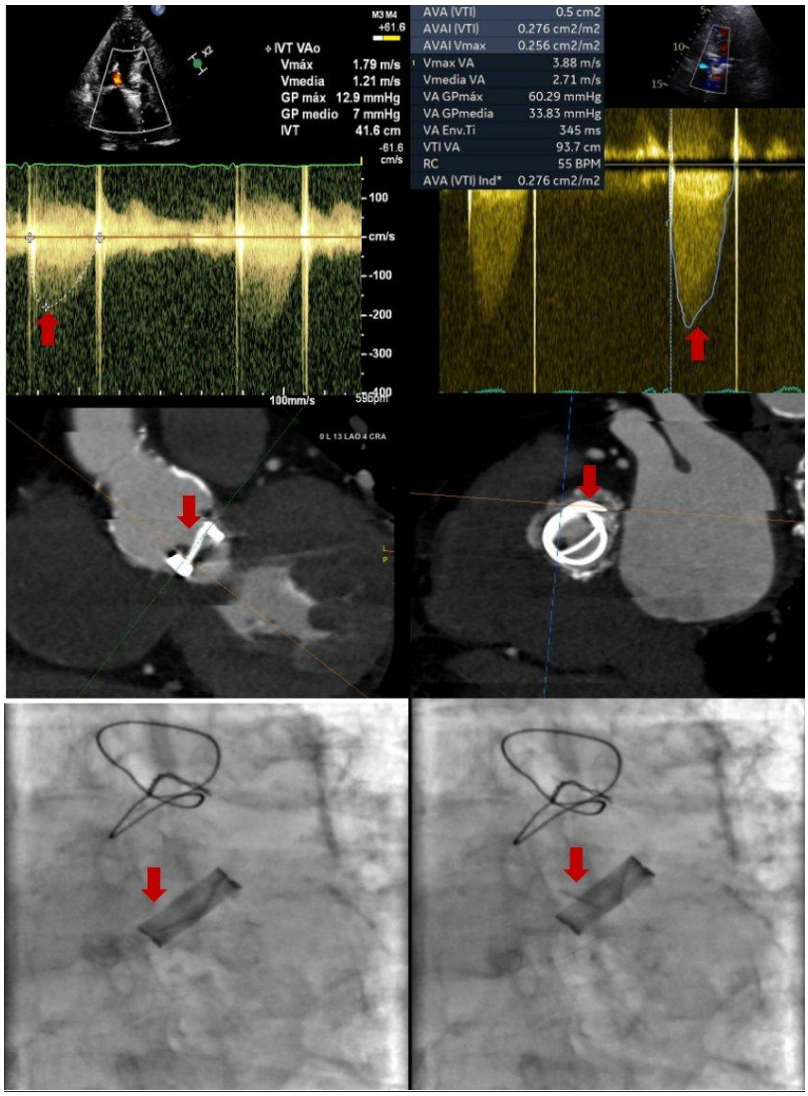


D. Four-chamber cine CMR: infiltrative mass with pericardial effusion



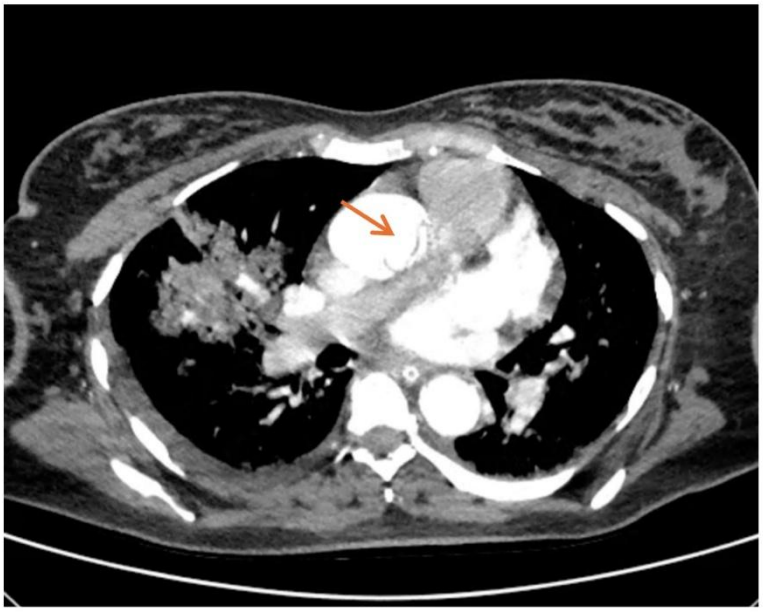
Session Title:	**Saturday Morning Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	MULTIMODAL IMAGING FOR THE DIAGNOSIS OF PROSTHETIC VALVE THROMBOSIS: A CASE-BASED IMAGE SERIES
Author Block:	LUISA AMADO, NELSON MORENO, RAFAEL R. MEDINA, FUNDACION UNIVERSITARIA SANITAS, Bogota, Colombia
Abstract Body:	**Background:** Prosthetic valve thrombosis (PVT) is a life-threatening complication. Timely diagnosis depends on cardiac multimodal imaging **Case:** We present key images from a patient with suspected PVT. The patient underwent three modalities: transesophageal echocardiography (TEE), fluoroscopy, and cardiac computed tomography (CT). Findings from each are described, comparing their ability to detect thrombus, assess leaflet motion, and differentiate thrombus from pannus. **Decision-making:** TEE revealed elevated gradients and a mobile mass consistent with thrombus. Fluoroscopy showed restriction of mechanical leaflet motion. CT confirmed thrombus, showing hypoattenuated valve thickening (HALT) and differentiated thrombus from pannus. The combination of TEE, fluoroscopy, and CT allowed definitive diagnosis. Representative images illustrate characteristic PVT findings. **Conclusion:** PVT diagnosis requires a multimodal approach. TEE is first-line for visualizing thrombi. Fluoroscopy provides functional information on leaflet motion, and CT offers superior tissue characterization. We present key images to suspect and definitively diagnose PVT using these complementary

techniques.


IVT VAo
Vmáx 1.79 m/s
Vmedia 1.21 m/s
GP máx 12.9 mmHg
GP medio 7 mmHg
IVT 41.6 cm
AVA (VTI) 0.5 cm2
AVAI (VTI) 0.276 cm2/m2
AVAI Vmax 0.256 cm2/m2
Vmax VA 3.88 m/s
Vmedia VA 2.71 m/s
VA GPmáx 60.29 mmHg
VA GPmedia 33.83 mmHg
VA Env.Ti 345 ms
VTI VA 93.7 cm
RC 55 BPM
AVA (VTI) Ind* 0.276 cm2/m2
100mm/s

Session Title:	**Saturday Morning Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	CASE REPORT:TYPE A AORTIC DISECCTION AS OBSTETRIC EMERGENCY IN A THIRD TRIMESTER PREGNANT WOMAN
Author Block:	Ivon Orellana Tovar, Freddy Flores Malpartida, Javier Osorio Esteban, Daniel Cordova Ccasa, Daniel Cruzado Benites, Hospital Emergencias Grau, Lima, Peru
Abstract Body:	**Background:** Acute aortic syndrome in pregnancy is rare, and late diagnosis can be fatal for mother and fetus. This case highlights the unpredictability of the disease and challenges in early diagnosis, especially prepartum. **Case:** A 36-year-old woman presented at the ED at 38 weeks of pregnancy with an acute onset of chest pain and dyspnea. After an emergency C-section, respiratory distress and vasoactive dependence persisted. Clinical findings showed signs of hypoperfusion, a diastolic murmur at the right upper sternal edge, and lower quality of bilateral upper and lower limb pulses. Urgent TTE demonstrated mildly reduced left ventricular systolic function, severe aortic regurgitation, and CT-A confirmed extensive Stanford type A aortic dissection extending from the aortic root and ascending aorta to the supra-aortic vessels and abdominal aorta. **Decision-making:** In our case, a multimodal image was crucial for diagnosis and rapid management. Current guidelines recommend that a C-section before aortic surgery reduces fetal mortality, depending on fetal viability and available medical care, particularly in acute type A AD. The patient underwent mechanical Bentall surgery, supraaortic vessels debranching, and aortocoronary bypass of the LAD and RCA. **Conclusion:** AD constitutes a critical obstetric complication during pregnancy that might be considered even in the absence of other risk factors and requires management by a multidisciplinary team to offer prompt treatment.

Figure 1 | **Cardiac Computed Tomography**



Type A dissection. Arrow points towards entrance flap

Session Title:	**Saturday Morning Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	BRONCHIAL COMPRESSION IN A NEONATE WITH COMPLEX CONGENITAL HEART DISEASE: THE ROLE OF MULTIMODAL IMAGING
Author Block:	Carlos Gonzalez, Maria Camila Bejarano, Camilo Calderon, Carlos Vesga, Clara Campos, Laura Ospina, Fundación Clinica Valle del lili, Cali, Colombia

Abstract Body:

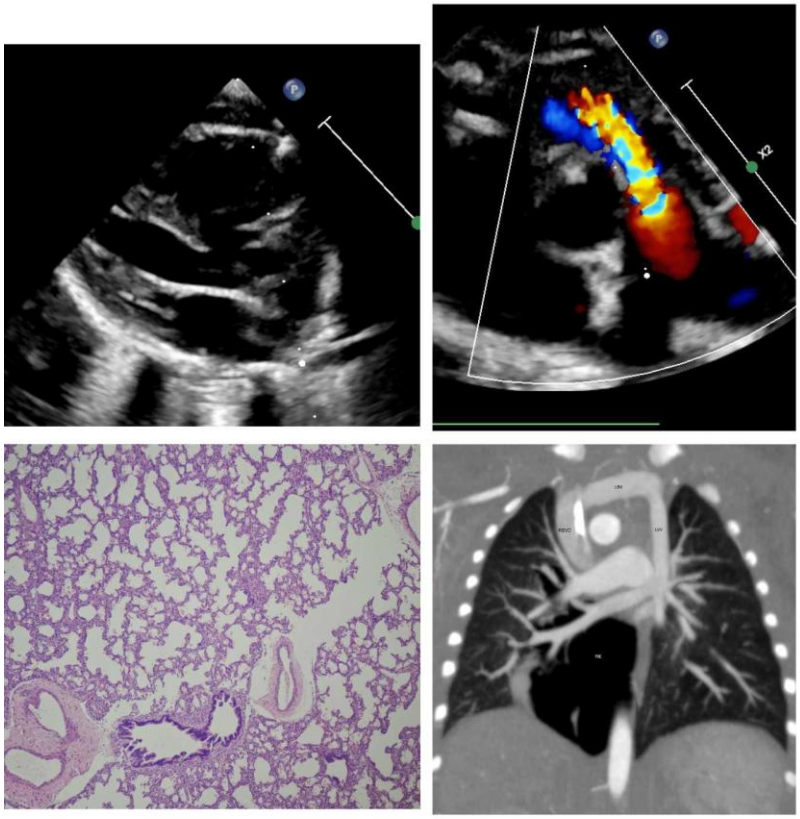
Background: Diagnosis and management of complex congenital heart disease, particularly when associated with rare pulmonary malformations requiring early intervention in the neonatal period, greatly benefit from serial multimodal imaging.

Case: A term male newborn with prenatal suspicion of congenital heart disease developed respiratory distress immediately after birth requiring intubation. Transthoracic echocardiography confirmed Tetralogy of Fallot with absent pulmonary valve and supracardiac total anomalous pulmonary venous connection (TAPVC). Computed tomography angiography confirmed TAPVC and characterized a right lower lobe pulmonary malformation causing bronchial compression and Pulmonary interstitial emphysema. A multidisciplinary team elected to perform early surgical management due to the risk of respiratory compromise.

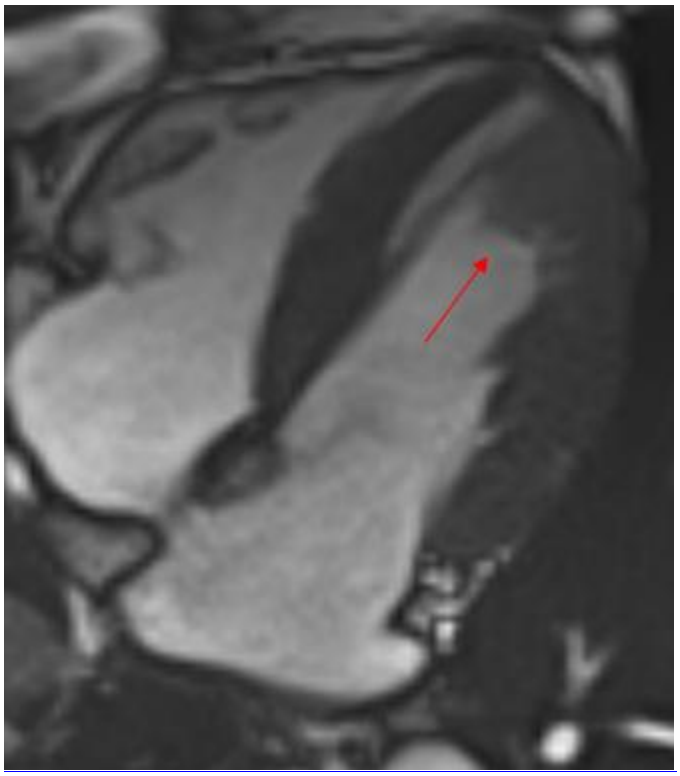
Decision-making: At 9 days of life, patient underwent a right lower lobectomy and bronchoscopy. Imaging findings supported early surgical removal of the compressive lesion causing pulmonary interstitial emphysema confirmed by patology, resulting in improved pulmonary mechanics and clinical stabilization to optimize physiologic stability prior to staged cardiac repair.

Conclusion: Multimodal imaging plays a pivotal role in the diagnosis, risk stratification, and management planning of neonates with complex congenital cardiac and pulmonary anomalies, enabling timely surgical intervention and

coordinated multidisciplinary care.

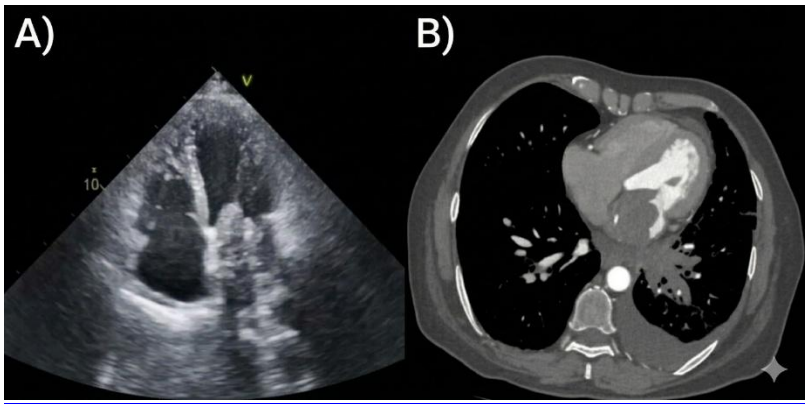


Session Title:	**Saturday Morning Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	LEFT VENTRICULAR METASTASIS FROM HEPATOCELLULAR CARCINOMA PRESENTING WITH SYSTEMIC EMBOLIZATION AND STROKE
Author Block:	Rana Rashwan, Zeyad Kholeif, Bryan Vega-Sanabria, Aya Elalfy, James F. Howick, Ahmed Mohamed Abdelsatar Elmorsy Mohamed, Julio Perez Downes, Mayo Clinic, Jacksonville, FL, USA
Abstract Body:	**Background:** Cardiac metastases are more common than primary cardiac tumors but are often clinically silent. Hepatocellular carcinoma (HCC) rarely involves the heart and usually extends into the right atrium; left ventricular (LV) involvement is exceptionally uncommon. **Case:** A 71-year-old man with HCC, hypertension, and atherosclerotic disease presented with gait instability, diplopia, vertigo, and tongue numbness. Brain MRI revealed multifocal infarcts in a systemic embolic pattern and a small frontal lesion concerning for metastasis. CT showed splenic and renal infarcts and a right psoas mass. Transthoracic echocardiography identified a mobile inferoapical LV mass initially suspected to be thrombus. Cardiac magnetic resonance (CMR) demonstrated a contrast-enhancing intracavitary LV mass adherent to the apical lateral wall, favoring vascularized neoplasm (Figure 1). Psoas biopsy confirmed metastatic HCC. **Decision-making:** Given HCC, systemic emboli, and an enhancing LV mass, metastatic tumor with associated thrombus was favored over isolated LV thrombus. The patient was started on anticoagulation and immunotherapy with nivolumab/ipilimumab, with radiation planned for intracranial and thoracic disease. **Conclusion:** This case highlights LV metastasis from HCC presenting as embolic stroke while mimicking LV thrombus. In patients with cancer and intracardiac masses, CMR helps distinguish tumor with associated thrombus from bland thrombus and guide multidisciplinary management.

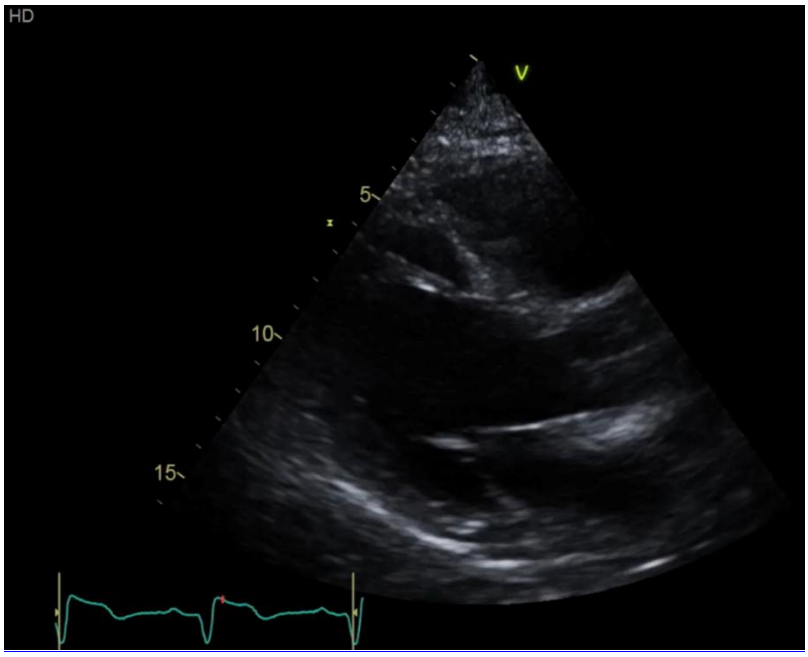


Session Title:	**Saturday Morning Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	NOT ALWAYS A MYXOMA: MULTIMODALITY IMAGING OF AN ATYPICAL LEFT ATRIAL ANGIOSARCOMA
Author Block:	Luis Gerardo López Mosqueda, Laura Leticia Rodríguez Chavez, Miguel Angel López-Lizarraga, Raúl Alejandro Hernández-Rocha, Bryan Chavez Castro, Sophia Eréndira Real Baron, Daniela Bautista de Jesus, Instituto Nacional de Cardiología Ignacio Chávez, México City, Mexico
Abstract Body:	**Background:** Primary cardiac sarcomas are rare malignant tumors associated with poor prognosis. Multimodality imaging is essential for differentiating malignant masses from more common benign lesions such as atrial myxoma. **Case:** A 64-year-old woman presented with progressive dyspnea, orthopnea, and paroxysmal nocturnal dyspnea. Transthoracic echocardiography revealed a 40 × 60 mm left atrial mass attached to the interatrial septum and anterior mitral leaflet. Coronary computed tomography angiography demonstrated irregular borders, heterogeneous contrast enhancement, vascular supply from the distal right coronary artery, and infiltrative extension into the pulmonary veins, suggesting malignancy. The patient underwent partial surgical resection with left atrial reconstruction. **Decision-making:** Imaging findings including infiltrative behavior, pulmonary vein extension, and heterogeneous enhancement favored malignant tumor over atrial myxoma or thrombus and guided surgical planning. Histopathology showed cribriform and spindle-cell patterns with focal chondroid differentiation. Immunohistochemistry demonstrated CD31 positivity and negativity for MDM2 and smooth muscle actin, confirming cardiac angiosarcoma. **Conclusion:** Multimodality imaging plays a critical role in identifying malignant cardiac tumors and guiding management, particularly in atypical presentations

of left atrial angiosarcoma.



Session Title:	**Saturday Morning Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	SEPTAL INTRAMYOCARDIAL DISSECTION AFTER LATE PRESENTING ANTERIOR STEMI
Author Block:	Ramiro Villavicencio Martínez, Alan Garcia Jimenez, Mario Torres, Saul Favila Lira, Nestor Ricardo Barrientos Guzmán, Daniel Eduardo Paz Driotes, Ricardo Leopoldo Barajas Campos, Alexandra Arias-Mendoza, Edgar Alejandro Sáenz Ordóñez, Instituto Nacional de Cardiologia Ignacio Chávez, Mexico City, Mexico
Abstract Body:	**Background:** Intramyocardial dissection is a rare mechanical complication of myocardial infarction associated with ventricular rupture and high mortality. **Case:** A 49 year old male smoker presented after late anterior ST elevation myocardial infarction with hypertensive crisis and resolved chest pain. Electrocardiogram showed anterior Q waves with persistent ST elevation. Transthoracic echocardiography demonstrated left ventricular ejection fraction of 45%, anteroseptal wall motion abnormalities and an intraseptal echolucent cavity with myocardial layer separation suggestive of septal intramyocardial dissection. Coronary angiography revealed total occlusion of the left anterior descending artery. The patient remained hemodynamically stable and was managed conservatively with favorable asymptomatic evolution. **Decision-making:** Intramyocardial dissection is an uncommon complication associated with delayed reperfusion and extensive infarction. Echocardiography is critical for early recognition and risk stratification. **Conclusion:** This case highlights favorable evolution with conservative treatment in a hemodynamically stable patient with septal intramyocardial dissection after late presenting STEMI.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Session Title:	**Saturday Morning Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	WHEN PREGNANCY LEAVES CARDIOVASCULAR SCARS: ACUTE AORTIC DISSECTION IN A YOUNG PATIENT WITH A HISTORY OF PREECLAMPSIA
Author Block:	Seily Nova, Aimee Flores, Katihurca Almonte Montes de Oca, Edgar D. Cadena Barranco, Cleysi Galva, Maykel Tapia, SR, Samuel Bencosme, PABLO BELLO, Katerin Sánchez Jiménez, Carla Marquez Figuereo, Vielka Vanessa Cabral Rodriguez, Yahina Duarte, Alexander Valentin Nova Torres, Ivan Nuñez, Eladia Reinoso Evangelista, felixander abreu, Asociación Instituto Dominicano De Cardiología, Santo Domingo, Dominican Republic
Abstract Body:	**Background:** Aortic dissection is a cardiovascular emergency caused by rupture of the intima and media, forming a false lumen that disrupts blood flow. Incidence is estimated at 3-4 cases per 100,000 persons/year. **Case:** A 27-year-old woman with hypertension and prior preeclampsia presented with chest and epigastric pain, nausea, and vomiting. ECG showed sinus rhythm with inferior ST elevation. In the catheterization lab, right coronary cannulation failed and an aortic flap was seen. Echocardiography revealed Stanford A dissection with double lumen to the arch, mild aortic regurgitation, wall motion abnormalities, concentric LV hypertrophy, and preserved ejection fraction (64.1%). Coronary CTA confirmed dissection from the sinuses of Valsalva to just before the inferior mesenteric artery, involving celiac and superior mesenteric trunks, hepatic and splenic arteries, and the right renal artery with severe stenosis, hypoperfusion, and hypoplasia. The patient underwent ascending aortic replacement with a prosthetic graft. **Decision-making:** Treatment focused on strict blood pressure and heart rate control with beta-blockers, followed by surgery. Postoperative evolution was favorable, and she was discharged under medical therapy. **Conclusion:** Stanford A dissection is life-threatening and requires urgent surgery. Mortality increases by ~1% per hour within the first 24 hours if untreated. Early recognition, stabilization, and surgery significantly improve

prognosis.

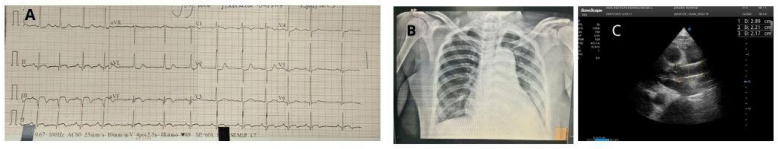


FIGURE 1

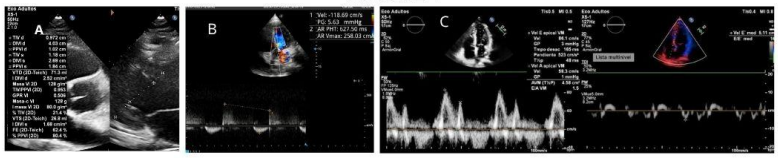


FIGURE 2

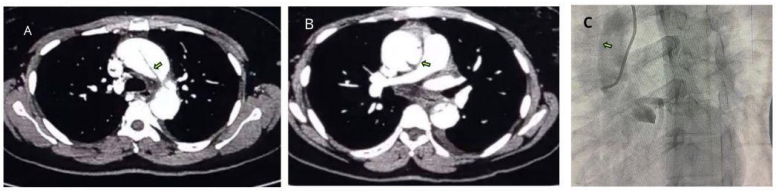


FIGURE 3

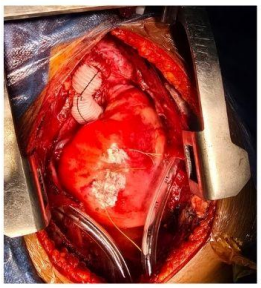


FIGURE 4

FIGURE 1. Twelve-lead electrocardiogram Sinus rhythm, ST segment elevation on the inferior surface. **A.** Chest radiograph Widened mediastinum, prominence of the aortic button. **B.** Echocardiography in parasternal long-axis view showed aortic root dilation with dissection and right coronary intimal flap. **C. FIGURE 2.** Long parasternal axis and apical four chambers left ventricular cavity with normal wall diameters, left ventricular function EF: 67%. **A.** Apical five-chamber view mild aortic regurgitation PHT 627 ms. **B.** Apical four-chamber view Grade II diastolic dysfunction with increased left ventricular filling pressures E/e':16. **C. FIGURE 3.** Coronary computed tomography angiography Stanford A aortic dissection from the sinuses of Valsalva to just before the inferior mesenteric artery. **A-B.** Cardiac catheterization presence of aortic dissection flap. **C. FIGURE 4.** ascending aortic prosthesis surgery.

Session Title:	**Saturday Morning Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	RUPTURED NON-CORONARY SINUS OF VALSALVA ANEURYSM FISTULIZING INTO THE RIGHT ATRIUM IN A YOUNG MARFANOID PATIENT
Author Block:	Daniela Mitchelle Rojas, Paolo Luis, Luis D. García-Rosales, Ricardo L. Barajas-Campos, National Institute of Cardiology Ignacio Chávez, Mexico City, Mexico
Abstract Body:	**Background:** Sinus of Valsalva aneurysm (SVA) is a rare anomaly, however, rupture into the right atrium (RA) is exceptionally uncommon and often linked to hereditary connective tissue diseases (CTD). **Case:** A 31 year old male presented with recurrent syncope and acute chest pain. Physical examination showed marfanoid habitus, wide pulse pressure, and a continuous murmur. Electrocardiogram demonstrated biventricular enlargement and left ventricular hypertrophy. Cardiac computed tomography (CT) and transesophageal echocardiography (TEE) identified a ruptured noncoronary SVA fistulizing to the RA with a 7 mm aortic orifice and 5 mm atrial exit. Despite a systemic Ghent score of 6, he did not fulfill Marfan syndrome criteria, raising suspicion for Loeys-Dietz or vascular Ehlers-Danlos syndrome. Surgical repair with a bovine pericardial patch was performed successfully, with favorable postoperative recovery.

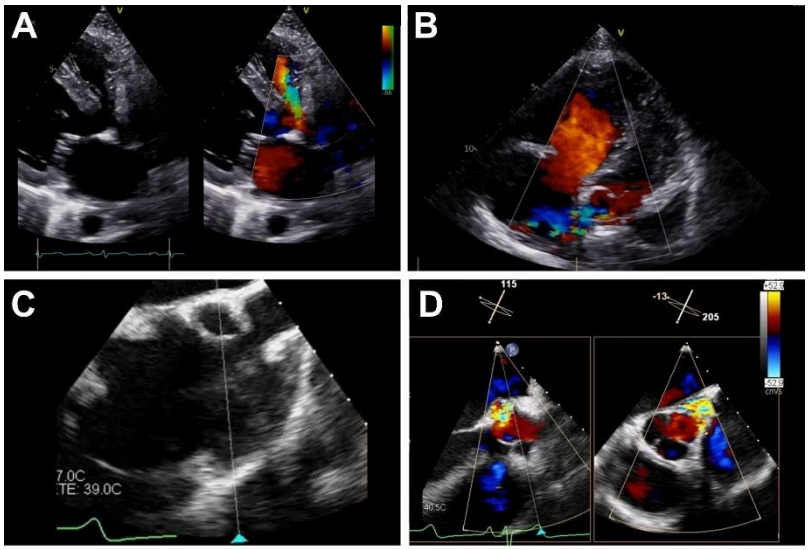


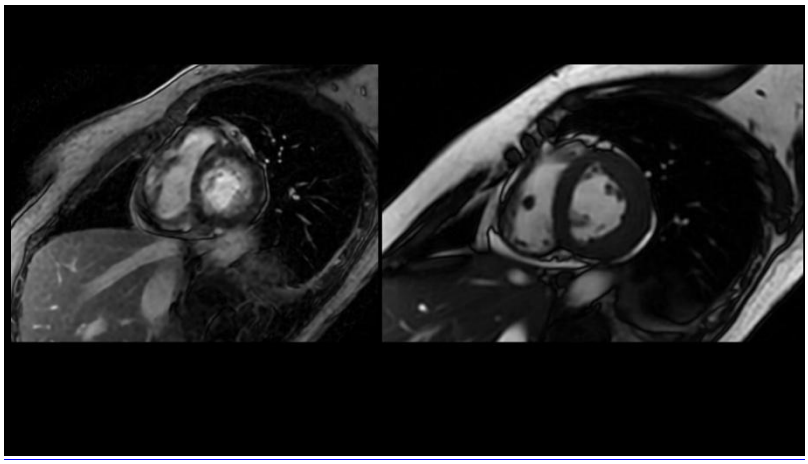
Figure 1. Echocardiographic assesment of ruptured non-coronary sinus of Valsalva aneurysm. Transthoracic and transesophageal ecocardiography demonstrating fistulous communication between the non-coronary sinus of Valsalva and the right atrium (A, B, C, D). Color Doppler images show continuous turbulent flow across the rupture site (A, B, D).

Decision-making: Multimodality imaging was essential for diagnosis and surgical planning. Early surgical repair remains the treatment of choice due to the risk of progressive hemodynamic deterioration and heart failure. This case underscores the importance of integrating imaging findings and specialized genetic evaluation in young patients with aortic structural abnormalities.

Conclusion: Ruptured noncoronary SVA fistulizing into the RA is a potentially life-threatening condition requiring prompt imaging evaluation, surgical repair, and specialized genetic follow-up.

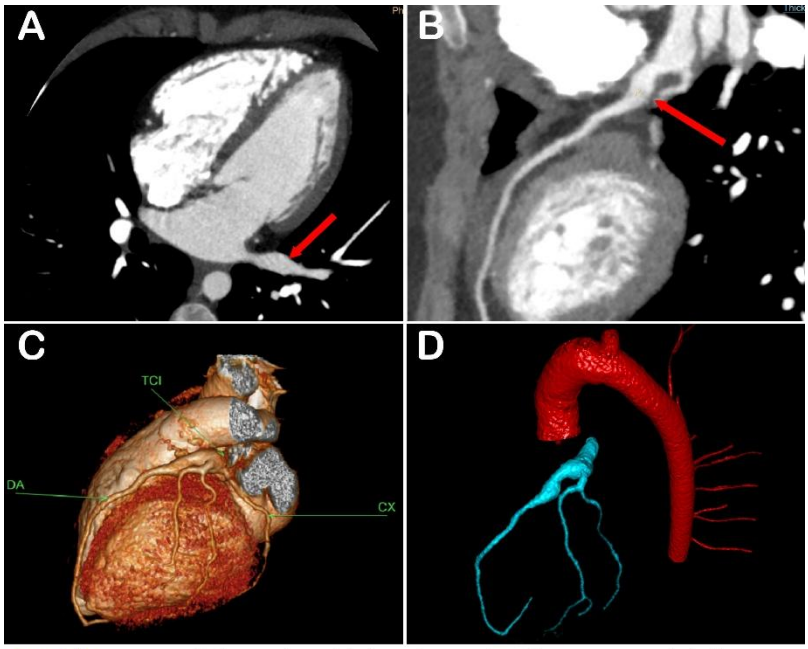
Session Title:	**Saturday Morning Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	DIAGNOSTIC PITFALLS IN EOSINOPHILIC MYOCARDITIS: WHEN BIOPSY FAILS AND IMAGING LEADS
Author Block:	Juan Sebastian Rodriguez Zakzuk, Carlos Felipe Laguado Buitrago, Carlos Fuentes Perez, Diana Vargas Vergara, Fernando Ortiz Duarte, Jesus Alexander Cotes Millan, Clinica Universitaria Colombia, Bogota, Colombia
Abstract Body:	**Background:** Hypereosinophilic syndrome (HES) is a rare systemic disorder that can lead to life-threatening eosinophilic myocarditis (EM) and acute heart failure (HF) **Case:** We present two cases of HES-related acute HF requiring inotropic support. Case 1: A 69-year-old female with multisystemic HES, including ischemic stroke, eosinophilic pneumonitis, and EM. Cardiac MRI showed typical myocarditis patterns. Although the endomyocardial biopsy was falsely negative—likely due to prior corticosteroid use—idiopathic HES was diagnosed. Case 2: A 29-year-old male with severe asthma on biologic therapy developed acute HF with severely reduced LVEF. Cardiac MRI showed typical myocarditis patterns, endomyocardial biopsy confirmed EM with dense eosinophilic infiltration. Both patients received high-dose corticosteroids and neurohumoral blockade, achieving complete resolution of eosinophilia and clinical compensation. **Decision-making:** HES affects diverse populations, from elderly patients to young atopic individuals. Biopsy timing is critical; early steroids can yield false negatives. MRI is a vital tool when histology is inconclusive. **Conclusion:** Eosinophilic myocarditis is a rare etiology of acute HF that requires high clinical suspicion in the context of HES. Diagnosis relies on multimodal imaging and endomyocardial biopsy, as prompt

immunosuppressive treatment is essential to improve clinical outcomes.



Session Title:	**Saturday Morning Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	A RARE CASE OF LEFT ANTERIOR DESCENDING AND AXILLARY ARTERY ANEURYSMS IN KAWASAKI DISEASE
Author Block:	Gustavo Adrian Medina Avalos, Alejandra Perea Ramirez, Omar Sáenz, Demian Casanova Campos, Alberto Isaí Rodríguez Vázquez, Jose Abraham Luna Herbert, Azucena Maribel Perez Perez, Mario Alberto Verber Arano, Manuel Alfredo Osuna Izaguirre, Universidad Autónoma de Baja California, Tijuana, Mexico
Abstract Body:	**Background:** Kawasaki disease (KD) is a medium-sized vessel vasculitis that primarilyaffects the coronary arteries. Systemic artery aneurysms in KD are rare, witha prevalence of 2% of cases. **Case:** A 9-year-old female presented with swelling in both armpits for the past five days. At the age of seven, she was diagnosed with KD and treated with adose of intravenous immunoglobulin. His initial workup included ultrasound that revealed bilateral axillary artery aneurysms measuring up to 16 mm. TTErevealed coronary aneurysms. Coronary CTA demonstrated multiple dilatations and an aneurysmal segment in the proximal left anterior descending (LAD) artery.A triple antithrombotic regimen with aspirin, enoxaparin, and clopidogrel was initiated. **Decision-making:** Despite being a candidate for surgical intervention, the patient was managed medically per her mother's decision. Six-month follow-up withTTE and CTA showed persistent giant coronary aneurysms, unchanged in size, without evidence of intraluminal thrombus. Percutaneous or surgical treatmentremains a future option. **Conclusion:** The optimal treatment for coronary and axillary artery aneurysm caused by KD remains debated. Additional well-designed studies are required toestablish evidence-based treatment strategies and improve patient

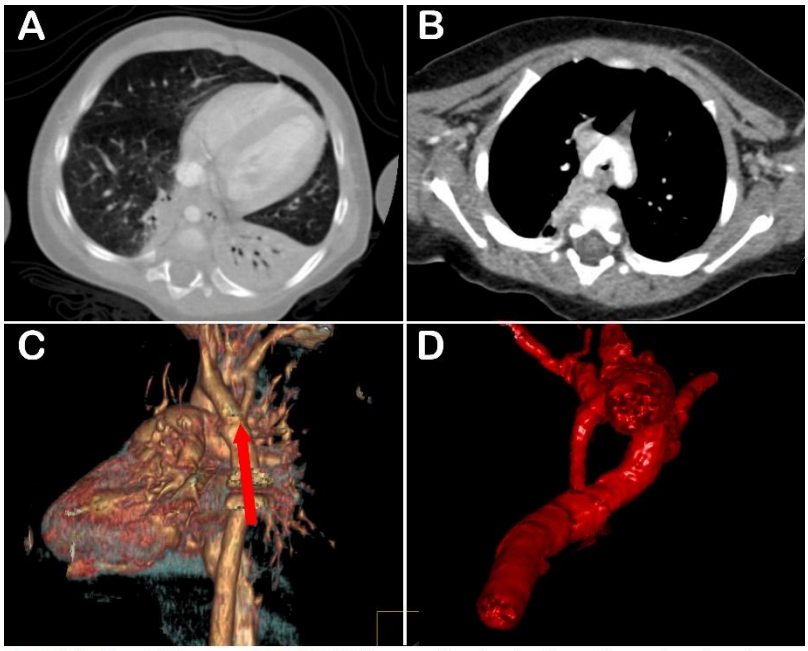
outcomes.



Panel A: coronary CTA scan in axial view demonstranting aneurysm in left anterior descending artery (LAD)(red arrow);
Panel B: Curved reconstruction of the LAD showing aneurysm (red arrow);
Panels C and D: three-dimensional volume rendering images of the aneurysm

Session Title:	**Saturday Morning Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	A RING IN THE CHEST: A RARE CAUSE OF RECURRENT PNEUMONIA
Author Block:	Gustavo Adrian Medina Avalos, Alejandra Perea Ramirez, Manuel Alfredo Osuna Izaguirre, Azucena Maribel Perez Perez, Alberto Isaí Rodríguez Vázquez, Jose Abraham Luna Herbert, Demian Casanova Campos, Mario Alberto Verber Arano, Universidad Autónoma de Baja California, Tijuana, Mexico, Instituto Mexicano del Seguro Social, Tijuana, Mexico
Abstract Body:	**Background:** Recurrent or treatment-refractory pneumonia represents a diagnostic challenge and should prompt a broad differential diagnosis. Mediastinal anatomic anomalies should be considered among potential underlying causes **Case:** A 8-month-old female with history of four admissions for pneumonia presents with cough, fever, stridor, respiratory distress and dysphagia requiring 15 days of high-flow oxygen. Despite antibiotic therapy, she remained symptomatic and oxygen-dependent. CT chest revealed mediastinal widening. **Decision-making:** CT angiography revealed a double aortic arch forming a complete vascular ring, causing compression of the trachea and esophagus. Consultations with cardiothoracic and vascular surgery were obtained; after discussing risks and benefits, the procedure was deferred at the mother's request. **Conclusion:** A double aortic arch is a rare congenital cardiac anomaly, with an incidence of less than 0.1%. Symptomatic patients usually require surgical

intervention, while asymptomatic cases are typically managed conservatively.”



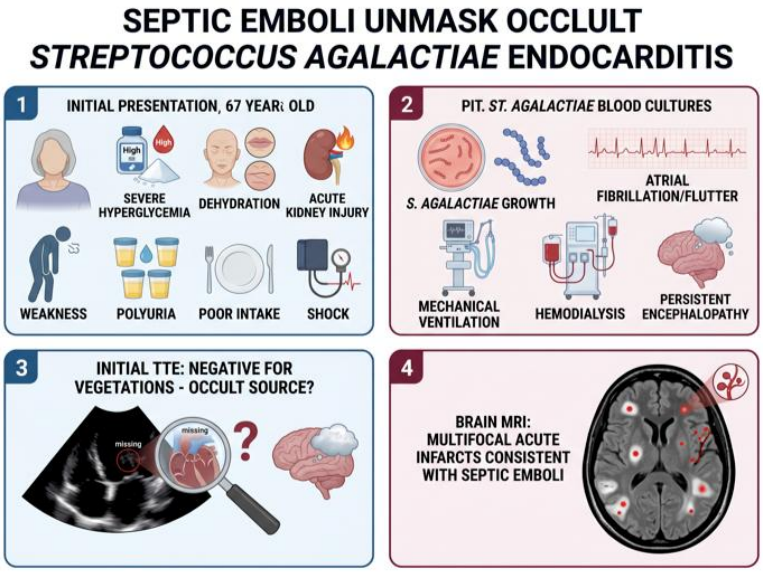
Panel A: Chest CT scan; **Panel B:** CTA scan showing both aortic arches forming a vascular ring with compression of the trachea;
Panels C and D: three-dimensional volume rendering images of the double aortic arch.

Session Title:	**Saturday Morning Poster Session**
Topic 1:	Valvular Diseases
Publishing Title:	WHEN THROMBOSIS MIMICS RHEUMATIC DISEASE: MITRAL VALVE OBSTRUCTION IN ANTIPHOSPHOLIPID SYNDROME
Author Block:	Kimberly Pagan, Xavier Delgado Lopez, Joseph Maldonado, Luis Alfredo Acevedo Soto, Andres Jose Cordova Toro, Eugenio Mulero, Mayaguez Medical Center, Mayaguez, PR, PR
Abstract Body:	**Background:** Antiphospholipid syndrome (APS)-associated valvular heart disease commonly presents with valvular thickening, sterile vegetations, and regurgitation. Severe non-rheumatic mitral stenosis caused by valvular thrombosis is exceptionally rare and may mimic rheumatic disease. Current American College of Cardiology/American Heart Association valvular guidelines provide limited guidance regarding thrombotic mitral obstruction in hypercoagulable disorders. **Case:** A 60-year-old woman with lupus anticoagulant positivity and recurrent miscarriages presented with progressive exertional dyspnea. Examination revealed a grade II diastolic murmur without overt heart failure. Transthoracic and transesophageal echocardiography demonstrated severe thickening and thrombotic involvement of both mitral leaflets causing severe mitral stenosis with valve area 0.99 cm^2. A fenestrated secundum atrial septal defect with left-to-right shunting was also identified. Coronary angiography showed no obstructive coronary disease or pulmonary hypertension. **Decision-making:** Multimodality imaging and multidisciplinary evaluation supported severe non-rheumatic mitral stenosis secondary to APS-associated valvular thrombosis. Due to severe obstruction and thrombotic burden, the patient underwent surgical mitral valve replacement with primary atrial septal defect closure and was discharged in stable condition. **Conclusion:** Although valvular involvement occurs in up to one-third of APS patients, clinically significant mitral stenosis from valvular thrombosis remains rare. This case highlights the importance of considering thrombotic valve pathology in hypercoagulable patients with unexplained dyspnea or mitral obstruction. Multimodality imaging and heart-team evaluation are critical for

diagnosis and management, as advanced disease may require surgical intervention despite anticoagulation.

Session Title:	**Saturday Morning Poster Session**
Topic 1:	Valvular Diseases
Publishing Title:	WHEN SEPTIC EMBOLI SPEAK LOUDER THAN ECHOCARDIOGRAPHY: OCCULT INFECTIVE ENDOCARDITIS REVEALED BY TEE
Author Block:	Marcos Fernandez, Ivan Rafael Figueroa Baez, Angel Davila, Andres Garcia Berrios, Jose Irizarry, Andrew Engel-Rodriguez, Giovanni Rivera, San Juan City Hospital, san juan, PR, PR, VA Caribbean Cardiology, san juan, PR, PR
Abstract Body:	**Background:** Infective endocarditis may present as sepsis and stroke rather than classic valvular findings, and a negative transthoracic echocardiogram may delay diagnosis. **Case:** A 67y/o woman with prior stroke,hypertension,and diabetes presented with weakness,polyuria,and poor intake after insulin nonadherence. She was admitted with severe hyperglycemia,dehydration, and AKI, then deteriorated with shock,mechanical ventilation,hemodialysis, and atrial fibrillation/flutter. Blood cultures grew multisensitive Streptococcus agalactiae. Initial TTE showed no endocarditis. Despite clearance of bacteremia on ceftriaxone, she remained encephalopathic.MRI showed multifocal acute ischemic infarcts concerning for cardioembolic or septic embolic disease. **Decision-making:** Given the neurologic pattern and bacteremia,TEE was pursued despite a negative TTE and showed aortic and mitral vegetations with mitral abscess. She received ceftriaxone and multiorgan support.Antithrombotic therapy required caution because septic cerebral emboli carried hemorrhagic risk. **Conclusion:** In persistent Streptococcus agalactiae bacteremia or unexplained multifocal cerebral infarcts, a negative TTE should not exclude infective endocarditis. Early TEE can uncover occult valvular infection and redirect

management.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STREPTOCOCCUS AGALACTIAE ENDOCARDITIS
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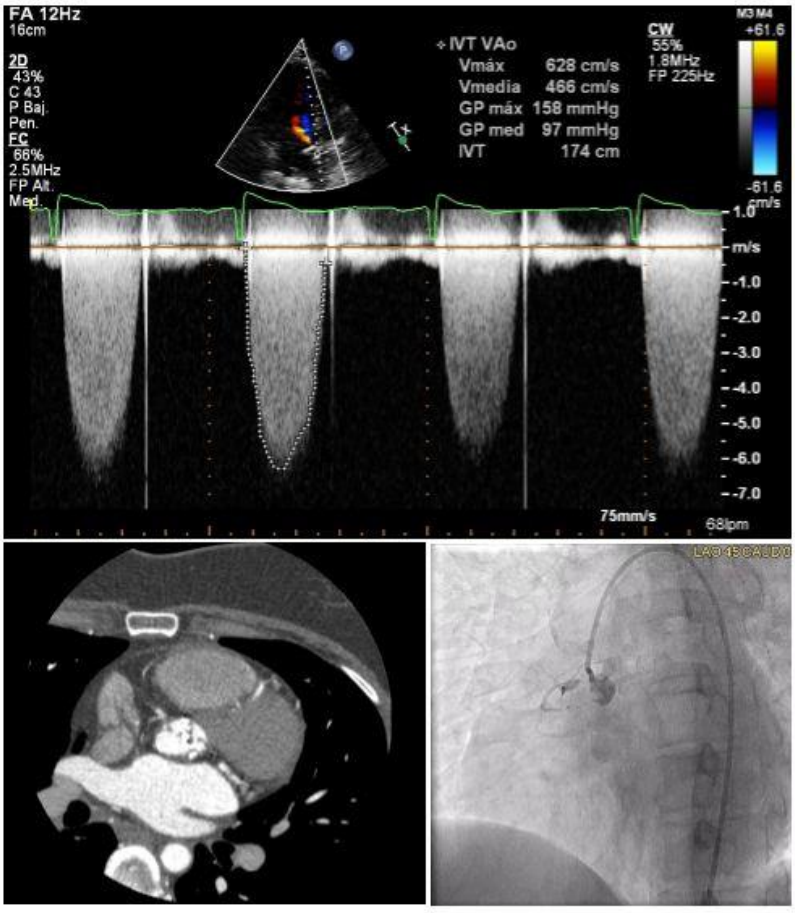
INITIAL PRESENTATION, 67 YEAR OLD
SEVERE HYPERGLYCEMIA
DEHYDRATION
ACUTE KIDNEY INJURY
WEAKNESS
POLYURIA
POOR INTAKE
SHOCK
2
PIT. ST. AGALACTIAE BLOOD CULTURES
S. AGALACTIAE GROWTH
ATRIAL FIBRILLATION/FLUTTER
MECHANICAL VENTILATION
HEMODIALYSIS
PERSISTENT ENCEPHALOPATHY
3
INITIAL TTE: NEGATIVE FOR VEGETATIONS - OCCULT SOURCE?
missing
missing
4
BRAIN MRI: MULTIFOCAL ACUTE INFARCTS CONSISTENT WITH SEPTIC EMBOLI

Session Title:	**Saturday Morning Poster Session**
Topic 1:	Valvular Diseases
Publishing Title:	CRITICAL AORTIC STENOSIS AND DIFFUSE PREMATURE ATHEROSCLEROSIS IN A 26-YEAR-OLD WOMAN WITH HOMOZYGOUS FAMILIAL HYPERCHOLESTEROLEMIA
Author Block:	Miguel Alejandro Maldonado, Pamela Rosario M. Alvarez, Daniel Paz, Tonatiuh Mendoza, Oscar Negrete, Pamela Ramirez Rangel, JR, National Institute of Cardiology Ignacio Chavez, Mexico City, Mexico, CDMX, Mexico
Abstract Body:	**Background:** Homozygous familial hypercholesterolemia (HoFH) is characterized by aggressive atherosclerosis and premature valvular degeneration. Critical aortic stenosis in young adults remains exceptionally rare **Methods:** A 26-year-old woman with untreated HoFH due to LDLR mutation and bicuspid aortic valve presented with recurrent exertional syncope, progressive angina, and acute heart failure. She had multiple xanthoma resections and LDL cholesterol >600 mg/dL. Echocardiography demonstrated critical aortic stenosis (valve area 0.3 cm2, mean gradient 97 mmHg, peak velocity 6.2 m/s), concentric hypertrophy, left ventricular ejection fraction 42%, and moderate mitral regurgitation. Coronary angiography revealed chronic total occlusion of the proximal right coronary artery with collateral circulation. Computed tomography showed diffuse premature noncalcified atherosclerosis involving the thoracic aorta and supra-aortic vessels **Results:** Multidisciplinary evaluation highlighted the complexity of management because of severe valvular disease, diffuse premature atherosclerosis, and advanced coronary artery disease despite the patient's young age. Mechanical valve replacement and coronary bypass were performed; however, refractory cardiogenic shock and severe biventricular failure led to fatal outcome. **Conclusion:** HoFH due to LDLR mutation may produce a malignant cardiovascular phenotype with rapidly progressive valvular and coronary disease in early adulthood.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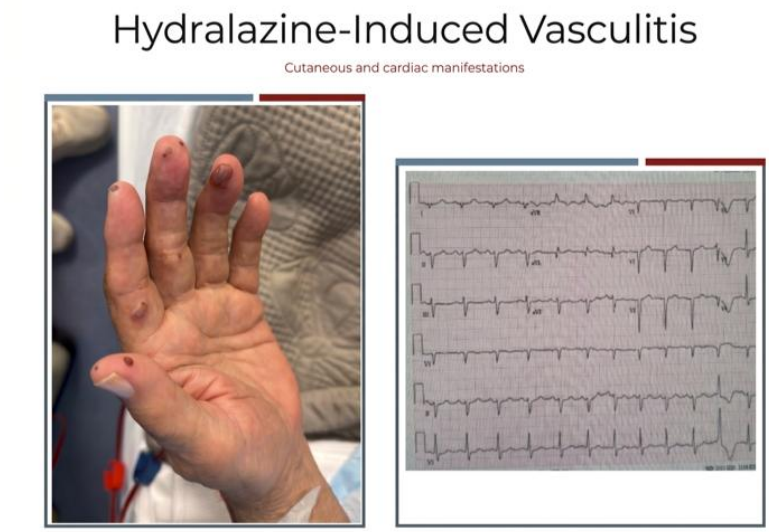
75mm/s
68lpm

Session Title:	**Saturday Morning Poster Session**
Topic 1:	Valvular Diseases
Publishing Title:	PAINFUL ACRAL LESIONS MIMICKING OSLER NODES: HYDRALAZINE-INDUCED VASCULITIS MASQUERADING AS INFECTIVE ENDOCARDITIS
Author Block:	Marcos Fernandez, Thomas Vazquez, Stephanie Colon-Marrero, Maillim Ortiz-Lopez, Paola Merheb, Ivan Rafael Figueroa Baez, Mariella Pappaterra-Rodriguez, Julian Jose Rubio Gil de Lamadrid, Caribbean VA Internal Medicine, San Juan, PR, USA, San Juan CIty Hospital, San Juan, PR, PR
Abstract Body:	**Background:** Painful acral lesions resembling Osler nodes with a cardiac murmur classically suggest infective endocarditis. However, drug-induced vasculitis can closely mimic these findings. **Case:** An 84y/o man with ESRD on hemodialysis presented with painful violaceous lesions on palms, fingertips, soles, buttocks, and elbow after URI. Despite a murmur, blood cultures were negative, Duke criteria not met, and TTE showed no vegetations. Skin biopsy revealed leukocytoclastic vasculitis. He was on high-dose hydralazine (100 mg TID) for >10 years; ANCA negative. Lesions improved after hydralazine discontinuation. **Decision-making:** Despite classic endocarditis clues,negative cultures,and unrevealing TTE, the diagnosis was challenged until biopsy and chronic hydralazine exposure revealed leukocytoclastic vasculitis masquerading as infective endocarditis. **Conclusion:** This diagnostically challenging case demonstrates how systemic symptoms, painful Osler-like lesions,and a cardiac murmur can strongly mimic infective endocarditis, hydralazine-induced vasculitis, ultimately revealing

itself by history exam,biopsy,and medication review.

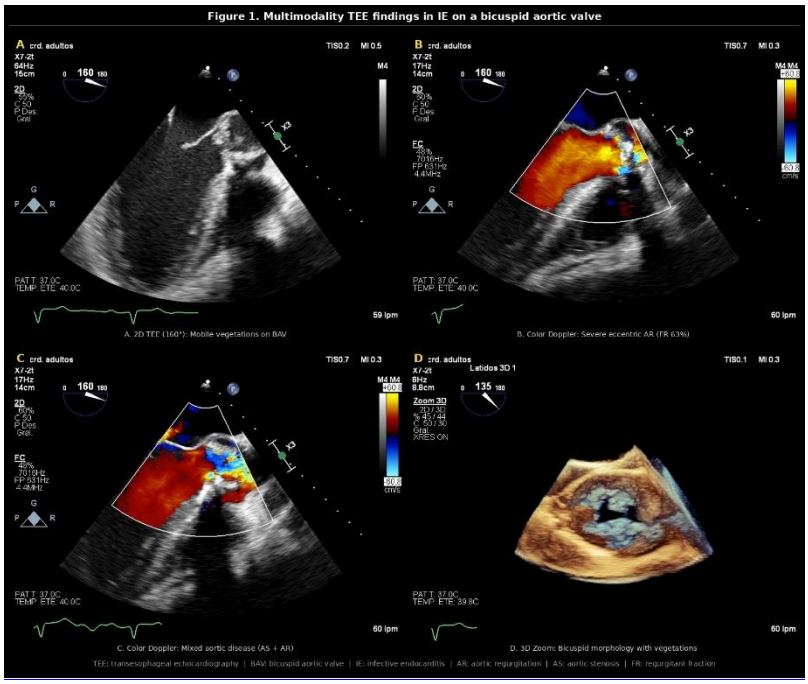


Session Title:	**Saturday Morning Poster Session**
Topic 1:	Valvular Diseases
Publishing Title:	INFECTIVE ENDOCARDITIS ON A BICUSPID AORTIC VALVE WITH SEVERE MIXED AORTIC DISEASE AND MULTIVESSEL CORONARY DISEASE
Author Block:	Sofia Jácome Garcia, Jesus Bello, Lina M. Jure Contreras, Santiago A. Medina Reyes, Claudia Jaramillo, Fundación clinica shaio, Bogota D.C, Colombia, Hospital Serena Del Mar, Cartagena, Colombia

Abstract Body:

Background: Infective endocarditis (IE) on bicuspid aortic valve (BAV) carries high morbidity, especially with severe mixed aortic disease and multivessel coronary artery disease (CAD), complicating surgical timing and strategy.
Case: A 56-year-old man presented with decompensated heart failure (NYHA III-IV), constitutional syndrome, and cardiac cachexia. Transthoracic echocardiography (TTE) showed severely dilated left ventricle (LV; EDVi 137 mL/m^2), LVEF 32%, BAV with moderate-severe mixed aortic disease, and pericardial effusion. Transesophageal echocardiography (TEE) confirmed BAV with mobile vegetations (15×11 mm), moderate-severe stenosis (3D-planimetry 1.2 cm^2, mean gradient 37 mmHg), and severe eccentric regurgitation (RF 63%). Coronary angiography revealed critical stenoses (ramus 95%, OM1 95%, posterior descending 90%). Blood cultures grew methicillin-sensitive *Staphylococcus aureus*; right heart catheterization excluded pulmonary hypertension (mPAP 17 mmHg).
Decision-making: Multidisciplinary evaluation indicated urgent surgery despite high risk. Combined aortic valve replacement (bioprosthesis) and coronary artery bypass grafting was performed after 2 weeks of targeted antibiotics (nafcillin/gentamicin). Intraoperative findings confirmed vegetations and calcifications on BAV.
Conclusion: Surgery succeeded anatomically, but LVEF fell to 19% despite normal prosthesis (6 mmHg), requiring optimized heart failure therapy.

Figure 1. Multimodality TEE findings in IE on a bicuspid aortic valve



A. 2D TEE (160°): Mobile vegetations on BAV

B. Color Doppler: Severe eccentric AR (FR 63%)

C. Color Doppler: Mixed aortic disease (AS + AR)

D. 3D Zoom: Bicuspid morphology with vegetations

TEE: transesophageal echocardiography | BAV: bicuspid aortic valve | IE: infective endocarditis | AR: aortic regurgitation | AS: aortic stenosis | FR: regurgitant fraction

Session Title:	**Saturday Morning Poster Session**
Topic 1:	Valvular Diseases
Publishing Title:	ENDOCARDITIS CAUSED BY GRANULICATELLA ADIACENS: A FASTIDIOUS ORGANISM AND DELAYED DIAGNOSIS
Author Block:	Sheyla Pavajeau, Jorge Cordoba, Ana Maria Rincon Quiroz, maria espitia, Oswaldo Aguilar, Fabian Manco, Nicolas Figueredo, Ginna Rodriguez, Altea Ortiz, Antonio Figueredo, Clinica Alta complejidad del caribe, Valledupar, Colombia
Abstract Body:	**Background:** Abiotrophia and Granulicatella (nutritionally variant streptococci) are responsible for about 5% of infective endocarditis cases and are associated with higher morbidity and mortality because they are difficult to diagnose and treat specifically. **Case:** Male, 65-year-old with a history of hypertension and PCI 5 years earlier. Admitted to the hospital in June 2025 with progressive heart failure. On admission, fever, mild chronic anemia, and chest X-ray findings consistent with multilobar pneumonia, were documented. IV piperacillin/tazobactam 2.5 g every 8 hours was initiated.On day 4, two blood cultures grew Granulicatella adiacens. Culture was performed on bioMérieux PolyViteX chocolate agar (growth factors, vitamins, amino acids, and coenzymes). Identification was done with VITEK MS system with MALDI-TOF mass spectrometry (ribosomal protein analysis).Antibiotic therapy was switched to linezolid 600 mg IV every 12 hours.3D TEE showed severe left ventricular dilatation and LVEF of 68%. Severe biatrial enlargement was present. Severe mitral regurgitation due to fibroelastic deficiency with rupture of major chordae tendineae was observed. No signs of endocarditis.Coronary angiography showed no significant lesions.The patient persisted with intermittent fever, met one major and one minor Duke-ISCVID 2023 criterion, and STS mortality risk 14.4%, so surgery was performed.Minimally invasive mitral valve replacement was done using a Mosaic N°31 bioprosthesis (Medtronic).Intraoperative findings showed microvegetations on the anterior and posterior leaflets and ruptured chordae at A2 and P2.No postoperative complications occurred, and the patient was discharged after 6 weeks of antibiotic therapy.At 3-month follow up,

echocardiography showed an LVEF of 51% with a normally functioning bioprosthetic mitral valve.
Decision-making: Enriched culture media and spectrometric analysis of ribosomal proteins should be routinely used to enable targeted therapy, thereby reducing morbidity and mortality.
Conclusion: The high clinical suspicion, diagnostic methods, medical and surgical therapies implemented allowed an adequate outcome for this patient.

Session Title:	**Saturday Morning Poster Session**
Topic 1:	Valvular Diseases
Publishing Title:	RIGHT VENTRICULAR-PULMONARY ARTERIAL COUPLING AS A PREDICTOR OF HEART FAILURE REHOSPITALIZATION AFTER TRANSCATHETER EDGE-TO-EDGE MITRAL REPAIR
Author Block:	Marcos Daniel Marcos Ramirez, Julieta Danira Morales Portano, Gladis Faustino Maravilla, Marco A. Alcántara Meléndez, Arnoldo S. Jiménez Valverde, Carlos Javier Roque Palacios, Centro Médico Nacional 20 de Noviembre, ISSSTE., Mexico City, Mexico
Abstract Body:	**Background:** Right ventricular-pulmonary arterial coupling has emerged as a prognostic marker in heart failure and valvular heart disease. However, its prognostic value after transcatheter edge-to-edge mitral repair remains unclear. **Methods:** We conducted a single-center retrospective cohort study including patients with heart failure and secondary mitral regurgitation undergoing MitraClip transcatheter edge-to-edge repair between 2017 and 2025. Postprocedural tricuspid annular plane systolic excursion/pulmonary artery systolic pressure (TAPSE/PSAP) ratio was evaluated. The primary endpoint was heart failure rehospitalization. **Results:** A total of 55 patients were included; 21 (38.2%) developed heart failure rehospitalization. Patients with rehospitalization had significantly lower postprocedural TAPSE/PSAP values compared with those without events (0.36±0.15 vs 0.70±0.32; p<0.001). TAPSE/PSAP demonstrated good predictive performance, with an area under the curve of 0.88. A cutoff value ≤0.45 showed 80.9% sensitivity and 85.3% specificity. Patients with TAPSE/PSAP ≤0.45 had significantly increased risk of rehospitalization (OR 24.65; 95% CI 5.81-104.53; p<0.001). Cox analysis confirmed increased risk of rehospitalization (HR 8.28; 95% CI 2.76-24.85; p<0.001). **Conclusion:** Impaired right ventricular-pulmonary arterial coupling assessed by postprocedural TAPSE/PSAP was strongly associated with heart failure

rehospitalization after MitraClip transcatheter edge-to-edge repair and may improve postprocedural risk stratification.

Session Title: **Saturday Morning Poster Session**

Topic 1: Valvular Diseases

Publishing Title: TRANSTHYRETIN CARDIAC AMYLOIDOSIS AND AORTIC STENOSIS A DIFFERENT RESTRICTIVE HEMODYNAMIC PHENOTYPE

Author Block: Katerin Sánchez Jiménez, Katihurca Almonte Montes de Oca, Edgar D. Cadena Barranco, Cleysi Galva, Alexander Valentin Nova Torres, Samuel Bencosme, Yahina Duarte, Vielka Vanessa Cabral Rodriguez, Carla Marquez Figuereo, Seily Nova, Ivan Nuñez, felixander abreu, PABLO BELLO, Eladia Reinoso Evangelista, Jennifer Lugo, Jonathan Rodríguez, Asociación Instituto Dominicano de Cardiología (Aidc), Santo Domingo, Dominican Republic

Abstract Body:

Background: Transthyretin Cardiac Amyloidosis and Aortic Stenosis frequently coexist in elderly patients, reflecting infiltrative myocardial disease and chronic pressure overload. Advanced echocardiographic imaging may identify restrictive physiology and myocardial dysfunction.

Case: A 72 year old man with hypertension and progressive dyspnea, corresponding to New York Heart Association functional class II, underwent transthoracic echocardiography showing concentric left ventricular hypertrophy with preserved ejection fraction of 63%. Global longitudinal strain was reduced to −16.1%. Aortic valve area measured 0.33 cm^2 with moderate regurgitation. Diastolic evaluation demonstrated elevated filling pressures with an E/e' ratio of 14.5. Left atrial reservoir strain was reduced to 20%, while right ventricular free-wall strain remained preserved at −21.7%. Bone scintigraphy with technetium-99m pyrophosphate demonstrated Perugini grade 2 uptake supporting transthyretin cardiac amyloidosis.

Decision-making: Transthyretin cardiomyopathy and aortic stenosis produce a restrictive-pressure overload phenotype with impaired myocardial deformation despite preserved ejection fraction.

Conclusion: This case highlights the restrictive hemodynamic phenotype of concomitant transthyretin cardiac amyloidosis and aortic stenosis. Multimodal echocardiographic assessment provides incremental value for infiltrative valvular disease characterization.

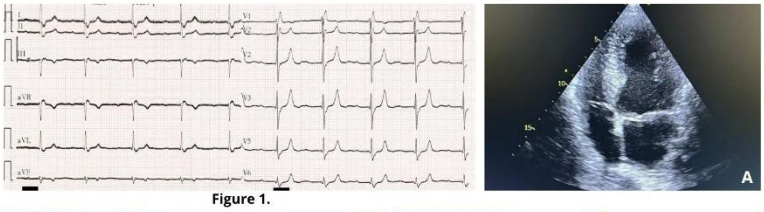


Figure 1.

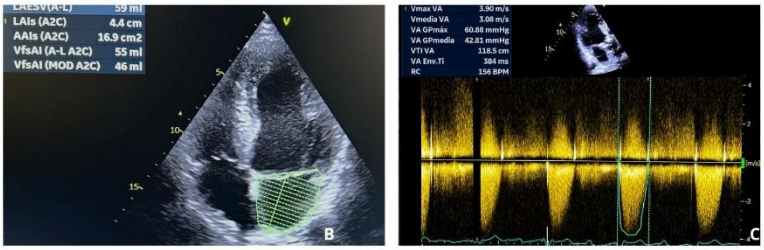
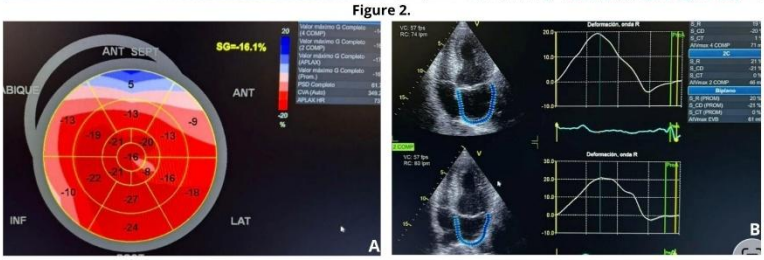


Figure 2.



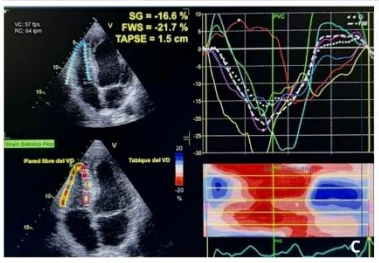
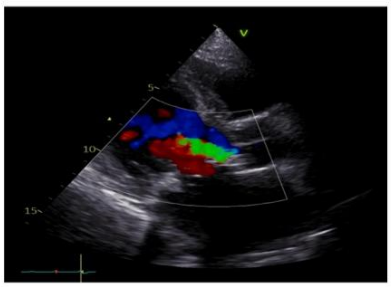
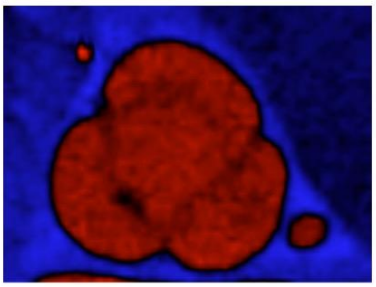


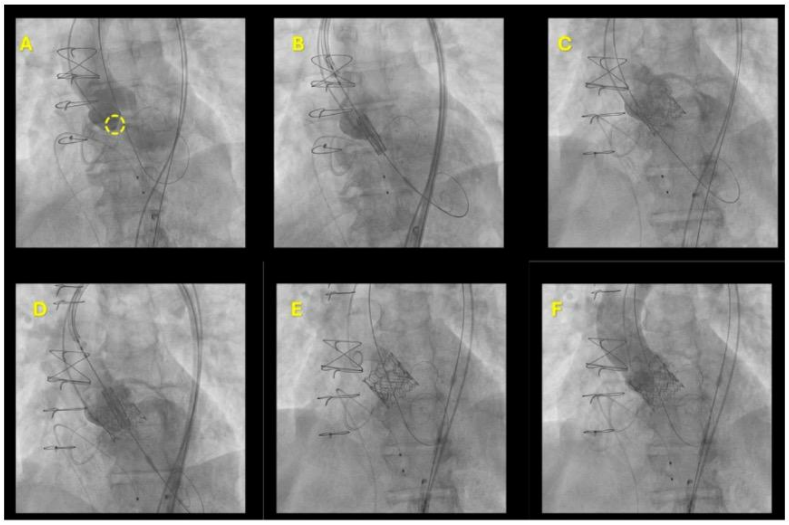
Figure 3.

Fig.1 Electrocardiogram of 12 leads: Sinus rhythm, with first-degree atrioventricular block and a pattern compatible with incomplete right bundle branch block. **Fig.2 Transthoracic echocardiogram: A.** The apical four-chamber view demonstrated concentric left ventricular hypertrophy **B.** Left atrial volume: 46 mL (unindexed); 36 mL/m² (indexed). **C.** Continuous-wave Doppler assessment of the aortic valve documented: Maximum transvalvular gradient: 60.88 mmHg Mean transvalvular gradient: 42.81 mmHg Aortic valve area: 0.33 cm² **Fig.3 A.** Global longitudinal strain was reduced at −16.1 %, with relative preservation of myocardial deformation in the mid and apical segments. The apical sparing index was <1**.** Right ventricular free wall strain was preserved at −21.7 %. **B.** Left atrial reservoir strain was reduced to 20 %, suggesting impaired left atrial function. **C.** Right ventricular free wall strain was preserved at −21.7 %.

Session Title:	**Saturday Morning Poster Session**
Topic 1:	Valvular Diseases
Publishing Title:	TRANSCATHETER AORTIC VALVE IMPLANTATION FOR SEVERE IATROGENIC AORTIC REGURGITATION FOLLOWING SURGICAL MITRAL VALVE REPLACEMENT
Author Block:	Saul Yair Guillot Castillo, María Alejandra Monroy Jiménez, Leonel Avendano-Perez, Marco Antonio Alcantara Melendez, Gabriela Melendez Ramirez, Gladis Faustino Maravilla, Antonio Vargas Cruz, Carlos Alberto Zaragoza Cortez, CMN 20 de Noviembre ISSSTE, Mexico City, Mexico, UNAM, Mexico city, Mexico
Abstract Body:	**Background:** A 68-year-old male presented with progressive dyspnea. Echocardiography revealed severe mitral regurgitation. Patient underwent surgical mitral valve replacement with a bioprosthetic valve. Immediate postoperative recovery was favorable, a subsequent evaluation identified perforation of non-coronary cusp, resulting in severe aortic regurgitation (AR). **Case:** The patient experienced deterioration on NYHA functional class. Given his high surgical risk for re-intervention, the case was evaluated by the Heart-Team, and a percutaneous strategy was selected. **Decision-making:** In procedure, a pigtail catheter was placed in non-coronary sinus, confirming AR (Fig A). The 1st valve was positioned (Fig B) and deployed (Fig C); significant paravalvular leak (PVL) from the left coronary sinus was observed (Fig D), accompanied by ventricularization of the aortic pressure. To resolve the PVL, a 2nd aortic valve was successfully implanted in a "valve-in-valve" way. (Fig E). Final angiographic control (Fig F) demonstrated no residual PVL and stable positioning. The patient was discharged in stable condition. **Conclusion:** This case demonstrates that percutaneous management of severe AR, even when resulting from post-surgical complications is a feasible and safe alternative. The presence of a prior mitral prosthesis acted as a critical anatomical landmark and support, facilitating a successful structural intervention in a patient otherwise ineligible for conventional surgery.



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Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Cardiac Arrhythmias
Publishing Title:	ATRIAL FLUTTER RECURRENCE AFTER PULSED FIELD ABLATION VERSUS RADIOFREQUENCY ABLATION FOR ATRIAL FIBRILLATION: A SYSTEMATIC REVIEW AND META-ANALYSIS
Author Block:	Nithin Karnan, Nidhi Laxminarayan Rao, Hamesh Gudalaraja, Gowrisankar Kugalur Saravanan, Kavikharan Karupannan, MercyOne North Iowa, Mason City, IA, USA, Adventist Health, Bakersfield, CA, USA
Abstract Body:	**Background:** Pulsed field ablation (PFA) has emerged as a nonthermal alternative to radiofrequency ablation (RFA) for pulmonary vein isolation in atrial fibrillation (AF). Multiple systematic reviews compare overall efficacy between modalities, but none isolate atrial flutter (AFL) recurrence as a distinct endpoint despite its unique mechanisms and management implications. **Methods:** A PRISMA 2020-compliant systematic review searched PubMed, Embase, Cochrane CENTRAL, and ClinicalTrials.gov (January 2021-December 2025), supplemented by HRS, AHA, ACC, and EHRA proceedings. Eligible studies included randomized controlled trials (RCTs), cohorts, and registries (N≥100) with ≥3 months follow-up. Two independent reviewers performed screening and extraction. Risk of bias was assessed using Cochrane RoB 2 and Newcastle-Ottawa Scale. Random-effects meta-analysis was performed with Peto odds ratios for rare events. The primary endpoint was AFL recurrence; secondary endpoints included tamponade and stroke/transient ischemic attack. **Results:** Fifteen studies (~120,000 patients) were included. RCT data demonstrated comparable AFL recurrence (ADVENT: 26.7% vs 28.7% failure, noninferiority probability 0.999; BEAT PAROX-AF: 77.2% vs 77.6% success, P=0.84). Pooled analysis showed modest PFA advantage (OR 0.65-0.73), driven by observational data on Bayesian analysis. Flutter-specific AFL recurrence after PFA was 3.9% overall. Tamponade and stroke rates were low and comparable (P=0.80 and P=0.78). PFA eliminated pulmonary vein stenosis (0% vs 1.4-1.9%), esophageal injury, and persistent phrenic palsy. PFA introduced

hemolysis (94.3% vs 6.8%, P0.001) and coronary spasm (5.8% vs 0.6%, P0.001) as novel complications. Overall serious adverse events favored PFA (3.4% vs 7.6%).

Conclusion: PFA and RFA demonstrate comparable AFL recurrence in RCTs. PFA eliminates several thermal complications but introduces hemolysis and coronary spasm as platform-dependent risks. This first AFL-focused systematic review highlights the need for RCT data specifically powered for flutter outcomes.

Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Cardiac Arrhythmias
Publishing Title:	FIBRILACIÓN AURICULAR PARASIMPÁTICA EN PACIENTE JOVEN: DIAGNÓSTICO CON MONITOR DE EVENTOS IMPLANTABLE Y AISLAMIENTO DE VENAS PULMONARES CON MODULACIÓN DE PLEXO GANGLIONAR
Author Block:	Alexander Álvarez, Orielso Becerra, Sebastián Macías, Joan S. Osorio, Instituto del Corazón de Bucaramanga, Bucaramanga, Colombia
Abstract Body:	**Background:** La fibrilación auricular (FA) vagal es un subtipo infrecuente de FA paroxística asociado a predominio parasimpático y observado en pacientes jóvenes sin cardiopatía estructural. Se describe un hombre de 38 años, residente en Santander, Colombia, con palpitaciones desde la infancia, progresión de síntomas, deterioro funcional y episodios nocturnos en reposo. No presentaba factores de riesgo cardiovascular y portaba un monitor implantable LINQ® tras estudios previos no diagnósticos. **Case:** El paciente presentó palpitaciones, fatiga y mareo con patrón compatible con activación vagal. Un Holter inicial fue normal; posteriormente se documentaron extrasístoles supraventriculares y pausas sinusales. El monitor implantable identificó episodios recurrentes de FA paroxística autolimitada asociados a bradicardia sinusal. Ecocardiogramas y prueba de esfuerzo descartaron cardiopatía estructural e isquemia. Se realizó estudio electrofisiológico con mapeo tridimensional CARTO-3®, aislamiento de las cuatro venas pulmonares y ablación por radiofrecuencia con modulación de plexos ganglionares, logrando bloqueo bidireccional completo sin complicaciones. **Decision-making:** La estrategia terapéutica se sustentó en síntomas persistentes, impacto funcional, ausencia de enfermedad estructural y documentación prolongada de FA mediante monitor implantable. La asociación entre bradicardia sinusal y episodios nocturnos orientó hacia FA de predominio vagal. Las guías actuales respaldan la ablación con catéter y el aislamiento de venas pulmonares como tratamiento de primera línea en pacientes jóvenes sintomáticos con FA paroxística; la modulación autonómica se consideró un complemento potencialmente beneficioso.

Conclusion: El caso destaca la utilidad diagnóstica de la monitorización implantable continua y la eficacia del aislamiento de venas pulmonares con modulación ganglionar en FA vagal probable. El paciente egresó en ritmo sinusal, sin complicaciones y con mejoría de la FEVI de 62% a 69%. El seguimiento prolongado permitirá evaluar la durabilidad del resultado.

Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Cardiac Arrhythmias
Publishing Title:	COMBINED TRANSVENOUS ATRIAL AND LEADLESS VENTRICULAR PACING AS A RESCUE STRATEGY IN A PATIENT WITH COMPLETE HEART BLOCK AFTER COMPLEX REDO AORTIC, MITRAL AND TRICUSPID VALVE REPLACEMENT
Author Block:	Camily Morales Lopez, Aya Elalfy, Anca Chiriac, Mayo Clinic, Jacksonville, FL, USA
Abstract Body:	**Background:** Ventricular pacing after multi-valve surgery is associated with unique challenges. There is a need to avoid placing transvenous leads across a new tricuspid valve; the options are limited to epicardial pacing or ventricular pacing via a coronary sinus tributary. Recently, leadless pacing has emerged as a valid alternative. **Case:** An 82-year-old man underwent high-risk replacement of the mitral, aortic, and tricuspid valves. An epicardial ventricular pacing wire was also placed and tunneled to an abdominal pocket. He developed irreversible complete heart block. We attempted a biventricular pacemaker using transvenous atrial and coronary sinus (CS) leads. The atrial lead was placed, however; the CS lead and the epicardial RV lead had very high thresholds, suggestive of diffuse epicardial scar (above 4V at 1msec). **Decision-making:** A leadless ventricular device (MICRA AV) was placed via the right femoral vein, with the guidance of an octapolar mapping catheter to define the anatomy across the new valve. Multiple septal sites were tested and required recapture and repositioning of the device due to scar; the final deployment achieved a great midseptal location, with a threshold of 0.5V at 0.24msec and QRS duration of 136msec (Figure 1). **Conclusion:** This case highlights the importance of a systematic approach to pacing patients with recent tricuspid surgery. Leadless pacing can achieve an excellent septal position and narrow QRS without injury to the tricuspid valve.

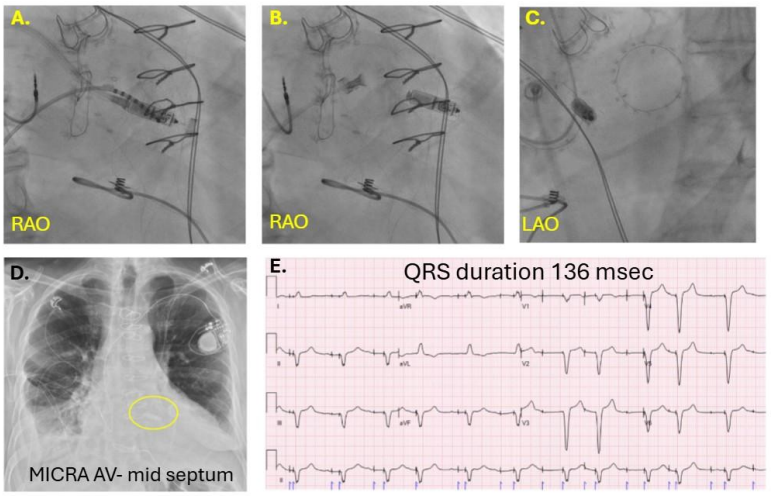


Figure 1. Leadless pacemaker (MICRA AV, Medtronic) deployment through a newly implanted bioprosthetic tricuspid valve to a mid-septum position. A. Leadless pacemaker follows an octapolar catheter. B–C. RAO/LAO views of septal deployment. D. Chest X-ray showing the Micra AV on the mid septum and mitral/tricuspid bioprosthetic valves. E. ECG shows atrial pacing via the transvenous lead and ventricular pacing via the Micra AV. The QRS duration is narrow, 136 milliseconds.

Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Cardiac Arrhythmias
Publishing Title:	SEIZURE-LIKE ACTIVITY REVEALING RECURRENT SINUS ARREST FOLLOWING LIVER TRANSPLANTATION
Author Block:	Angel Davila, Ivan Rafael Figueroa Baez, Marcos Fernandez, BELISSA LOPEZ, San Juan City Hospital, San Juan, PR, USA
Abstract Body:	**Background:** Convulsive syncope secondary to prolonged sinus arrest is an underrecognized mimic of epileptic seizures in critically ill patients. In post-transplant ICU patients, autonomic dysfunction, critical illness, and immunosuppressant-related electrophysiologic effects may predispose to clinically significant bradyarrhythmias. **Case:** A 56-year-old man with Budd-Chiari syndrome and hepatocellular carcinoma underwent orthotopic liver transplantation complicated by hemorrhagic shock, multiple surgical re-explorations, respiratory failure requiring tracheostomy, and ICU deconditioning. Around postoperative day 14, he developed recurrent episodes of unresponsiveness associated with generalized tonic stiffening and spontaneous recovery. Seizures were suspected, and levetiracetam followed by topiramate were initiated without improvement. Continuous EEG demonstrated no epileptiform activity. Telemetry revealed recurrent sinus arrest/asystole associated with convulsive episodes, including pauses up to 10.4 seconds and one event progressing to nonsustained ventricular tachycardia before return to sinus rhythm. Electrolytes, QTc interval, thyroid studies, and echocardiography were unremarkable. Electrophysiology evaluation determined the episodes represented symptomatic sinus node dysfunction. Due to recurrent events, a dual-chamber permanent pacemaker was implanted with complete resolution of syncopal and convulsive episodes. **Decision-making:** Persistent events despite antiseizure therapy prompted integrated neurocardiac evaluation. Cerebral hypoperfusion during prolonged sinus arrest likely produced tonic movements mimicking generalized seizures. According to ACC/AHA/HRS guidelines, symptomatic sinus node dysfunction with recurrent pauses causing syncope represents a Class I indication for

permanent pacing.

Conclusion: In critically ill post-transplant patients with seizure-like activity, cardiac telemetry should be reviewed when EEG findings are non-epileptiform. Early electrophysiology consultation and integrated EEG-ECG monitoring may prevent diagnostic delay and facilitate lifesaving permanent pacing.

Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Cardiac Arrhythmias
Publishing Title:	UNMASKING FAMILIAL ATRIAL CARDIOMYOPATHY: SEVERE ATRIAL DILATION AND ELECTRICAL SILENCE LINKED TO A MYL4 MUTATION
Author Block:	Paula Quiroga, Massiel K. Cañavera, Juan Pablo Estrada, Fundación Cardioinfantil-Instituto de Cardiología, Bogotá, Colombia, Universidad del Rosario, Universidad del Bosque, Colombia
Abstract Body:	**Background:** Familial atrial fibrillation linked to MYL4 gene mutations drives early-onset arrhythmias and progressive atrial cardiomyopathy. Recognizing this etiology is crucial for managing severe atriopathy and guiding family screening. **Case:** A 49-year-old woman with a dual-chamber pacemaker since age 35 for sinus node dysfunction exhibits progressive disease. At age 41, she develops high-grade atrioventricular block and persistent atrial fibrillation. She undergoes pulmonary vein isolation; 3D mapping documents bi-atrial electrical silence, with activity limited to the right atrial appendage neck. Subsequent echocardiograms reveal severe progressive atrial dilation despite no arrhythmia recurrence. Comprehensive workup rules out Chagas, ischemia, and infiltrative diseases. **Decision-making:** A strong family history of early-onset arrhythmias and pacemaker dependency prompts genetic investigation. Her 20-year-old son, recently treated for atrial fibrillation, tests positive for a pathogenic heterozygous MYL4 mutation. This confirms a genetic basis for the patient's atriopathy, shifting the clinical focus toward familial genetic screening and structural monitoring. **Conclusion:** MYL4 mutations cause progressive atrial cardiomyopathy, manifesting as early electrical silence and severe dilation. This case underscores the necessity of genetic testing in unexplained atrial disease to optimize family risk stratification.

Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Cardiovascular Disease Prevention
Publishing Title:	AGREEMENT BETWEEN DIRECTLY MEASURED AND ESTIMATED LDL-C IN PATIENTS WITH CORONARY ARTERY DISEASE: A MULTICENTER COLOMBIAN STUDY
Author Block:	Maria Londono, Andrea Alejandra Arteaga-Tobar, Brayan Daniel Cordoba Melo, Juan Pablo Arango-Ibanez, Viviana Quintero Yepez, Milton René Ayala, Juan Fernando Velásquez Osorio, José D. Cruz-Cuevas, Mario Miguel Barbosa, Juan Andrés Muñoz-Ordoñez, Valeria Azcarate-Rodriguez, Dora Inés Molina de Salazar, Juan Esteban Gomez, Fundación Valle del Lili, Cali, Colombia
Abstract Body:	**Background:** Low-density lipoprotein cholesterol (LDL-C) is commonly estimated using equations, although accuracy may vary in coronary artery disease (CAD). We compared directly measured LDL-C with six estimation equations in Colombian patients with angiography-confirmed CAD. **Methods:** Retrospective multicenter diagnostic agreement study nested within the EDHIPO MARCA Registry including adults with angiography-confirmed CAD from 11 Colombian institutions. Patients with at least one follow-up within 12 months documenting directly measured LDL-C and lipid-lowering therapy during 2011-2012, 2016-2017, or 2021-2022 were eligible. Directly measured LDL-C was the reference standard, compared with LDL-C estimated using DeLong, Friedewald, Sampson, Anandaraja, Cordova, and Extended Martin/Hopkins equations. Agreement was assessed using Lin's concordance correlation coefficient (CCC), mean difference, and Bland-Altman limits of agreement. Subgroup analyses used triglycerides (<200 vs. ≥200 mg/dL) and LDL-C (<100 vs. ≥100 mg/dL). **Results:** A total of 1,149 patients had 1,867 LDL-C determinations. Median age was 66 years (IQR 59-74), 72% were men, and unstable angina was the most frequent indication (29%). DeLong showed the highest agreement with directly measured LDL-C (CCC 0.957, 95% CI 0.953-0.961), followed by Sampson (0.955), Friedewald (0.952), and Extended Martin/Hopkins (0.950), whereas Anandaraja and Cordova showed lower concordance (0.851 and 0.871). DeLong had the narrowest limits of agreement (−22 to 24 mg/dL), while

Anandaraja and Cordova had the widest. Bland-Altman showed minimal bias for DeLong and Extended Martin/Hopkins, while Anandaraja and Cordova had greater dispersion at higher LDL-C values. Agreement decreased at triglycerides ≥200 mg/dL; in this subgroup, Extended Martin/Hopkins (CCC 0.739) and DeLong (0.723) performed best. Agreement also declined at LDL-C ≥100 mg/dL, with Extended Martin/Hopkins showing the highest concordance (CCC 0.777).

Conclusion: In patients with CAD, DeLong and Extended Martin/Hopkins showed the best agreement with directly measured LDL-C, whereas agreement decreased at triglycerides ≥200 mg/dL and LDL-C ≥100 mg/dL.

Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Cardiovascular Disease Prevention
Publishing Title:	SHORT SLEEP DURATION AND CARDIOVASCULAR RISK FACTORS IN YOUNG ADULTS A NATIONWIDE ANALYSIS FROM THE NATIONAL HEALTH AND NUTRITION EXAMINATION SURVEY (NHANES 2017-2020)
Author Block:	Camila Yepez, Andres Suarez, Paola Yance, Universidad Cooperativa de Colombia, Santa Marta, Colombia
Abstract Body:	**Background:** La corta duración del sueño (<6 horas/noche) se ha revelado como un nuevo factor de riesgo cardiovascular; sin embargo, su impacto en los adultos jóvenes aún no se ha estudiado en profundidad. Este estudio evaluó la asociación entre la corta duración del sueño y los factores de riesgo cardiovascular en adultos jóvenes de Estados Unidos. **Methods:** Se realizó un análisis transversal utilizando datos de 5847 participantes de entre 18 y 45 años de edad, provenientes de NHANES 2017-2020. La duración del sueño fue autoinformada y categorizada como corta (<6 horas), recomendada (7-8 horas) o larga (≥9 horas). Los factores de riesgo cardiovascular incluyeron hipertensión, obesidad, diabetes, síndrome metabólico, proteína C reactiva elevada y alto riesgo de enfermedad cardiovascular aterosclerótica (ECVA). Se realizaron modelos de regresión logística multivariante ajustados por variables demográficas y conductuales. **Results:** En general, el 28,4% de los participantes reportaron una duración de sueño corta. En comparación con los participantes que dormían entre 7 y 8 horas, los que dormían poco tenían una mayor prevalencia de hipertensión (24,3% frente a 15,8%), obesidad (38,7% frente a 29,2%), diabetes (9,2% frente a 5,1%) y síndrome metabólico (22,1% frente a 14,3%) (todos p<0,001). Después del ajuste multivariable, la duración corta del sueño se mantuvo asociada de forma independiente con la hipertensión (OR ajustado 1,52; IC del 95%: 1,24-1,87), la obesidad (OR ajustado 1,48; IC del 95%: 1,26-1,74), la diabetes (OR ajustado 1,71; IC del 95%: 1,28-2,29) y el síndrome metabólico (OR ajustado 1,61; IC del 95%: 1,33-1,95). La proteína C reactiva elevada y el alto riesgo de ASCVD también fueron más frecuentes entre los que dormían poco.

Conclusion: La corta duración del sueño se asocia de forma independiente con múltiples factores de riesgo cardiovascular en adultos jóvenes. Estos hallazgos sugieren que la falta de sueño representa un factor modificable importante para la prevención cardiovascular temprana y respaldan la incorporación de intervenciones de higiene del sueño en las estrategias cardiometabólicas preventivas.

Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Cardiovascular Disease Prevention
Publishing Title:	BEYOND THROMBOSIS: PREMATURE DIFFUSE CORONARY ARTERY DISEASE IN A YOUNG PATIENT WITH SLE AND ANTIPHOSPHOLIPID SYNDROME
Author Block:	Jorge Luis Vallee, Liu Felix, Guerra Yissel, Carlos Guerra, Hospital Santo Tomas, Panama, Panama
Abstract Body:	**Background:** Systemic lupus erythematosus and antiphospholipid syndrome are associated with accelerated atherosclerosis, endothelial dysfunction, and a markedly increased thrombotic risk, leading to premature cardiovascular disease at unusually young ages. **Case:** A 43-year-old man with longstanding systemic lupus erythematosus and antiphospholipid syndrome, presented with sudden-onset oppressive chest pain radiating to the left arm accompanied by diaphoresis. Electrocardiography revealed an inferior ST-segment elevation myocardial infarction with right ventricular involvement. Given his history of APS-associated hypercoagulability and chronic anticoagulation, the initial clinical suspicion strongly favored an acute coronary thrombotic event. However, coronary angiography unexpectedly demonstrated severe diffuse multivessel coronary artery disease. **Decision-making:** This case highlights the complex cardiovascular phenotype associated with autoimmune disease, where chronic inflammation, endothelial injury, accelerated atherosclerosis, and thrombosis coexist simultaneously. In this patient, the severity and diffuse nature of coronary artery disease at 43 years of age strongly suggested premature immune-mediated vascular injury. However, APS also raised the possibility that the acute coronary event may have been predominantly thrombotic in origin despite chronic anticoagulation therapy. The coexistence of APS, warfarin therapy, aspirin allergy, and diffuse multivessel disease significantly complicated antithrombotic management and long-term therapeutic decision-making. A multidisciplinary approach involving cardiology, rheumatology, and hematology was required to optimize treatment.

Conclusion: SLE and APS may lead to severe premature coronary disease and STEMI in young patients through overlapping mechanisms of accelerated atherosclerosis and thrombosis. This case highlights the profound cardiovascular burden associated with autoimmune disease and underscores the need for earlier cardiovascular risk recognition, diseasespecific risk assessment tools, and multidisciplinary management in these high-risk populations.

Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Cardiovascular Disease Prevention
Publishing Title:	AGREEMENT BETWEEN WHO/PAHO AND GLOBORISK-LAC NON-LABORATORY CARDIOVASCULAR RISK SCORES IN OLDER ADULTS FROM THE PERUVIAN AMAZON
Author Block:	Fabián Chávez Ecos, Rodrigo A. Chavez-Ecos, Alexander M. Parra-Huaroto, Marcelo S. Chavez-Ecos, S. Belen Alderete-Quispe, Fabricio P. Canchari-Ramos, Miguel Angel Chavez-Gutarra, Fernando Runzer-Colmenares, Jose F. Parodi, Carlos Vergara Sanchez, Kiara Camacho Caballero, Carlos Toro Huamanchumo, Facultad de Ciencias de la Salud, Universidad Científica del Sur. Lima, Perú, Lima, Peru, Red de Cardiología y Salud Pública (RCSP), Ica, Perú, Ica, Peru
Abstract Body:	**Background:** Cardiovascular disease is the leading cause of death in Latin America and the Caribbean, yet over 40% of older adults (OAs) in remote communities lack access to laboratory-based risk assessment. Non-laboratory cardiovascular risk prediction tools are essential for equitable screening in these resource-limited settings; however, the degree of agreement between available calculators remains unknown. **Methods:** We conducted a cross-sectional analysis using data from the AMAZON-FRAIL project, including community-dwelling OAs aged 60-74 years without prior cardiovascular disease from three Peruvian Amazon communities. Ten-year cardiovascular risk was estimated using non-laboratory-based WHO/PAHO and Globorisk-LAC. Risk was categorized as low (<10%), moderate (10-<20%), and high (≥20%). Agreement was assessed using weighted Cohen's kappa; correlation using Pearson's coefficients; and individual-level agreement using Bland-Altman analysis. All analyses were stratified by sex. **Results:** Of 428 enrolled individuals, 166 met eligibility criteria (69.9% female; mean age 66.0 ± 4.1 years). Mean WHO/PAHO risk score was 6.9 ± 2.8% versus 12.0 ± 4.5% for Globorisk-LAC (p<0.001). WHO/PAHO classified 81.9% as low risk and none as high risk, while Globorisk-LAC classified 33.1% as low, 62.1% as moderate, and 4.8% as high risk. Overall categorical agreement was 46.4%

(weighted kappa=0.13; slight), moderate in males (weighted kappa=0.45) but slight in females (weighted kappa=0.01). Despite low categorical agreement, both scores showed strong linear association (Pearson r=0.82-0.93; p<0.001) but only moderate absolute agreement (ICC=0.47; Lin's CCC=0.47). Bland-Altman analysis revealed a systematic positive bias of 5.1% (95% limits of agreement: −0.2 to 10.4), with Globorisk-LAC consistently yielding higher estimates.

Conclusion: These non-laboratory cardiovascular risk calculators cannot be used interchangeably among OAs from the Peruvian Amazon, with particularly poor agreement in women. Prospective outcome validation studies are urgently needed before either calculator is adopted as the basis for treatment allocation in remote, underserved older populations.

Session Title: **Saturday Afternoon Poster Session**

Topic 1: Cardiovascular Disease Prevention

Publishing Title: SLEEP DISTURBANCES AND OBSTRUCTIVE SLEEP APNEA SYNDROME ASSOCIATION WITH CARDIOVASCULAR RISK: A CROSS-SECTIONAL ANALYSIS

Author Block: Ilani Paola Santoyo Pérez, Javier Andres Ascencio Guerrero, Hector Iñaki Marrufo Rizo, Daniel G. Gómez-Revilla Mancilla, Valeria Ortega Albarran, Daniela Martínez Martín, Jesús E. González-López, Joselyn Noriega Saldaña, Diego I. Cardoso Casco, Edgar Francisco Carrizales-Sepulveda, Jennifer Ann Swain Saint Martin, Julio C. Pérez Bustamante, Irving U. Díaz Ramírez, Jorge A. Vázquez Acosta, Yolotzin G. Anguiano Ramos, Luis Fernanda Aguilera Mora, Salvando Latidos, Guadalajara, Jalisco, Mexico, Department of Medicine and Nutrition, University of Guanajuato, León, Guanajuato, Mexico

Abstract Body:

Background: Obstructive sleep apnea (OSA) and abnormal sleep duration have been associated with adverse cardiovascular outcomes through mechanisms including intermittent hypoxia, sympathetic activation, systemic inflammation, and circadian disruption.

Methods: We conducted a cross-sectional study of adults aged 40-74 years participating in a population-based cardiovascular screening program. OSA was self reported, and sleep duration was categorized as short, normal, or long. Cardiovascular risk was estimated using the Globorisk-LAC equation. Logistic regression models evaluated the association between sleep disorders and elevated cardiovascular risk after adjustment for alcohol consumption and physical activity.

Results: Among 1745 participants (median age 56 years, 62% women), OSA was identified in 14%; short and long sleep duration represented 17% and 2%, respectively. OSA was associated with higher cardiovascular risk (OR=1.795, 95% CI 1.273-2.533, $p<0.001$). Short sleep duration was also associated with increased risk (OR=1.613, 95% CI 1.170-2.224, $p=0.004$), while long sleep duration was not.

Conclusion: Self-reported OSA and short sleep duration were independently associated with higher cardiovascular risk even after adjustment. Long sleep duration was not significantly associated with elevated risk. These findings

highlight the importance of screening for sleep disorders as part of cardiovascular prevention strategies in community settings.

TABLE 1 **Demographic and Clinical Characteristics**

VARIABLE	VALUE N = 1,745
Demographics	
Age, years	56 (40–74)
Sex	
Female	1,085 (62.2%)
Male	660 (37.8%)
Anthropometric Variables	
BMI, kg/m²	27.53 (13.33–61.73)
SBP, mmHg	125 (75–210)
Lifestyle Factors	
Sedentary lifestyle	677 (39%)
Smoking	279 (16%)
Alcohol consumption	903 (52%)
Sleep Variables	
Obstructive Sleep Apnea — Yes	243 (13.9%)
Sleep duration	
Short (<7 h)	301 (17.2%)
Normal	785 (44.9%)
Prolonged	40 (2.3%)
Cardiovascular Risk (GLOBORISK-LAC)	
High risk	491 (28.1%)
Low risk	1,254 (71.9%)

Continuous variables expressed as median (range). Categorical variables as n (%). SBP: systolic blood pressure; BMI: body mass index; GLOBORISK-LAC: 10-year cardiovascular risk score.

TABLE 2 **Association Between Sleep Disorders and High Cardiovascular Risk — Binary Logistic Regression**

OUTCOME	OR	95% CI	P VALUE
Sleep Variables			
Obstructive Sleep Apnea	**1.800**	**1.200 – 2.750**	**<0.001**
Short Sleep Duration	**1.613**	**1.170 – 2.224**	**0.004**
Normal Sleep (Reference)	—	—	—
Prolonged Sleep Duration	1.293	0.588 – 2.845	0.523
Other Variables			
Alcoholism	0.933	0.688 – 1.264	0.653
Sedentary Lifestyle	0.190	0.666 – 1.244	0.653

Logistic regression adjusted for age (continuous), sex, cigarette smoking, alcohol consumption, sedentary lifestyle. OR = odds ratio; CI = confidence interval. Bold / red values indicate statistical significance (p < 0.05).

Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Cardiovascular Disease Prevention
Publishing Title:	ASSOCIATION BETWEEN OBESITY AND ARRHYTHMIC RISK IN MYOCARDIAL INFARCTION WITH NON-OBSTRUCTIVE CORONARY ARTERIES
Author Block:	Alvaro Taveras, Enrique Crousett, Camila Tavarez, Ivan Rafael Figueroa Baez, Pontificia Universidad Católica Madre y Maestra, Santiago de los Caballeros, Dominican Republic, UConn Health, Farmington, CT, USA
Abstract Body:	**Background:** Arrhythmias are a recognized complication following myocardial infarction; however, determinants of arrhythmic risk in myocardial infarction with non-obstructive coronary arteries (MINOCA) remain poorly characterized. Obesity is associated with increased atrial and ventricular arrhythmias in obstructive coronary disease, but its role in MINOCA is uncertain. **Methods:** We conducted a retrospective cohort study using the TriNetX global research network. Patients with MINOCA were stratified by obesity status and propensity score matched 1:1 for baseline demographics and cardiovascular comorbidities. The primary outcome was incident atrial fibrillation over 5 years. Secondary outcomes included ventricular arrhythmias and all-cause mortality. **Results:** A total of 516 matched patients were included. Obesity was not associated with a significantly increased risk of atrial fibrillation (HR 1.22, 95% CI 0.41-3.62) or ventricular arrhythmias during follow-up. All-cause mortality was also similar between groups. Event rates remained low overall, with wide confidence intervals limiting statistical power. **Conclusion:** In this global propensity-matched cohort, obesity was not associated with increased arrhythmic risk among patients with MINOCA. These findings suggest that arrhythmogenic mechanisms in MINOCA may differ from those observed in obstructive coronary artery disease and highlight the need for further mechanistic investigation in this unique population.

Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Cardiovascular Disease Prevention
Publishing Title:	CARDIOVASCULAR AND THROMBOEMBOLIC SAFETY SIGNALS OF FDA-APPROVED JAK INHIBITORS FOR ALOPECIA AREATA: A FAERS PHARMACOVIGILANCE ANALYSIS
Author Block:	Maria Alexandra Vargas, Nicole James, Ajay Baddi, Advocate Illinois Masonic Medical Center, CHICAGO, IL, USA
Abstract Body:	**Background:** JAK inhibitors approved for alopecia areata (AA) carry an FDA boxed warning for major adverse cardiovascular events (MACE) and venous thromboembolism (VTE) extrapolated from rheumatoid arthritis trials. Whether this risk reproduces in real-world AA reports — a younger, lower-cardiovascular-risk population — is poorly characterized. **Methods:** Disproportionality analysis using the FDA Adverse Event Monitoring System (AEMS) Public Dashboard. Reports listing baricitinib, ritlecitinib (2022-2026), or deuruxolitinib (2024-2026, post-FDA approval) as a suspect drug with alopecia areata, totalis, or universalis indication were identified. MACE and VTE/PE were defined by pre-specified MedDRA preferred-term clusters. For each drug, reporting odds ratios (ROR) with 95% confidence intervals were calculated versus the pooled other two JAKi. Signal: lower 95% CI > 1, ≥3 cases. **Results:** 2,023 reports met criteria: baricitinib n=1,080; ritlecitinib n=915; deuruxolitinib n=28. 67% female; median age 37 (IQR 20-52); 77% US-origin. Baricitinib had 10 MACE and 15 VTE events; ritlecitinib 4 and 2; deuruxolitinib none. Baricitinib showed a significant VTE signal (ROR 6.63, 95% CI 1.51-29.05); MACE was numerically elevated but non-significant (ROR 2.19, 0.69-7.02). Ritlecitinib showed significantly lower VTE reporting (ROR 0.16, 0.04-0.70); MACE non-significant (ROR 0.48, 0.15-1.54). Deuruxolitinib reports were too sparse for inference. Eight reports listed death as an outcome. **Conclusion:** In AA-restricted post-marketing data, baricitinib showed a significant venous thromboembolism reporting signal versus other AA-approved JAK inhibitors, whereas ritlecitinib reported VTE less frequently.

Findings are hypothesis-generating given FAERS limitations but support drug-specific rather than class-wide cardiovascular surveillance in alopecia areata.

Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	PROBABILITY OF HFPEF IN PATIENTS WITH RESISTANT ARTERIAL HYPERTENSION.
Author Block:	Orlando José Durón Rivas, Rafael Jose Hernandez, Margoly Morales, JOSE LUIS ALVARADO, Roosevelt Hospital, Guatemala, GA, Guatemala
Abstract Body:	**Background:** Resistant arterial hypertension is associated with structural and functional cardiac abnormalities that may increase the likelihood of heart failure with preserved ejection fraction. The H2FPEF score provides a pragmatic estimate of this probability in patients with increased clinical risk. **Methods:** We performed a descriptive, cross-sectional analysis of 40 patients with resistant arterial hypertension. Clinical, biochemical, ambulatory blood pressure monitoring and echocardiographic variables were summarized. The H2FPEF score and estimated H2FPEF probability were calculated. Correlations between H2FPEF probability and selected clinical, biochemical and echocardiographic variables were explored using correlation analysis. **Results:** Mean age was 63.5 years. Median systolic and diastolic blood pressure were 137 mmHg and 74 mmHg, respectively. Mean body mass index was 26.2 kg/m^2. Median creatinine was 0.90 mg/dL, median NTproBNP was 111 pg/mL and mean estimated glomerular filtration rate was 70.6 mL/min/1.73 m^2. Median E/e' was 9.0 and median estimated pulmonary artery systolic pressure was 25 mmHg. The median H2FPEF score was 3.0, with a mean estimated H2FPEF probability of 35.4%. H2FPEF probability showed a strong inverse correlation with DASI score (r=-0.70; p<0.001), and a positive correlation with aldosterone levels (r=0.39; p=0.024) and NTproBNP (r=0.41; p=0.007). H2FPEF score was negatively correlated with diastolic blood pressure (r=-0.41; p=0.009) and correlation with systolic blood pressure was non-significant. **Conclusion:** In this cohort of patients with resistant arterial hypertension, estimated H2FPEF probability was intermediate and was associated with worse functional capacity and higher aldosterone levels. These findings suggest that systematic H2FPEF assessment may help identify a subgroup of

resistant hypertension patients with a higher probability of heart failure with preserved ejection fraction and potential neurohormonal involvement. Correlation with blood pressure levels was weaker.

Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	BEYOND THE CONGENITAL: TRANSTHYRETIN AMYLOIDOSIS AS A CAUSE OF HEART FAILURE A PATIENT WITH AORTIC COARTATION AND BICUSPID AORTIC VALVE
Author Block:	Kevin J. Acevedo Gomez, Rodrigo Antonio Bonilla, Freddy Javier Medina Santos, Vincenzo Arenas, Julieta Danira Morales Portano, National Medical Centel November 20th, Mexico City, Mexico
Abstract Body:	**Background:** Aortic coarctation represent 7% of congenital heart diseases (CHD). 25% of bicuspid aortic patients also present aortic coarctation. Association between cardiac amyloidosis (CA) and aortic stenosis in > 65 years coexists in 4%, relationship CA and CHD has been rarely reported **Case:** 41y female with aortic coarctation and bicuspid aortic valve was treated with coarctectomy at age 5. Developed severe stenosis, managed with valvuloplasty at age 16 and mechanical valve replacement at age 24. At age 28, a severe paravalvular leak was resolved with surgical closure. Developed atrial fibrillation due to extensive atrial fibrosis on mapping. At 40y, NYHA II dyspnea was presented, LVEF 30%, severe TR and MR, GLS-10% with a cherry-on-top pattern suggestive of CA **Decision-making:** Pyrophosphate SPECT distribution confirme Perugini 2 amyloidosis. MRI reported normally functioning prosthetic valve and no recoarctation. Subendocardial late gadolinium enhancement was observed in LV and atria. Serum free light chains (FLC) and urine electrophoresis were performed, showing elevated levels (K: 15, L: 8.7, K/L:1.7). Upon confirmation of TTR-CA, heart failure medical therapy was adjusted and Tafamidis was initiated **Conclusion:** Both FLC measurement increase to 99% sensitivity for AL. 80% of patients with TTR-CA present with normal FLC levels. With a Perugini-2 result, was classified as TTR-CA with elevated FLC. Although rare, infiltrative cardiomyopathies can also be a cause of LV dysfunction in CHD patients

FIGURE 1. SPECT/CT: Technetium 99 and pyrophosphates with abnormal distribution of Perugini Grade 2 tracer.

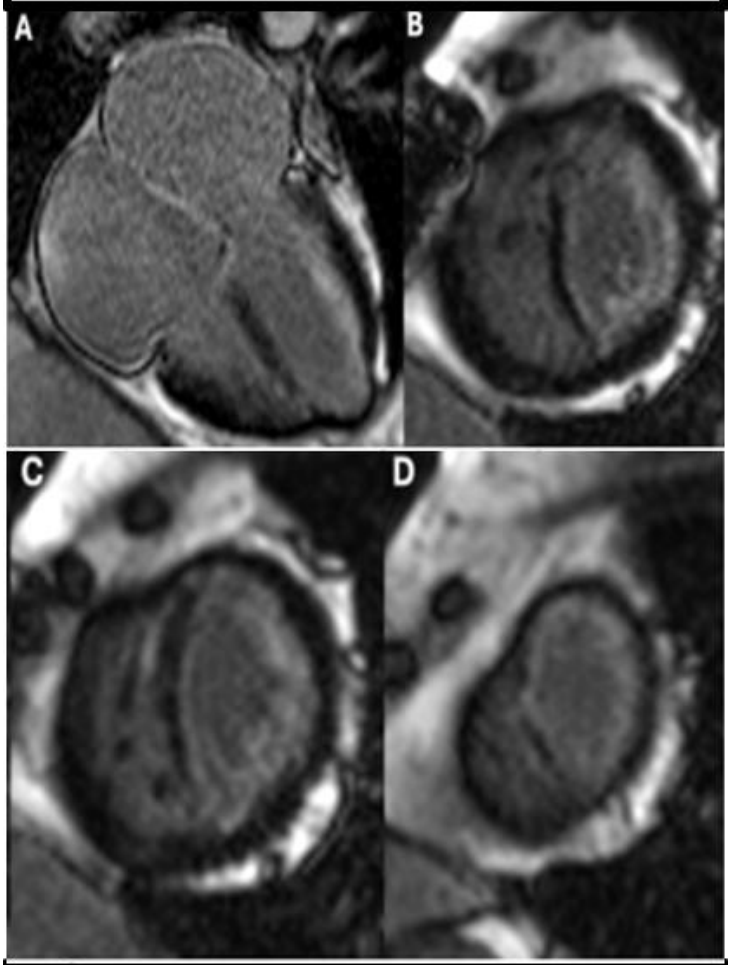


FIGURE 2. Investment-recovery sequence. A) Late reinforcement of biatrial sub-endocardial gadolining. B-D) Diffuse subdocardial of the left ventricle from the base to the apex.

Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	HOUSING INSECURITY PROLONGS HOSPITALIZATION AND ALTERS DISCHARGE DISPOSITION IN PATIENTS WITH HEART FAILURE WITH REDUCED EJECTION FRACTION
Author Block:	Jean Carlo Rivera, Deitrich Gerlt, Michael J. Mogg, Abdulmanan Abid, Terrell Roane, William Giesing, Nasser Ud-Din Khan, Mohammad Akram Kawsara, Methodist Dallas Medical Center, Dallas, TX, USA, Centro Medico Episcopal San Lucas, Ponce, PR, USA
Abstract Body:	**Background:** Housing insecurity is a major social determinant of health that complicates cardiovascular care. Its impact on outcomes and resource utilization during acute heart failure with reduced ejection fraction (HFrEF) hospitalizations remains poorly characterized. **Methods:** Using the 2017-2022 Nationwide Readmissions Database, we identified adult hospitalizations with a primary diagnosis of HFrEF and stratified patients by housing insecurity. Primary outcomes included in-hospital mortality and 30-day readmission. Secondary outcomes included length of stay (LOS), discharge disposition, total hospital charges, and intervention rates. We performed propensity score matching (PSM) followed by multivariable regression adjusting for patient and hospital characteristics. **Results:** Among 297,834 weighted HFrEF admissions, 0.9% involved housing insecurity, increasing from 0.07% in 2017 to 4.5% in 2022. Housing-insecure patients were younger (53 vs 65 years, P<.001), more frequently Medicaid-insured (66.0% vs 18.8%, P<.001), and had higher rates of drug abuse (53.6% vs 9.7%, P<.001). They demonstrated higher unadjusted 30-day readmissions (32.3% vs 20.7%, P<.001) but lower in-hospital mortality (1.5% vs 3.8%, P<.001). After PSM (N=1,597 pairs), housing insecurity trended toward increased 30-day readmission (aOR 1.17, 95% CI 1.00-1.37, P=.054) but was not associated with mortality (aOR 0.84, 95% CI 0.50-1.42, P=.524). Housing insecurity was associated with prolonged LOS (Ratio 1.09, 95% CI 1.02-1.17, P=.009) and increased routine home discharge (aOR 1.62, 95% CI 1.32-1.98, P<.001). Left- and right-heart catheterizations were less frequently performed.

Conclusion: Housing insecurity among patients hospitalized with HFrEF is associated with earlier disease presentation, prolonged hospitalization, and fewer invasive diagnostic procedures. Despite similar adjusted mortality and readmission outcomes, these findings highlight significant disparities in inpatient resource utilization and discharge planning, emphasizing the need for early social support integration and targeted transitional care strategies.

Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	ECONOMIC COSTS OF CHAGASIC CARDIOMYOPATHY IN LATIN AMERICA: A SCOPE REVIEW
Author Block:	Katherin A. Gamboa, Carlos Corona, Angie Y. Serrano, Martha Lucía Díaz, Hugo Castro-Suárez, Sergio A. Gómez, Luis Eduardo Echeverria, Lyda Z. Rojas, Fundacion Cardiovascular de Colombia, Floridablanca, Colombia, Hospital Internacional de Colombia, Piedecuesta, Colombia
Abstract Body:	**Background:** Chronic Chagasic Cardiomyopathy (CCC) is the primary determinant of morbidity and high costs in Chagas disease, driven by progression to heart failure (HF) and the need for advanced medical technologies. This scoping review aimed to systematize fragmented evidence on CCC costs in Latin America and classify economic evaluation methodologies to identify regional information gaps. **Methods:** A scoping review was conducted following the JBI methodology and PRISMA-ScR extension, with the protocol registered in OSF. Using the Population-Concept-Context (PCC) framework, we included studies of adults across all CCC clinical stages (A-D) reporting economic burden or evaluations. Searches were performed in PubMed, EMBASE, and LILACS without language restrictions. Quality was assessed using the JBI checklist for economic evaluations. **Results:** Nine original studies (2005-2025) were included, primarily focused on Colombia and Brazil. Cost-of-illness (COI) and cost-effectiveness analyses (CEA) predominated. The average annual cost per infected individual is estimated at US$ 564.06, with national burdens of US$ 11.44 billion in Brazil (0.23% of GDP). Direct medical costs per patient/year varied by severity: US$ 51.4 in primary care, US$ 7,980.9 in specialized care, and up to US$ 12,798 in advanced HF, where hospitalization accounted for 65.5% of costs. High-technology procedures were reported to cost up to US$ 4,944 per event. Indirect costs from productivity loss accounted for 28.1% of the total burden, while the annual social cost per patient reached US$ 4,226, with a high impact from out-of-pocket expenditure (OPE). Vector control and early treatment were

highly cost-effective (US$ 289 per QALY). Methodological quality was high according to the JBI scale.

Conclusion: CCC has a significant financial impact, with the clinical stage as the primary predictor of expenditure. The "iceberg effect" of indirect and out-of-pocket costs underscores that the hospital's impact is only a fraction of the economic crisis families face. Early intervention and cardiovascular rehabilitation are essential for regional health system sustainability.

$$MISSING OR BAD GRAPHIC SPECIFICATION (41E01080-4185-433D-A0DB-BD6E205E26C3) $$

Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	MALNUTRITION PROLONGS HOSPITALIZATION AND LIMITS FUNCTIONAL RECOVERY IN HEART FAILURE WITH REDUCED EJECTION FRACTION
Author Block:	Jean Carlo Rivera, Deitrich Gerlt, Michael J. Mogg, Terrell Roane, William Giesing, Nasser Ud-Din Khan, Mohammad Akram Kawsara, Methodist Dallas medical center, Dallas, TX, USA, Centro Médico Episcopal San Lucas, Ponce, PR, USA
Abstract Body:	**Background:** Malnutrition is a recognized driver of frailty and adverse outcomes in patients with heart failure with reduced ejection fraction (HFrEF). However, its independent effect on inpatient outcomes, functional recovery, and healthcare utilization during acute HFrEF hospitalizations remains poorly characterized. **Methods:** Using the 2017-2022 Nationwide Readmissions Database, we identified hospitalizations with a primary diagnosis of HFrEF and stratified patients by malnutrition diagnosis. Primary outcomes included in-hospital mortality and 30-day readmission. Secondary outcomes included length of stay (LOS), routine home discharge, and total hospital charges. We performed propensity score matching (PSM) followed by multivariable regression adjusting for patient and hospital characteristics. **Results:** Among 285,915 weighted HFrEF admissions, 3.6% had a diagnosis of malnutrition. Malnourished patients were older (69 vs 65 years, P<.001) and had higher rates of cardiogenic shock (20.6% vs 6.1%, P<.001) and acute kidney injury (41.7% vs 26.7%, P<.001). They demonstrated increased unadjusted 30-day readmission (23.3% vs 20.5%, P<.001) and in-hospital mortality (11.5% vs 3.3%, P<.001). After PSM (N=2,368 pairs) and multivariable regression, malnutrition was not independently associated with 30-day readmission (aOR 1.07, 95% CI 0.92-1.24, P=.378) or in-hospital mortality (aOR 1.14, 95% CI 0.93-1.39, P=.213). However, malnutrition significantly reduced routine home discharge (aOR 0.54, 95% CI 0.48-0.62, P<.001) and increased LOS (AR 1.42, 95% CI 1.34-1.52, P<.001) and hospital charges (AR 1.73, 95% CI 1.57-1.90, P<.001).

Conclusion: Although malnutrition was not independently associated with mortality or readmission after propensity matching, it was strongly associated with impaired functional recovery, prolonged hospitalization, and increased healthcare utilization. These findings support the importance of early nutritional screening and targeted rehabilitation strategies in hospitalized HFrEF patients.

Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	THE CLINICAL INTERSECTION OF VITAMIN B12 DEFICIENCY AND ACUTE HFPEF EXACERBATIONS
Author Block:	Jean Carlo Rivera, Deitrich Gerlt, Michael J. Mogg, Terrell Roane, William Giesing, Mohammad Akram Kawsara, Nasser Ud-Din Khan, Methodist Dallas Medical Center, Dallas, TX, USA, Centro Medico Episcopal San Lucas, Ponce, PR, USA
Abstract Body:	**Background:** Vitamin B12 deficiency is a common but under-recognized comorbidity in patients with heart failure with preserved ejection fraction (HFpEF). Its prognostic significance during acute HFpEF hospitalizations remains unclear. **Methods:** Using the 2017-2022 Nationwide Readmissions Database, we identified adults hospitalized with a primary diagnosis of HFpEF and stratified patients by concurrent vitamin B12 deficiency. Primary outcomes included in-hospital mortality and 30-day readmission. Secondary outcomes included length of stay (LOS), discharge disposition, and total hospital charges. Doubly robust estimation combining propensity score matching and survey-weighted multivariable regression was performed adjusting for patient demographics, hospital characteristics, and baseline comorbidities **Results:** Among 223,205 weighted HFpEF hospitalizations, 0.3% had documented vitamin B12 deficiency. Patients with B12 deficiency were significantly older (77 vs 74 years, P<.001) and had a greater burden of comorbid disease, including dementia (15.6% vs 9.2%, P=.003) and moderate renal failure (30.4% vs 22.0%, P=.002). Following doubly robust adjustment, vitamin B12 deficiency was not independently associated with increased in-hospital mortality (aOR 0.98, 95% CI 0.46-2.10, P=.963) or 30-day readmission (aOR 1.23, 95% CI 0.84-1.80, P=.281). However, patients with B12 deficiency demonstrated shorter LOS (Ratio 0.86, 95% CI 0.77-0.97, P=.017) and increased odds of routine home discharge (aOR 1.45, 95% CI 1.04-2.04, P=.031). No significant difference in total hospital charges was observed between groups (Ratio 0.90, 95% CI 0.79-1.03, P=.119).

Conclusion: Vitamin B12 deficiency was not independently associated with increased mortality or readmission during acute HFpEF exacerbations. Unexpectedly, B12 deficiency correlated with shorter hospitalization and improved discharge disposition, suggesting that recognition of nutritional deficiencies may prompt targeted inpatient interventions that facilitate improved short-term recovery and transitional care outcomes.

Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	STAGE 4 CKM SYNDROME ACCELERATES HEART FAILURE HOSPITALIZATION BY SEVEN YEARS AND WORSENS IN-HOSPITAL COMPLEXITY WITHOUT INCREASING SHORT-TERM MORTALITY
Author Block:	Jean Carlo Rivera, Deitrich Gerlt, Hira Cheema, Michael J. Mogg, Abdulmanan Abid, Bryan Barrientos, Terrell Roane, William Giesing, Nasser Ud-Din Khan, Mohammad Akram Kawsara, Methodist Dallas Medical Center, Dallas, TX, USA, Centro Medico Episcopal San Lucas, Ponce, PR, USA
Abstract Body:	**Background:** Cardiovascular Kidney Metabolic (CKM) syndrome reflects the interconnected burden of metabolic disease, chronic kidney disease, and cardiovascular dysfunction. Although Stage 4 CKM syndrome is increasingly prevalent among patients with heart failure with preserved ejection fraction (HFpEF), its impact on inpatient complexity and healthcare utilization remains poorly characterized. **Methods:** Using the 2017-2022 Nationwide Readmissions Database, we identified adult HFpEF hospitalizations and stratified patients by the presence of Stage 4 CKM syndrome. Propensity score matching (PSM) was performed using demographics, hospital characteristics, and Elixhauser comorbidities. Doubly robust survey-weighted multivariable regression was subsequently applied. Primary outcomes included 30-day readmission and in-hospital mortality. Secondary outcomes included acute kidney injury, mechanical ventilation, length of stay, total hospital charges, and discharge disposition. **Results:** Among 223,204 weighted HFpEF hospitalizations, 48.3% had Stage 4 CKM syndrome. Patients with CKM presented for acute HFpEF hospitalization seven years earlier than non-CKM patients (70 vs 77 years, P<.001). After PSM (N=93,048) and multivariable adjustment, no significant differences were observed in 30-day readmission (aOR 1.01, 95% CI 0.98-1.04, P=.566) or in-hospital mortality (aOR 0.97, 95% CI 0.90-1.05, P=.418). However, CKM patients experienced higher rates of AKI (26.7% vs 18.5%, P<.001) and mechanical ventilation (1.5% vs 1.2%, P<.001). Stage 4 CKM independently increased LOS by 10% (aMR 1.10, 95% CI 1.09-1.11, P<.001), total hospital

charges by 6% (aMR 1.06, 95% CI 1.05-1.08, P<.001), and reduced the likelihood of routine home discharge (aOR 0.76, 95% CI 0.74-0.78, P<.001). **Conclusion:** Stage 4 CKM syndrome affects nearly half of acute HFpEF hospitalizations and is associated with greater inpatient complexity despite similar adjusted mortality and readmission rates. These findings highlight the need for early metabolic intervention and coordinated multidisciplinary care to reduce cardiorenal complications, healthcare utilization, and post-acute care dependence.

Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	INFLAMMATORY CARDIOMYOPATHY AND MIXED SHOCK: IMMUNOLOGICAL SYNERGY BETWEEN SEVERE DENGUE AND SARS-COV-2-ASSOCIATED MULTISYSTEM INFLAMMATORY SYNDROME IN CHILDREN
Author Block:	Bianca Riera, Miguel A. Luzardo, Leoneska C. Ruiz, Veronica C. Chirinos, Ivana B. Pimentel, Fabiana V. Zambrano, Valentina E. Gutierrez, Carlos Nino, Universidad del Zulia, Maracaibo, Venezuela, Hospital de Niños de Veritas, Maracaibo, Venezuela
Abstract Body:	**Background:** Dengue and Multisystem Inflammatory Syndrome in Children (MIS-C) share cytokine-mediated pathophysiology; their concurrent presentation in arbovirus-endemic regions can produce fulminant inflammatory cardiomyopathy with mixed shock, an entity rarely described. **Case:** A 10-year-old female presented with fever, epigastric pain, and generalized rash. Examination showed jugular distension, hepatomegaly 4 cm below the costal margin, and tachycardia. B-type Natriuretic Peptide (BNP) reached 2,546 pg/mL, ferritin 2,000 ng/mL, and C-reactive protein 37.2 mg/dL. Imaging revealed pericardial and right pleural effusion. NS1 antigen and dengue serology confirmed severe dengue; prior SARS-CoV-2 antibodies fulfilled MIS-C diagnostic criteria. The patient deteriorated into mixed distributive-cardiogenic shock requiring mechanical ventilation, dobutamine, and noradrenaline. Treatment included aggressive immunomodulation with methylprednisolone and intravenous immunoglobulin (IVIG), resulting in a favorable clinical course and resolution of cardiac and multi-organ dysfunction. **Decision-making:** Extreme BNP elevation and pericardial involvement signaled fulminant heart failure (HF), prompting recognition of an inflammatory rather than purely infectious process. Fluid resuscitation alone proved insufficient: acting as a second hit, severe dengue-driven hypovolemia deepened the cardiogenic dysfunction established by MIS-C. This dual compounding pathway, in which dengue amplified vascular permeability through histamine release while SARS-CoV-2 spike protein intensified

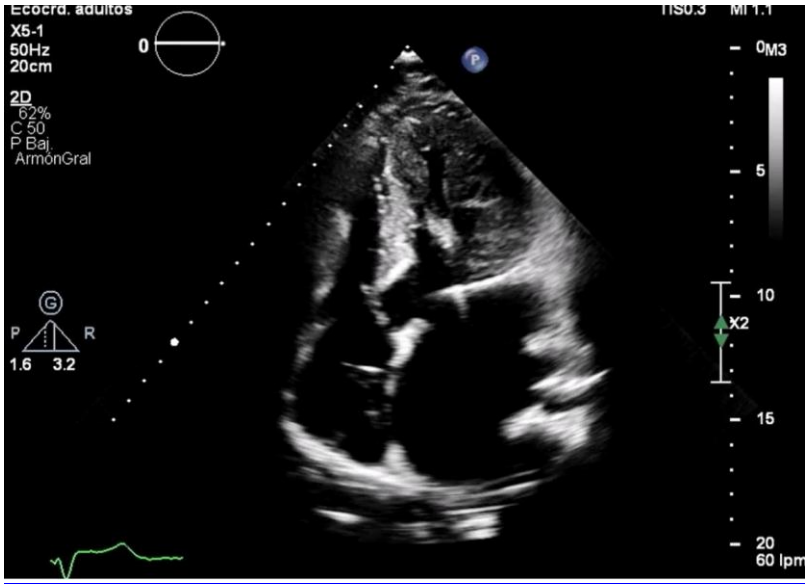
cytokine-mediated myocardial depression, produced a phenotype attributable to neither pathogen in isolation. Had MIS-C gone unrecognized, no immunomodulation would have been initiated, likely worsening survival. In endemic zones, both diagnoses must be pursued concurrently.
Conclusion: In dengue-endemic settings, pediatric patients with disproportionate cardiac biomarkers and mixed shock after SARS-CoV-2 exposure warrant concurrent MIS-C screening. Timely IVIG and corticosteroids may reverse myocardial dysfunction before irreversible organ damage occurs.

Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	HEART FAILURE IN NON-HODGKIN LYMPHOMA DEATHS IN BRAZIL: A NATIONAL MULTIPLE-CAUSE ANALYSIS FROM 2015 TO 2024
Author Block:	Ana Carolina Leal, Júlia Araujo de Brito, Amanda Medeiros de Sá Pordeus, Mariana Araujo De Noronha Rocha, Jingying Elena Chen, Joanna Maria Valente Zabeu, Beatriz Parizzi Nasser, Luíza Lima Ilydio dos Santos, Maria Luiza Cardoso Rocha Sarago, Alice Gouvea Cardoso, Maria Victoria Feres Nascif, Franco de Andrade Janaina, IDOMED/Universidade Estácio de Sá - Campus Vista Carioca, Rio de Janeiro, Brazil
Abstract Body:	**Background:** Non-Hodgkin Lymphoma (NHL) is the ninth most common cancer in Brazil. Advances in targeted therapies and immunotherapies have improved survival, but may increase cardiovascular events (CV), especially heart failure (HF). In this scenario, exposure to potentially cardiotoxic therapies combined with longer overall survival may contribute to changing mortality patterns, amplifying the role of CV diseases among the associated causes of death in NHL. **Methods:** Ecological, descriptive, and retrospective study based on data from the National Mortality Information System (SIM/DATASUS), analyzing the period from 2015 to 2024. Deaths with NHL (ICD-10: C82-C85) as the underlying cause of death and Congestive HF (ICD-10: I50) as a multiple cause of death were included, across all ages, sexes, and regions of Brazil. **Results:** From 2015-2024, 126,455 NHL related deaths were recorded, representing an 12.2% increase. During the same time period, 1,066 deaths involving HF as an associated cause were identified, corresponding to a 29.5% increase and suggesting an upward trend in HF/NHL association and CV burden. Additionally, a more pronounced rise was observed in diffuse NHL (+37.8%) compared with the follicular subtype (+28.5%). These differences may reflect distinct biological characteristics among subtypes, as diffuse NHL exhibits more aggressive clinical behavior and often requires intensive, potentially cardiotoxic therapy. Moreover, a reduction in deaths was observed in 2020-2021, followed by a subsequent increase, possibly influenced by

underreporting and healthcare restrictions during the COVID-19 pandemic. Considering the limitations inherent to DATASUS secondary categorization and subtype differentiation, mortality attributed to C85 includes heterogeneous classifications with distinct clinical profiles, which may explain the disproportionate number of deaths compared with C82 and C83.
Conclusion: HF contributed to mortality among patients with NHL. The CV vulnerability observed may be associated with intrinsic mechanisms of malignancy and exposure to potentially cardiotoxicity. These findings reinforce the importance of integrated cardio-oncology care.

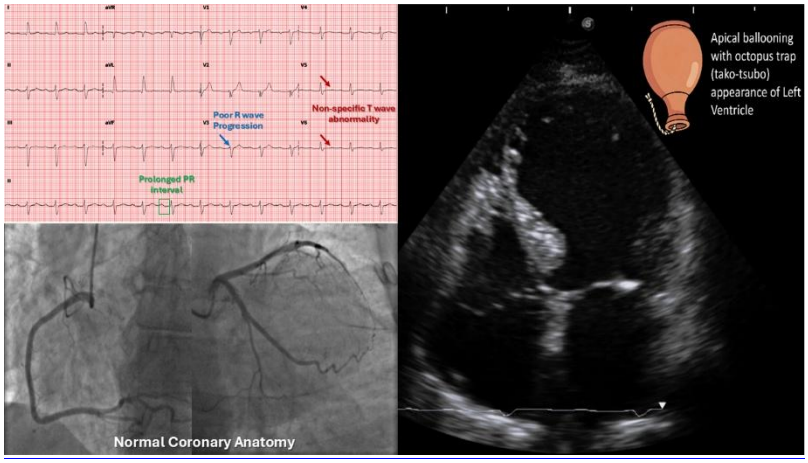
Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	NOONAN SYNDROME WITH BIVENTRICULAR OBSTRUCTION: A HYPERTROPHIC CARDIOMYOPATHY PHENOCOPY WITH HIGH ARRHYTHMIC RISK
Author Block:	Jimena Alejandra Ramírez Hernández, Jessica Loreley Lima Díaz, Carlos Agenor García Rosales, Jose Raul Nieto-Saucedo, Rodrigo Soria García, María Cecilia Escalante Seyffert, Enrique Alexander Berrios-Barcenas, SR, FRANCISCO JAVIER ROLDAN, Instituto Nacional de Cardiología Ignacio Chávez, Ciudad de México, Mexico
Abstract Body:	**Background:** Noonan syndrome associated with biventricular obstructive hypertrophic cardiomyopathy (HOCM) represents an uncommon phenocopy with high arrhythmic risk. **Case:** A 27-year-old woman with Noonan syndrome and global biventricular HOCM, with prior history of mitral valve repair, resection of accessory mitral tissue, and supravalvular membrane. Echocardiographic findings showed a maximum left ventricular outflow tract (LVOT) gradient of 154 mmHg, severe systolic anterior motion (SAM), and a right ventricular outflow tract (RVOT) gradient of 51 mmHg. Cardiac magnetic resonance imaging demonstrated a maximum wall thickness of 33 mm, moderate fibrosis, and a left ventricular ejection fraction (LVEF) of 57%. Subsequently, she presented with unexplained syncope and a 5-year sudden cardiac death risk of 9%, without ventricular arrhythmias on Holter monitoring. Implantation of an implantable cardioverter-defibrillator (ICD) was decided as primary prevention. **Decision-making:** The coexistence of myocardial fibrosis, severe obstructive gradients, and unexplained syncope justified a comprehensive risk assessment. **Conclusion:** Personalized arrhythmic risk stratification is essential in complex

phenotypes underrepresented in current guidelines.



Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	TAKOTSUBO SYNDROME PRESENTING AS ACS IN A MULTIMORBID POSTMENOPAUSAL WOMAN: BIVENTRICULAR DILATION, ELEVATED D-DIMER AND THE IMPERATIVE OF STRUCTURED LONG-TERM FOLLOW-UP
Author Block:	Xavier Brown, Robert Hibbert, Jelees Dolphin, Chiemeka Arize, Chantal Williams, Jason Rohan Ifill, Olaleye E. Olalekan, Cinthia De Freitas, Sarah Abou Alaiwi, Kenechukwu Mezue, Sara Tabtabai, Mark Williams, Dainia Baugh, Cesia Maria Gallegos Kattan, Edward James Miller, Ernest C. Madu, Heart Institute of the Caribbean, Kingston, Jamaica, Section of Cardiovascular Medicine, Dept of Internal Medicine, Yale University School of Medicine, New Haven, CT, USA
Abstract Body:	**Background:** Takotsubo syndrome (TTS) accounts for 1-2% of ACS presentations and up to 2.2% of women with STEMI. TTS carries a 5 year mortality of 16% comparable to ACS with recurrence risk, yet diagnosis is challenging in multimorbid patients. **Case:** A 74-year-old obese woman with multiple comorbidities presented with chest pain, dyspnea, diaphoresis, and weakness. ECG showed NSR, poor R wave progression, intraventricular conduction delay, left axis deviation, PR prolongation, and lateral T wave abnormalities. Troponin I 76.4 pg/mL; D-dimer >5,000 ng/mL. Echo showed apical ballooning, biventricular dilation, mid to apical akinesis, LVEF 40%, and diastolic dysfunction. Angiography excluded obstructive CAD; CTPA excluded PE, establishing TTS as diagnosis. **Decision-making:** Elevated D-dimer and ischemic ECG changes raised concern for ACS and PE. Apical ballooning with normal coronary anatomy confirmed TTS. D-dimer elevation driven by catecholamine surge and endothelial stress does not exclude TTS. Biventricular dilation added prognostic complexity. This case underscores need for TTS awareness in Latin American and Caribbean populations where comorbidity burden may delay diagnosis. **Conclusion:** TTS confirmed by apical ballooning and normal angiogram and CTPA. Biventricular dilation with reduced LVEF identifies a high-risk subset requiring structured follow up. In postmenopausal women with ACS mimicking

features, TTS must remain an active consideration regardless of D-dimer elevation.



Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	THE OVER-REPLACED HEART: LEVOTHYROXINE-INDUCED THYROTOXICOSIS CAUSING HIGH-OUTPUT FAILURE
Author Block:	Laura Bou Delgado, Kristian Guzman Velez, Liz Salgado Romero, Carrie Maymon, Paola Mongil Lomba, Edwin Omar Molina Torres, Department of Internal Medicine, Damas Hospital, Ponce, PR, USA
Abstract Body:	**Background:** High-output heart failure (HOHF) is characterized by elevated cardiac output and reduced systemic vascular resistance causing heart failure symptoms despite preserved systolic function. Iatrogenic thyrotoxicosis from chronic levothyroxine therapy is an underrecognized cause. **Case:** A 41-year-old woman with hypothyroidism and atrial fibrillation presented with symptomatic anemia (hemoglobin 4.3 g/dL). After transfusion of 4 units packed red blood cells, hemoglobin improved to 9 g/dL, but she developed worsening dyspnea, volume overload, and atrial fibrillation with rapid ventricular response. Thyroid studies showed suppressed TSH (0.005 μIU/mL) and elevated free T4 (7.55 ng/dL). She had remained on levothyroxine 112 mcg daily for over 10 years without thyroid function monitoring. **Decision-making:** Levothyroxine was discontinued and propranolol initiated. Echocardiography demonstrated preserved left ventricular systolic function with biatrial enlargement. Right and left heart catheterization revealed elevated filling pressures (PCWP 22 mmHg, LVEDP 25 mmHg), high cardiac output (6.56-7.0 L/min), cardiac index 3.99 L/min/m^2, and low systemic vascular resistance (560 dyn·s/cm^5), confirming HOHF. Right heart hemodynamics revealed pulmonary hypertension with a mean atrial pressure of 20 mmHg, a mean ventricular pressure of 21 mmHg, a mean pulmonary artery pressure of 40 mmHg, and an elevated pulmonary vascular resistance of 287 dyn·s/cm^5. She required intravenous bumetanide, norepinephrine support, and short-term propylthiouracil with subsequent clinical improvement. This case highlights that thyrotoxicosis should be considered in unexplained HOHF, especially with preserved systolic function and low systemic vascular resistance. Severe anemia likely amplified the high-output state and masked

the underlying etiology.

Conclusion: Chronic levothyroxine therapy without surveillance may lead to severe cardiovascular complications including atrial fibrillation and HOHF. Routine thyroid function monitoring is essential to prevent avoidable morbidity.

Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	VEXAS UNRAVELED: REVERSAL OF SEVERE CARDIOMYOPATHY IN VEXAS SYNDROME WITH TARGETED IMMUNOTHERAPY
Author Block:	Tarek Dawame, Michelle Omega, Krista Grennan, Michael Acevedo Monsanto, Michelle Freeman, Mayo clinic, florida, FL, USA

Abstract Body:

Background: VEXAS syndrome is an autoinflammatory disorder caused by somatic UBA1 mutations. Cardiac involvement is uncommon, and reversible severe cardiomyopathy is rarely reported.

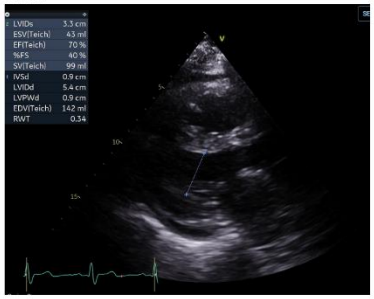
Case: A 72-year-old man with MDS presented with mixed distributive and cardiogenic shock requiring mechanical ventilation, vasopressors, and inotropic support despite negative infectious workup. TTE demonstrated new severe non-ischemic cardiomyopathy with decline in LVEF from preserved to 12% with non-obstructive coronary angiography. His course was complicated by persistent fevers, pancytopenia, acute kidney injury, atrial fibrillation, and deep vein thrombosis. Bone marrow testing revealed a pathogenic UBA1 p.Met41 mutation, confirming VEXAS syndrome.

Decision-making: Given persistent shock despite antimicrobial therapy and negative infectious evaluation, VEXAS-associated systemic inflammation was suspected. High-dose corticosteroids, Janus kinase inhibition, and interleukin-1 blockade were initiated with multidisciplinary management. The patient subsequently demonstrated marked clinical improvement, including recovery of renal, respiratory, and cardiac function, with left ventricular ejection fraction improving to 65%.

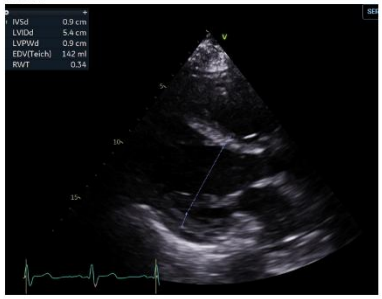
Figure 1. Recovery of Left Ventricular Function in VEXAS Syndrome

Transthoracic echocardiography following immunomodulatory therapy.

Panel A



Panel B



Parasternal long-axis M-mode measurements demonstrating preserved left ventricular systolic function with estimated left ventricular ejection fraction of 65%.

Conclusion: VEXAS syndrome should be considered in patients with unexplained inflammation, cytopenias, thrombosis, and new cardiomyopathy. Early immunomodulatory therapy may lead to significant cardiac and clinical recovery.

Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	SEX DIFFERENCES IN CHAGAS-ATTRIBUTABLE HEART FAILURE BURDEN ACROSS LATIN AMERICA
Author Block:	Rafael Cortorreal, Felix R. Almanzar, JR, Mariana Santana, Antonio Villegas, CEDIMAT Cardiovascular Center, Distrito Nacional, SD, Dominican Republic

Abstract Body:

Background: Chagas disease remains an important contributor to heart failure across Latin America. However, sex differences in disease burden remain insufficiently characterized.

Methods: An ecological analysis with data from the Global Burden of Disease Study, including eight Latin American countries from 1990 to 2023. We calculated an HF-to-Chagas index using the age-standardized prevalence rates of Chagas disease and Chagas-attributable heart failure. Sex differences were assessed using paired country-year comparisons.

Results: Across 272 paired country-year comparisons, women had a higher median prevalence of Chagas disease (2924.5 vs 2660; M/F ratio: 0.95; $p<0.001$). Men had a higher burden of Chagas-attributable heart failure (66.2 vs. 37.5; M/F ratio: 1.86; $p<0.001$) and YLDs (5.0 vs. 2.8; M/F ratio: 1.86; $p<0.001$). The HF-to-Chagas index was almost twice as high in men (2.38% vs. 1.23%; M/F ratio: 1.95; $p<0.001$). In 2023, men had a higher HF-to-Chagas index in all included countries, with sex gaps ranging from +1.06 to +1.37 percentage points. Venezuela showed the highest index and the widest sex gap, whereas Bolivia had the lowest index.

Conclusion: Men showed a higher relative burden of Chagas-attributable heart failure despite having a lower overall prevalence of Chagas disease. These findings suggest that Chagas prevalence alone underestimates male cardiac burden and highlight the need for sex-stratified surveillance of Chagas-related

heart failure in Latin America.

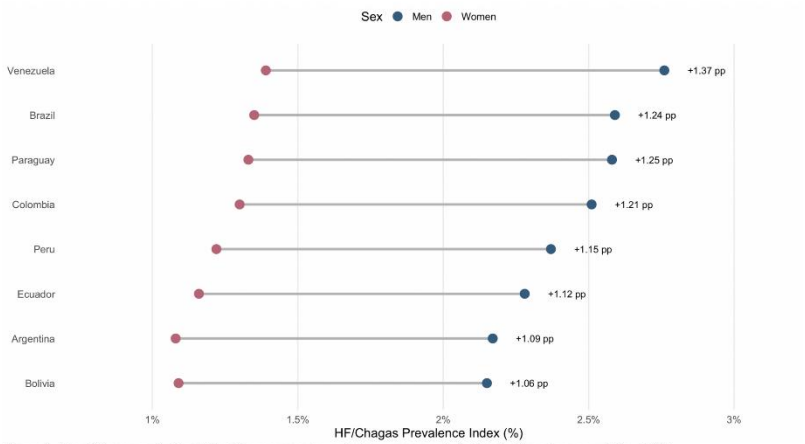
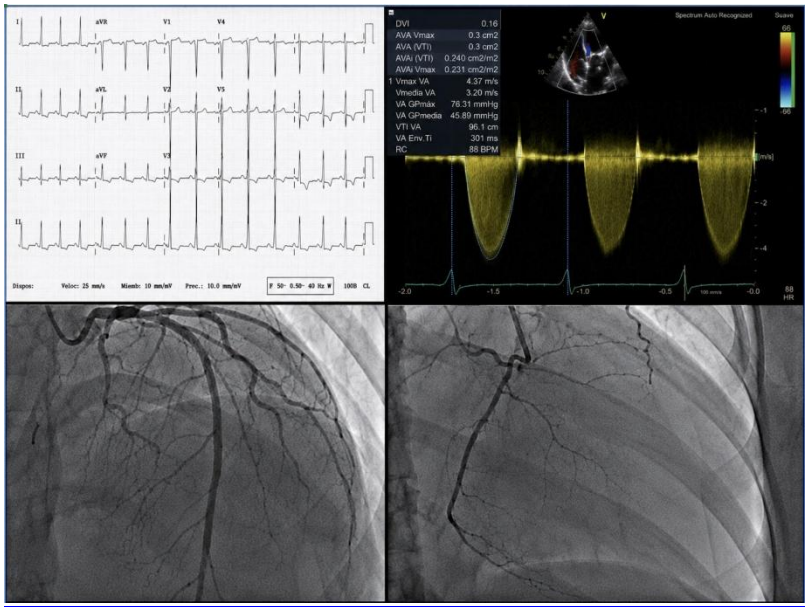


Figure 1. Sex differences in the HF-to-Chagas prevalence index across selected Latin American countries, 2023.
The figure shows the heart failure attributable to Chagas disease prevalence index relative to overall Chagas disease prevalence, calculated as: HF attributable to Chagas prevalence / Chagas prevalence × 100. Each horizontal line represents the sex gap within each country. Blue points represent men and pink points represent women. Across all countries, men showed a higher HF-to-Chagas prevalence index than women, with absolute gaps ranging from +1.06 to +1.37 percentage points. Venezuela showed the highest index and the largest sex difference, whereas Bolivia showed the lowest index.

Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	A 20 YEAR OLD WOMAN WITH HOMOZYGOUS FAMILIAL HYPERCHOLESTEROLEMIA, SEVERE AORTIC STENOSIS, CORONARY ARTERY DISEASE, HEART FAILURE, AND FATAL OUTCOME.
Author Block:	Laura Leticia Rodríguez-Chávez, Daniela Bautista de Jesus, Eréndira S. Real-Baron, Patricio H. Ortiz-Fernández, Instituto Nacional de Cardiología Ignacio Chávez, Mexico city, Mexico
Abstract Body:	**Background:** Homozygous familial hypercholesterolemia (HoFH) causes extreme LDL elevation and accelerated atherosclerosis with early valvular and coronary involvement. **Methods:** A 20-year-old woman with history of a brother with xanthomas who died at 12. She was diagnosed with hypercholesterolemia at 5. She presented with exertional angina, presyncope, and heart murmur. She had BMI 17.6 kg/m^2, corneal arcus, xanthelasmas, bilateral tendon xanthomas, and grade III/IV aortic systolic murmur. **Results:** Total cholesterol 512 mg/dL, LDL 456 mg/dL, HDL 16.9 mg/dL, apolipoprotein B 317 mg/dL, and triglycerides 143 mg/dL. Genetic test: HoFH depending the low-density lipoprotein receptor (LDLR). ECG: left ventricular hypertrophy and old anteroseptal infarction. Echocardiography: AVA 0.6 cm^2, mean gradient 45 mmHg, and LVEF 25%. MRI: prior septal infarction, LVEF 16 %, GLS -2%, GCS -5.6%, and a 5x6 mm LV apical thrombus. Coronary angiography: multivessel disease. Despite aortic valve replacement and coronary bypass, she developed refractory cardiogenic shock requiring amines and VA-ECMO nevertheless died after 8 days. **Conclusion:** The most common genetic mutations responsible for HoFH are those affecting the encoding of LDLR, accounting >95% of cases, as our patient. Early recognition, genetic suspicion, and timely access to intensive lipid lowering therapy are essential to prevent premature cardiovascular death.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III
aVF
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Diapos:
Veloc: 25 mm/s
Miemb: 10 mm/mV
Prec.: 10.0 mm/mV
F 50- 0.50- 40 Hz W
100B CL
DVI 0.16
AVA Vmax 0.3 cm2
AVA (VT) 0.3 cm2
AVAi (VTI) 0.240 cm2/m2
AVAi Vmax 0.231 cm2/m2
Vmax VA 4.37 m/s
Vmedia VA 3.20 m/s
VA GPmax 76.31 mmHg
VA GPmedia 45.89 mmHg
VTI VA 96.1 cm
VA Env.TI 301 ms
RC 88 BPM
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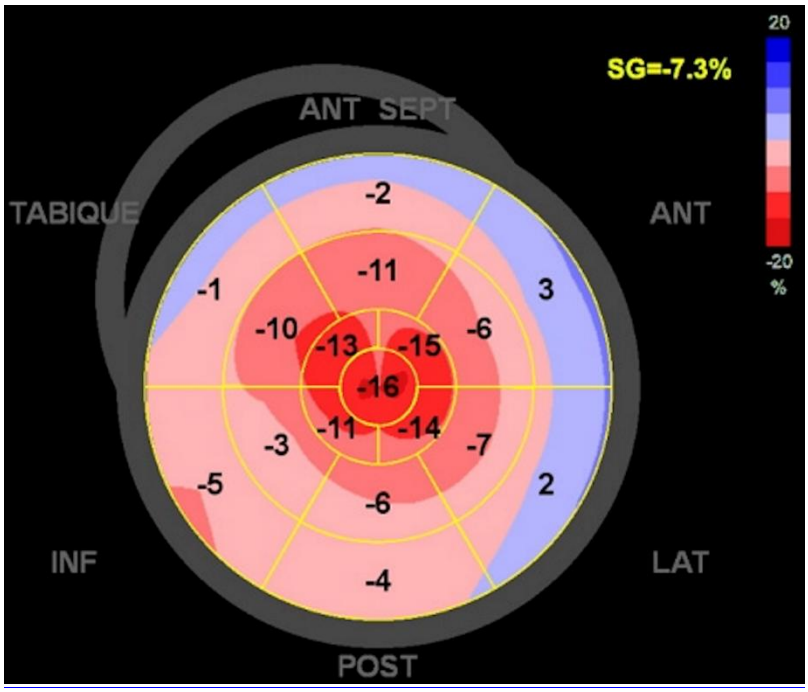
68
HR

Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	HEREDITARY TRANSTHYRETIN AMYLOIDOSIS - A MISSED CAUSE OF HEART FAILURE AND POLYNEUROPATHY IN A LATIN AMERICAN PATIENT
Author Block:	Sergio Andres Higuera Leal, Silvia Moncada-Marin, Universidad Industrial de Santander, Bucaramanga, Colombia, Instituto del Corazón de Bucaramanga, Bucaramanga, Colombia
Abstract Body:	**Background:** Hereditary transthyretin amyloidosis (hATTR) remains underdiagnosed due to heterogeneous presentation. **Case:** A 76-year-old Colombian man presented with 3-year history of progressive exertional dyspnea. He reported symptoms consistent with carpal tunnel syndrome. His comorbidities included hypertension and diabetes mellitus. Electromyography confirmed severe mixed *axonal-demyelinating* peripheral polyneuropathy. Echocardiography showed LVEF of 44%, with left ventricular hypertrophy and a reduced longitudinal strain with apical sparing. Chagas and ischemic heart disease were excluded. Light chain amyloidosis was ruled out by serum protein electrophoresis, immunofixation and serum-free light-chain assays. Bone scintigraphy showed strong myocardial tracer uptake with heart-to-contralateral ratio of 1.77. Genetic sequencing identified c.424G>A (p.Val142Ile) heterozygous mutation in Transthyretin (TTR) gene. **Decision-making:** Based on the findings, a diagnosis of hATTR with mixed phenotype was established. Therapy with tafamidis was started. Patient reports improvement of symptoms up to its last clinical follow-up. **Conclusion:** This variant is typically associated with African ancestry and predominantly cardiac phenotype. Its presence in Colombia with mixed phenotype highlights a diagnostic challenge where red flags can elucidate

diagnosis.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Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	TRATAMIENTO MEDICO DE LA ENTEROPATIA PERDEDORA DE PROTEINAS, UN DESAFIO QUE SUPERAR EN PACIENTES CON FISIOLOGIA FONTAN, PRESENTACION DE UN CASO
Author Block:	Katia Millaray Rivera, Ronald Acuña, Rodrigo Gonzalez, Francisca Arancibia, Polentzi Uriarte, Pamela Zelada, Daniel Springmuller, Daniel Springmuller, Instituto Nacional del Tórax, Santiago, Chile
Abstract Body:	**Background:** La Enteropatía perdedora de proteínas (EPP) es una complicación que puede aparecer en pacientes con Fisiología Fontan. La prevalencia a 30 años de realizado el Fontan es de 3,5 a 5%. Se registra que a los 15 años de inicio de la EPP un 60 % tiene riesgo de muerte o trasplante cardíaco. **Case:** Se presenta un paciente masculino de 23 años, con diagnóstico de Doble entrada a Ventrículo Único Izquierdo, anatomía segmentaria SLL, operado de Banding de la arteria pulmonar, Glenn-DKS y Fontan extracardiaco no fenestrado. Actualmente con Insuficiencia severa de la válvula tricúspide, y EPP. **Decision-making:** Se concluye que una eventual cirugía cardíaca sobre la válvula tricúspide es compleja dado por la posición posterior de la misma con difícil acceso, por el riesgo de una cuarta esternotomía (aorta cerca del esternón), sin tener certeza de que esto mejore la EPP, por tal razón el trasplante cardíaco sería su tratamiento curativo. Se inicia un soporte nutricional. El tratamiento farmacológico fue escalonado hasta llegar a dosis máxima de sildenafil (150 mg día), espironolactona (50 mg día), Midodrina (10 mg día), Budesonida vía oral (6 mg día). Actualmente el paciente se encuentra con niveles normales de albumina, en Clase Funcional I, y en estudio pre-trasplante cardíaco. **Conclusion:** La EPP es una complicación poco frecuente de la Fisiología de Fontan, con una elevada mortalidad a mediano plazo, que requiere un tratamiento escalonado con el objetivo de lograr niveles normales de albúmina.

Figura 1. Esternotomía de alto riesgo

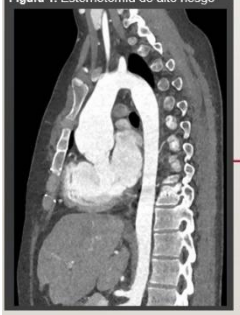
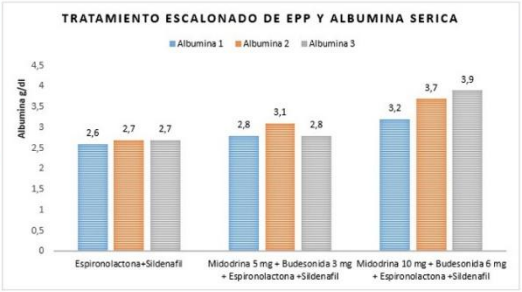


Grafico 1



Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	ICD IMPLANTATION DECISION IN A PATIENT WITH CHAGASIC CARDIOMYOPATHY AND SUSTAINED VENTRICULAR TACHYCARDIA
Author Block:	Luis Angel Eslava Gálvez, Zoila Rodriguez Urteaga, Murillo Perez Luis Enrique, INCOR, LIMA, Peru

Abstract Body:

Background: Chagas cardiomyopathy (CC) is a non-ischemic cardiomyopathy with a worse prognosis

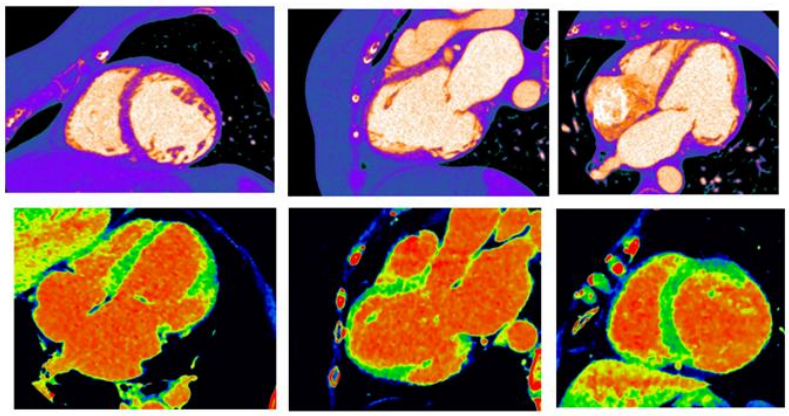
Case: A 62-year-old woman, with no cardiovascular risk factors, presented a wide-QRS ventricular tachycardia (TV). The baseline electrocardiogram showed sinus bradycardia with low-voltage QRS complexes. Transthoracic echocardiography revealed dilated left ventricle (LV), ejection fraction of 60%, and aneurysmal image in the inferolateral and anterolateral segments. Coronary angiography ruled out coronary lesions. Holter documented non-sustained TV. Cardiac computed tomography confirmed the aneurysms and transmural fibrosis in these segments (Image 1). Two IgG ELISA serologies were positive for T. cruzi.

Decision-making: CC was diagnosed at stage B2 according to the American Heart Association classification. In a multidisciplinary team meeting, the decision was made to implant an implantable cardioverter-defibrillator (ICD) for secondary prevention.

In a patient from an endemic area who presents ventricular tachycardia, CC should be at the top of the differential diagnosis.

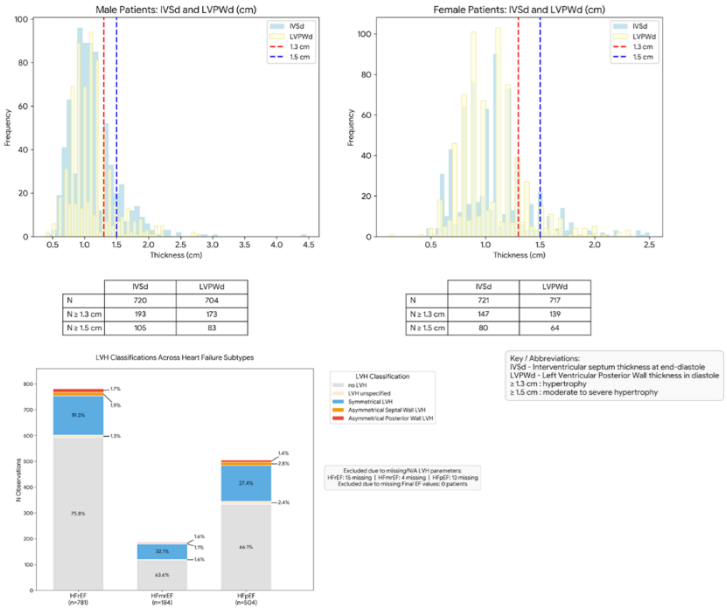
Conclusion: Early suspicion of Chagas cardiomyopathy in patients with ventricular arrhythmias, normal coronary arteries, and origin from endemic areas allows appropriate risk stratification and prevention of sudden cardiac , as illustrated by this patient, who has remained stable and free of shocks

during follow-up.



Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	HYPERTROPHIC CARDIOMYOPATHY IN AFRO-CARIBBEANS: IN PLAIN SIGHT BUT OVERLOOKED AND NEVER SCREENED FOR
Author Block:	Robert Hibbert, Xavier Brown, Chiemeka Arize, Chantal Williams, Kenechukwu Mezue, Cesia Maria Gallegos Kattan, Sara Tabtabai, Ernest C. Madu, Edward James Miller, Yale School of Medicine, Section of Cardiovascular Medicine, New Haven, CT, USA, Heart Institute of the Caribbean, Kingston Jamaica
Abstract Body:	**Background:** Hypertrophic cardiomyopathy (HCM) is underrecognized in Afro-Caribbeans, but it is now a treatable cause of heart failure (HF), with genetic testing able to identify predisposed individuals. **Methods:** A retrospective cohort of 1501 adult patients (49.9% male) with ICD-9/10 CHF diagnosis, echocardiography and clinical data were created from electronic records at a Jamaican cardiology center between 2006-2024. Patients were classified into HF phenotypes using LVEF, with hypertrophy in the posterior wall and septum determined using threshold of ≥1.5cm, and further broken down into extreme high risk HCM patients who display asymmetrical hypertrophy (based on ratio of thickness of walls). **Results:** Overall, 12.8% of HF patients had severe hypertrophy (≥1.5 cm) with 3.7% displaying asymmetry, representing the HCM high risk and "extreme-high" risk populations that warranted genetic screening. Septal hypertrophy occurred in 26.8% of males vs 20.4% of females, p=0.005; while posterior wall hypertrophy occurred in 24.6% of males vs 19.4% of females, p=0.022. **Conclusion:** Up to 12.8% of Afro-Caribbean patients with HF meet criteria for HCM screening, with 3.7% being considered extremely high risk. With the

advent of new therapies genetic screening now offer the potential to save lives.

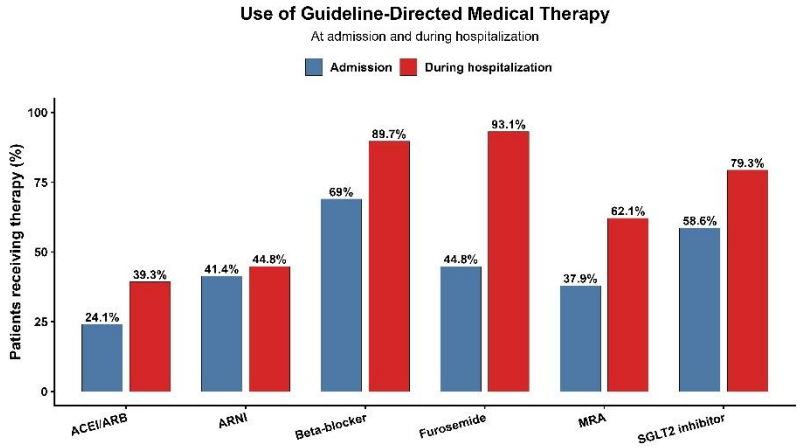


	IVSd	LVPWd
N	720	704
N ≥ 1.3 cm	193	173
N ≥ 1.5 cm	105	83

	IVSd	LVPWd
N	721	717
N ≥ 1.3 cm	147	139
N ≥ 1.5 cm	80	64

Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	THERAPEUTIC GAP IN GUIDELINE:DIRECTED MEDICAL THERAPY AMONG PATIENTS HOSPITALIZED FOR ACUTE DECOMPENSATED HEART FAILURE WITH PREVIOUSLY DIAGNOSED REDUCED EJECTION FRACTION: A COLOMBIAN SINGLE CENTER REGISTRY
Author Block:	Jaime Alberto Gomez-Rosero, Juana Ospina-Restrepo, Juanita Velasquez-Ospina, Edwin Rios, Alejandra Ortiz-Moreno, Jorge Alejandro Pamplona-Tobón, Maria Clara Gaviria-Aguilar, Veronica lopez cardona, Juan Manuel Martinez, Natalia Mejía-Zapata, Juan-Daniel Castrillon-Spitia, Alejandro Jaramillo-Yepes, Mateo Morales-Henao, Clínica Las Vegas, Medellín, Colombia
Abstract Body:	**Background:** Guideline-directed medical therapy (GDMT) improves survival in heart failure with reduced ejection fraction (HFrEF), yet real-world implementation remains suboptimal. Local data on therapeutic gaps in Latin America are scarce **Methods:** Prospective single-center registry of hospitalized heart failure patients in Medellin, Colombia. GDMT use was assessed at admission in patients with previous diagnosis of heart failure. Quadruple therapy was defined as concurrent use of sacubitril/valsartan or angiotensin-conrting enzyme inhibitor/angiotensin receptor blocker (ACEI/ARB), beta-blocker, mineralocorticoid receptor antagonist (MRA), and sodium-glucose cotransporter-2 inhibitor (SGLT2i) **Results:** Among 66 patients, 29 (43.9%) had HFrEF. In this subgroup, mean age was 72.2±13.9 years and 55% were male. At admission, 69.0% were receiving beta-blockers, 58.6% iSGLT2, 37.9% MRA, 24.1% ACEI/ARB, and 41.1% sacubitril/valsartan. Differences in therapy at admission and in-hospital treatment are shown in Figure 1. 17.2% received quadruple therapy and 13.8% received none. Median NT-proBNP was 6,061 pg/mL (interquartile range 2,613-16,643); in-hospital mortality was 6.9% and intensive care unit admission 20.7% **Conclusion:** In a Colombian tertiary center, only 1 in 6 hospitalized HFrEF patients received complete quadruple GDMT at admission. This therapeutic

gap, especially for MRA, represents a critical opportunity for quality improvement in regional heart failure care



Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	DILATED CARDIOMYOPATHY AS THE INITIAL MANIFESTATION OF SYSTEMIC LUPUS ERYTHEMATOSUS WITH ANTIPHOSPHOLIPID SYNDROME IN A YOUNG ADULT
Author Block:	Danilo Weir Restrepo, Andrés Sánchez Muñoz, Luis Guillermo Pájaro Franco, SR, Alejandro Aristizabal, Sara V. Serrano, CES university, Medellin, Colombia, Clinicas las America AUNA, Medellin, Colombia
Abstract Body:	**Background:** Systemic lupus erythematosus (SLE) rarely presents as dilated cardiomyopathy (DCM), especially with concurrent antiphospholipid syndrome (APS); this mimics primary cardiomyopathies, delaying diagnosis and immunosuppressive therapy. **Case:** A 27-year-old man without prior history presented with progressive dyspnea, orthopnea, edema, frothy sputum, and oral ulcers. Echocardiography showed biventricular dilation and ejection fraction of 15%. Intensive care with levosimendan was required for hemodynamic failure. Labs revealed elevated natriuretic peptides, thrombocytopenia, low complement, hemolytic anemia, positive antinuclear antibodies, high-titer lupus anticoagulant/anticardiolipin/anti-beta2-glycoprotein I antibodies, and pulmonary embolism, diagnosing SLE-associated APS. Cardiac magnetic resonance (CMR) imaging demonstrated nonischemic fibrosis (lateral/septal) without edema, indicating healed autoimmune myocarditis. The patient received intravenous methylprednisolone pulses, cyclophosphamide, anticoagulation and heart failure therapy with subsequent clinical improvement. **Decision-making:** The severe HF presentation mimicked primary cardiomyopathy, but systemic signs like oral ulcers, hemolysis, and thrombocytopenia redirected the workup toward an autoimmune etiology. CMR was pivotal in characterizing the myocardial substrate, revealing healed myocarditis that supported prioritizing immunosuppression over anti-inflammatory monotherapy. Concurrent high-titer antibodies confirmed APS, amplifying thrombotic and microvascular risk, mandating aggressive

anticoagulation alongside immunosuppression. Multidisciplinary collaboration was pivotal for hemodynamic stabilization, etiological clarification, and optimization of guideline-directed medical therapy.

Conclusion: Severe DCM can be the inaugural manifestation of SLE and APS in young adults. Extracardiac systemic features in unexplained HF mandate comprehensive evaluation. Early tissue characterization with CMR and a multidisciplinary approach are essential to promptly initiate life-saving therapies.

Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	TRIPLE-M SYNDROME: ACUTE AUTOIMMUNE MYOCARDITIS DURING MYASTHENIC CRISIS COMPLICATED BY MIXED SHOCK
Author Block:	Carlos felipe Laguado buitrago, Carlos Fuentes, Diana Vargas, Clinica colombia, Bogotá, Colombia
Abstract Body:	**Background:** Triple-M syndrome (myasthenia gravis, myositis, and myocarditis) is a rare autoimmune triad. We report a case of acute myocarditis presenting as mixed shock during a myasthenic crisis. **Methods:** A 44-year-old woman with seropositive myasthenia gravis presented with bulbar symptoms and respiratory failure requiring mechanical ventilation. Labs showed troponin 633 ng/L and NT-proBNP 9,591 pg/mL. ECG revealed sinus tachycardia. Echocardiography showed global hypokinesia (LVEF 33%). The course was complicated by pneumonia, septic shock, and cardiogenic shock. Cardiac MRI (CMR) confirmed acute myocarditis (LVEF 48%). Elevated CPK and neuromuscular weakness confirmed Triple-M syndrome. **Results:** Myocarditis is a severe complication of myasthenia gravis. This case highlights a complex mixed shock where autoimmune myocarditis overlapped with septic cardiomyopathy. Management included broad-spectrum antibiotics, IVIG, and rituximab. Neurohumoral blockade was initiated following hemodynamic stabilization. This integrated approach led to a complete recovery of ventricular function (LVEF 54%). **Conclusion:** Triple-M syndrome and septic cardiomyopathy can coexist in critically ill patients during a myasthenia crisis. This scenario requires high clinical suspicion and multidisciplinary management to achieve favorable outcomes.

Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	BURDEN OF COMORBIDITIES IN HOSPITALIZED PATIENTS WITH HEART FAILURE: A COLOMBIAN REGISTRY
Author Block:	Jorge Alejandro Pamplona Tobón, Jaime Alberto Gómez Rosero, Juanita Velasquez-Ospina, Maria Clara Gaviria, Juan Manuel Martinez, Veronica lopez cardona, Juan Daniel Castrillon Spitia, Natalia Mejia Zapata, Mateo Morales Henao, Alejandro Jaramillo Yepes, Juana Valentina Ospina Restrepo, Edwin Rios, Alejandra Ortiz Moreno, Clínica Las Vegas, Medellin, Colombia

Abstract Body:

Background: Heart failure is frequently associated with cardiovascular and non-cardiovascular comorbidities that significantly impact clinical prognosis. This study aims to describe the prevalence of comorbidities in a cohort of hospitalized patients, population for which local data remains limited.
Methods: Prospective single-center registry of 106 adult patients (≥18 years) hospitalized with a confirmed diagnosis of heart failure (HF) at a tertiary care center in Colombia. Consecutive patients requiring inpatient management during the study period were included, regardless of HF etiology.
Results: Median age was 76.5 (IQR 66-83) years; 98.1% presented with acute decompensation. Anemia prevalence was 39% (hightest in males 48%).Chronic kidney disease (CKD) was present in 33.0% of the cohort. Median estimated glomerular filtration rate (eGFR), calculated using the CKD-EPI 2021 equation, was 47.2 (IQR 32.3-66.8) mL/min/1.73m^2. Atrial fibrillation (AF)/flutter affected 33.0%. Coexistence of hypertension, CKD, and type 2 diabetes occurred in 16.0%. Almost half (49%) had ≥3 comorbidities. Median NT-proBNP was 5,253 (IQR 2684-13314) pg/mL.
Conclusion: Multiple comorbidities were frequently observed; more than 1/3 of the patients had Anemia, Chronic kidney disease, or Atrial fibrillation, and almost half had three or more comorbidities. This high burden identifies a population that requires multidisciplinary care and poses a challenge for

optimizing guideline-based medical treatment.

Table 1. Baseline Characteristics According to Sex

Characteristic	Overall N = 106[1]	Female N = 56[1]	Male N = 50[1]
Age, years	76.5 (66.0, 83.0)	75.0 (64.0, 82.5)	78.5 (71.0, 84.0)
Hypertension	73 (69%)	32 (57%)	41 (82%)
Type 2 diabetes mellitus	35 (33%)	20 (36%)	15 (30%)
COPD	24 (23%)	13 (23%)	11 (22%)
Chronic kidney disease	35 (33%)	19 (34%)	16 (32%)
Dyslipidemia	35 (33%)	21 (38%)	14 (28%)
Smoking history	43 (41%)	20 (36%)	23 (46%)
Atrial fibrillation/flutter	35 (33%)	17 (30%)	18 (36%)
Prior myocardial infarction	28 (26%)	14 (25%)	14 (28%)
Cerebrovascular disease	9 (8.5%)	4 (7.1%)	5 (10%)
Comorbidity burden			
0–1	31 (29%)	22 (39%)	9 (18%)
2	23 (22%)	4 (7.1%)	19 (38%)
3	21 (20%)	11 (20%)	10 (20%)
≥4	31 (29%)	19 (34%)	12 (24%)
Systolic blood pressure, mmHg	130.0 (110.0, 142.0)	130.0 (112.5, 138.0)	130.5 (109.0, 145.0)
Creatinine, mg/dL	1.4 (1.0, 1.7)	1.3 (1.0, 1.6)	1.4 (1.2, 2.1)
eGFR, mL/min/1.73m²	47.2 (32.3, 66.8)	43.8 (32.2, 65.0)	49.0 (35.8, 66.9)
Hemoglobin, g/dL	12.8 ± 2.3	12.7 ± 2.2	13.0 ± 2.4
Anemia	41 (39%)	17 (30%)	24 (48%)
NT-proBNP, pg/mL	5,253.0 (2,684.0, 13,314.0)	5,599.0 (3,119.0, 12,402.0)	4,433.0 (2,437.0, 13,830.0)
Peripheral edema	76 (72%)	38 (68%)	38 (76%)
Orthopnea	44 (42%)	20 (36%)	24 (50%)

[1] Median (Q1, Q3); n (%); Mean ± SD

Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Heart Failure and Cardiomyopathies
Publishing Title:	TEMPORAL PATTERN OF HOSPITAL ADMISSIONS FOR CHRONIC RHEUMATIC HEART DISEASE AND ASSOCIATED COSTS IN BRAZIL, 2015-2025
Author Block:	Hermes Estevam Torega Celkevicius, Vicente Morales Ribeiro, Pedro Henrique S. Troes, Giovanna Cristina Gonçalves Camacho, Rafael Henkes, Jamile Boff, Jean Carlos C. Gonçalves, Nathalia S. Castro, Guilherme Silva Mendes Gaia, Ivan Rafael Figueroa Baez, Department of Internal Medicine, Serra Gaúcha University Center, Caxias do Sul, Brazil, Department of Internal Medicine, University of Southern Santa Catarina (UNISUL), Palhoça, Brazil, Palhoça, Brazil
Abstract Body:	**Background:** Chronic rheumatic heart disease is a preventable cardiovascular condition associated with valve damage, recurrent hospitalization, premature mortality and health-system costs. In Brazil, SIH/SUS data allow monitoring of temporal patterns and regional inequalities in public hospital care. To analyze admissions, in-hospital mortality and costs related to chronic rheumatic heart disease in Brazil and its regions from 2015 to 2025. **Methods:** This ecological time-series study used secondary data from the Hospital Information System of the Brazilian Unified Health System, available through TABNET/DATASUS. Admissions, deaths, mortality and costs were analyzed by year, region, sex, age group and race/skin color. Rates were calculated per 100,000 inhabitants using the 2022 Brazilian Demographic Census. Trends were assessed by Joinpoint regression, with APC, AAPC, 95% confidence intervals and p-values. Public aggregated data were used; therefore, ethics approval was not required. **Results:** Brazil recorded 82,911 admissions, 6,678 in-hospital deaths and R$ 774,768,170.03 in costs due to chronic rheumatic heart disease. Overall hospital mortality was 8.05%. The Southeast concentrated the largest number of admissions and deaths, while the Midwest had the highest accumulated admission rate. Admissions, deaths and costs were higher among females. Hospitalizations were concentrated in adults aged 50-59 and 60-69 years, and mortality increased with age, reaching 16.54% in patients aged 80 years or

older. National admission rates remained stable, with AAPC of 1.094900. In-hospital death rates also remained stable, with AAPC of 0.008360. Hospital mortality was stable in Brazil, with AAPC of -1.074. Hospital costs increased significantly, with AAPC of 6.613, 95%CI 4.060797-9.228593 and p=0.000291. Regionally, admission rates increased in the North and Northeast. Death rates increased in the Northeast and decreased in the Midwest. Mortality decreased in the Southeast and Midwest.
Conclusion: Chronic rheumatic heart disease remains a relevant hospital and economic burden in Brazil, as costs continue to rise despite stable national admission and mortality trends.

Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Interventions and Ischemic Heart Diseases
Publishing Title:	FREQUENCY OF COMPLETE CORONARY OCCLUSION IN PATIENTS WITH NON-ST-SEGMENT ELEVATION ACUTE MYOCARDIAL INFARCTION AT A HIGH-COMPLEXITY HOSPITAL IN MEDELLíN, COLOMBIA
Author Block:	Jhon Correa, Jose E. Agamez, Laura S. Suarez, Maria J. Bedoya, Jorge H. Donado, Jessica Londoño, Yesid A. Saavedra, Universidad Pontificia Bolivariana, Medellín, Colombia, Hospital Pablo Tobón Uribe, Medellín, Colombia
Abstract Body:	**Background:** A considerable proportion of patients with non-ST-segment elevation myocardial infarction (NSTEMI) have undiagnosed acute coronary occlusion, which is associated with a worse prognosis. This underscores the need for early identification of patients with probable coronary occlusion who could benefit from an earlier reperfusion strategy. **Methods:** We conducted a cross-sectional study in a retrospective cohort at a tertiary hospital. Adult patients with NSTEMI undergoing coronary angiography were included. Complete coronary occlusion was defined as TIMI flow 0-1. Analyses were descriptive, focused on baseline mismatch and in-hospital outcomes between occlusive myocardial infarction (OMI) and non-occlusive myocardial infarction (NOMI). **Results:** A total of 164 patients were included: 134 (81.7%) with NOMI and 30 (18.3%) with OMI. Patients with OMI more frequently showed high-risk electrocardiographic features (83.3% vs. 46.3%) and greater clinical severity at presentation (26.7% vs. 14.2%). The left anterior descending artery was the most common culprit vessel (34.3%). OMI patients had shorter delays to coronary angiography, with fewer experiencing time-to-catheterization >24 hours (16.7% vs. 45.1%). **Conclusion:** Acute coronary occlusion was present in a significant subset of NSTEMI patients and was associated with higher-risk presentation. Improved recognition of OMI may refine risk stratification and support earlier reperfusion

strategies.

Table 1. Baseline characteristics and main findings

Variable	No occlusion	Occlusion
n (%)	134 (81.7%)	30 (18.3%)
Age (mean (SD))	66.70 (11.79)	62.73 (12.11)
Female sex (%)	55 (41.0)	7 (23.3)
Hypertension (%)	88 (65.7)	19 (63.3)
Diabetes (%)	38 (28.4)	8 (26.7)
Chronic kidney disease (%)	20 (14.9)	1 (3.3)
Dyslipidemia (%)	64 (47.8)	8 (26.7)
Previous myocardial infarction (%)	35 (26.1)	3 (10.0)
Smoking (%)	47 (35.1)	11 (36.7)
Body mass index (BMI) > 30 kg/m² (%)	15 (12.2)	6 (22.2)
Killip II and IV (%)	19 (14.2)	8 (26.7)
High-risk ECG (%)	62 (46.3)	25 (83.3)
Ejection fraction <40% (%)	21 (16.5)	6 (22.2)
Time from diagnosis to catheterization > 24h (%)	60 (45.1)	5 (16.7)
VT/FV at admission (%)	0 (0.0)	1 (3.3)
In-hospital mortality (%)	14 (10.4)	3 (10.0)
Culprit vessel		
Left anterior descending	55 (41.0%)	13 (43.3%)
Circumflex	21 (15.7%)	4 (13.3%)
Right coronary artery	31 (23.1%)	5 (16.7%)
Left main	11 (8.2%)	1 (3.3%)
Other	16 (11.9%)	7 (23.3%)

VT/FV, ventricular tachycardia/ventricular fibrillation

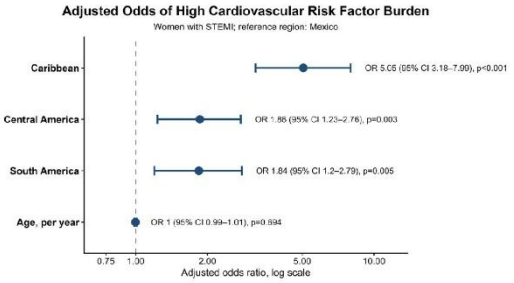
Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Interventions and Ischemic Heart Diseases
Publishing Title:	WOMEN WITH STEMI IN LATIN AMERICA: A HIGH-RISK PHENOTYPE WITH REGIONAL DISPARITIES
Author Block:	Miguel Delgado, SR, Sara Divanne González, Pamela Pina Santana, Marlon Miguel Espaillat, Ana M. Coeto, Edith Tonalli Adame-Avilés, Dulce Renee Soto Gonzalez, Hector González, Paula Polanco-Lou, Sebastian Pérez, Sonia Margarita Moreno-Díaz, Jose Alfaro, Iván Paredes Heredia, Diego Rengifo, Diana Llumipanta, Cristian Eduardo Vimos Gagñay, Liliana Cardenas, JAIME SALGUEIRO BUSTILLOS, Jose Antonio Cornejo-Guerra, Carlos Garcia Lithgow, SR, Alexandra Arias-Mendoza, Cesar J. Herrera, LATAM-STEMI Network, CEDIMAT Cardiovascular Center, Santo Domingo, Dominican Republic, Instituto Nacional de Cardiología Ignacio Chavez, Ciudad de México, Mexico
Abstract Body:	**Background:** Regional differences in cardiometabolic burden and coronary phenotype among women with STEMI in Latin America are poorly defined. **Methods:** Between 2020-2025 we studied 5766 consecutive patients with STEMI, 1,205 were women residing in the Caribbean (100, 8%), Central America (CA) (185, 15%), Mexico (757, 62%) and South America (SA) (163, 13%). Risk factors, vascular history, and angiographic findings were compared across geographic regions. High-risk burden was defined as ≥3 of hypertension, diabetes, dyslipidemia, obesity, smoking, or CKD. Age-adjusted logistic regression assessed the association between region and high-risk burden. **Results:** Marked heterogeneity was observed with hypertension, diabetes, dyslipidemia, smoking, and prior MI being most prevalent in the Caribbean (44% with high-risk burden), whereas SA had the lowest prevalence of hypertension and diabetes. Compared with Mexico, high-risk burden was more likely in the Caribbean (OR 5.05, 95% CI 3.18-7.99), CA (OR 1.86, 95% CI 1.23-2.76), and SA (OR 1.84, 95% CI 1.20-2.79), independent of age. **Conclusion:** Among women with STEMI in Latin America, geographic region was strongly associated with clustered cardiometabolic risk, with the Caribbean showing the most adverse profile. These findings support geographic region-specific primary prevention and secondary prevention strategies across

this multicountry cohort.

Cardiovascular risk factors in women with STEMI by geographic region

Variables	Overall N = 1,205[1]	Caribbean N = 100[1]	Central America N = 185[1]	South America N = 163[1]	Mexico N = 757[1]	p-value[2]
Hypertension	825 (69.0)	80 (85.1)	137 (75.3)	100 (61.3)	508 (67.1)	<0.001
Diabetes mellitus	660 (55.2)	66 (70.2)	119 (65.4)	61 (37.4)	414 (54.7)	<0.001
Dyslipidemia	172 (14.4)	38 (40.4)	24 (13.2)	24 (14.9)	86 (11.4)	<0.001
Self-reported obesity	284 (27.5)	8 (40.0)	32 (22.2)	40 (33.6)	204 (27.2)	0.12
Smoking status (Current/Former)	235 (19.6)	26 (26.0)	18 (9.9)	36 (22.8)	155 (20.5)	0.002
Prior MI	75 (6.3)	16 (17.0)	21 (11.6)	9 (5.5)	29 (3.8)	<0.001
Prior stroke/TIA	31 (2.8)	2 (2.1)	4 (3.8)	9 (5.6)	16 (2.1)	0.088
High risk factor burden*	227 (19.0)	42 (44.7)	42 (23.1)	37 (22.8)	106 (14.0)	<0.001

[1]n(%), [2]Pearson's Chi-squared test. * High risk factor burden was defined as the presence of ≥3 of the following risk factors: hypertension, diabetes mellitus, current/former smoking, dyslipidemia, obesity, and chronic kidney disease. Abbreviations: MI, myocardial infarction; TIA, transient ischemic attack.



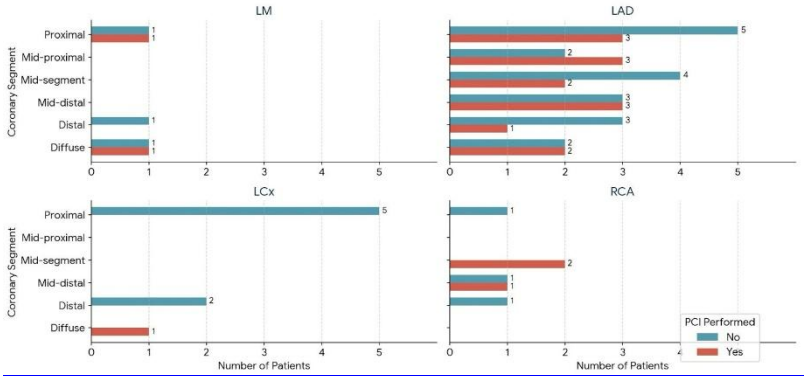
Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Interventions and Ischemic Heart Diseases
Publishing Title:	SPONTANEOUS CORONARY ARTERY DISSECTION IN MEXICO: A 20-YEAR EXPERIENCE FROM A TERTIARY CARDIOVASCULAR CENTER
Author Block:	Raul Alejandro Hernandez-Rocha, Hector Gonzalez-Pacheco, Alexandra Arias-Mendoza, Daniel Manzur-Sandoval, Instituto Nacional de Cardiología Ignacio Chávez, Ciudad de México, Mexico
Abstract Body:	**Background:** Spontaneous coronary artery dissection (SCAD) is an increasingly recognized cause of Acute Coronary Syndrome (ACS), particularly in young patients without traditional cardiovascular risk factors. Despite its clinical importance, data regarding its prevalence, risk factors, and prognosis in Latin American populations are virtually non-existent. **Methods:** We conducted a retrospective study of ACS patients with angiographically confirmed SCAD (2005-2025) at a tertiary cardiovascular center. Clinical and angiographic variables were analyzed to identify predictors of outcomes. **Results:** Among 46 patients, smoking (50%; 75% in men), migraine (15.4% in women), and pre-eclampsia (12.8%) were prevalent. Men presented with higher rates of STEMI (85.7% vs 43.6%, p=0.048) and left main coronary artery involvement (37.5%) compared to women. Intracoronary imaging (IVUS/OCT) was utilized in 21.7% (15.2%/6.5%) of cases. Management was primarily conservative (60.9%). At 1-year follow-up, clinical recurrence of SCAD was 2.1%. **Conclusion:** This first Mexican SCAD cohort confirms a young, female-predominant population but highlights a high smoking prevalence as a potential regional co-factor. Men with SCAD exhibit a more aggressive clinical phenotype, characterized by a higher incidence of STEMI and left main involvement. These findings emphasize the need for high clinical suspicion and

sex-specific diagnostic strategies in Latin American cardiac centers

Clinical and angiographic characteristics according to treatment strategy

Variable	Conservative (N=28)	Revascularization (N=18)	p-value
Age, years (SD)	47.6 (9.54)	41.8 (10.81)	0.061
Female sex, n (%)	24 (85.7%)	15 (83.3%)	1.000
Presentation as STEMI, n (%)	12 (42.9%)	11 (61.1%)	0.365
Culprit Artery, n (%)			
Left Main	1 (3.6%)	1 (5.6%)	1.000
Left Anterior Descending	16 (57.1%)	12 (66.7%)	0.554
Saw Classification, n (%)			0.236
Type 1	4 (14.3%)	5 (27.8%)	
Type 2a	5 (17.9%)	4 (22.2%)	
Type 2b	11 (39.3%)	2 (11.1%)	
Type 3	6 (21.4%)	3 (16.7%)	
Type 4	0 (0%)	1 (5.6%)	
Multiple types	2 (7.1%)	3 (16.7%)	
Initial TIMI 3 Flow, n (%)	25 (89.3%)	6 (33.3%)	**< 0.001**
Final TIMI 3 Flow, n (%)	25 (89.3%)	16 (88.9%)	1.000

Localization of dissection and PCI performance by artery

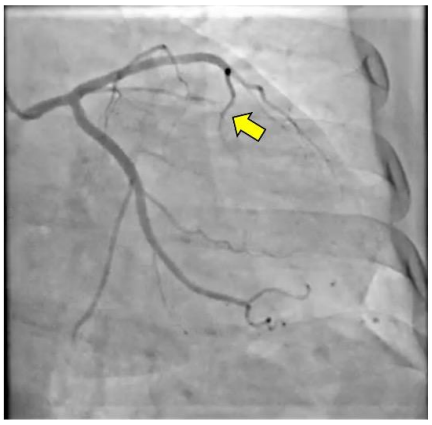


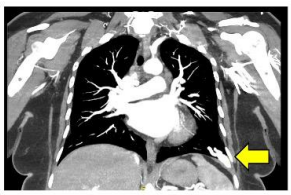
Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Interventions and Ischemic Heart Diseases
Publishing Title:	PERCUTANEOUS CORONARY REVASCULARIZATION IN MULTIVESSEL DISEASE AND NSTE-ACS: WHAT IS THE IDEAL STRATEGY?
Author Block:	Marco Antonio Alonso Lima, Hector Hugo Escutia-Cuevas, Ivonne Hernández Montiel, Juan Antonio Suárez-Cuenca, Hospital Puebla, Puebla, Mexico, Regional Hospital ISSSTE Puebla, Puebla, Mexico
Abstract Body:	**Background:** Multivessel disease (MVD) affects nearly 50% of patients with acute coronary syndrome (ACS). Evidence on complete revascularization (CR) in patients with MVD and non-ST-segment elevation acute coronary syndrome (NSTE-ACS) remains limited. This study assessed the impact of percutaneous revascularization strategy on major adverse cardiovascular and cerebrovascular events (MACCE) in patients with MVD and NSTE-ACS. **Methods:** This observational, longitudinal, analytical, ambispective cohort included patients with NSTE-ACS, including non-ST-segment elevation myocardial infarction (NSTEMI) or unstable angina (UA), and MVD who underwent percutaneous coronary intervention (PCI). Revascularization was performed during the index procedure (IP) or as a staged procedure during the index hospitalization or within ≤12 months after the first intervention. Patients were classified into CR or culprit-only revascularization (COR). The primary endpoint was one-year MACCE, defined as all-cause mortality, cardiac death, reinfarction, repeat coronary revascularization, rehospitalization for UA, or stroke. MACCE-free survival was assessed using Kaplan-Meier curves and the log-rank test. **Results:** From April 2020 to August 2023, 146 patients were included: 49 with NSTEMI and 97 with UA. CR was performed in 76.7% (n = 112), while 23.3% (n = 34) underwent COR. Within the CR group, 67.9% (n = 76) achieved CR during the IP and 32.1% (n = 36) through staged procedures. At one year, CR was associated with fewer MACCE than COR: 10.7% (n = 12) versus 44.1% (n = 15) [HR 0.286 (95% CI, 0.093-0.878); log-rank p = 0.0024]. In subgroup analysis, CR during the IP showed fewer MACCE (log-rank p = 0.0143). CR also showed a lower risk of repeat coronary revascularization (log-rank p = 0.0259). Among

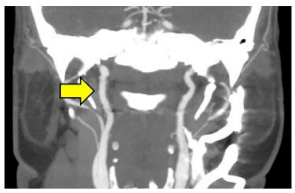
CR patients, MACCE occurred in 7.9% (n = 6) of the IP group and 16.7% (n = 6) of the staged-procedure group [HR 0.462 (95% CI, 0.137-1.561); p = 0.1706]. **Conclusion:** In patients with NSTE-ACS and MVD, CR was associated with a lower one-year incidence of MACCE compared with COR. These findings support CR, particularly during the index procedure when clinically feasible.

Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Interventions and Ischemic Heart Diseases
Publishing Title:	BALANCING THROMBOSIS AND BLEEDING: SPONTANEOUS CORONARY ARTERY DISSECTION (SCAD) IN OSLER-WEBER-RENDU SYNDROME
Author Block:	Juan Pablo Estrada, Jonathan Javier Diaz Jurado, Juan P. Cardenas, Paula Quiroga, Daniel Isaza-Restrepo, Fundación Cardioinfantil-Instituto de Cardiologia, Bogota, Colombia, Universidad del Rosario, Bogotá
Abstract Body:	**Background:** Spontaneous coronary artery dissection (SCAD), often linked to fibromuscular dysplasia (FMD), may requires antithrombotics. A therapeutic conflict arises when SCAD co-occurs with pro-hemorrhagic conditions like Hereditary Hemorrhagic Telangiectasia (HHT). **Case:** A 53-year-old woman with untreated gastritis presented with acute chest pressure and elevated troponin. Angiography showed a myocardial infarction driven by a ramus intermedius SCAD. Imaging identified cervical internal carotid FMD, a pulmonary arteriovenous malformation, and intrahepatic telangiectasias. With familial epistaxis and mucosal telangiectasias, she met all Curaçao criteria for HHT. **Decision-making:** This diagnosis created a therapeutic conflict: SCAD may requires antithrombotics, but HHT and gastritis carry severe bleeding risks. Given her stability, a multidisciplinary team initiated cautious daily aspirin (100mg) and enoxaparin (40mg). Specialists concurrently managed her vascular malformations, emphasizing collaborative risk stratification over rigid protocols. **Conclusion:** Concurrent SCAD, FMD, and HHT exposes a gap in acute coronary syndrome guidelines. Safely navigating conflicting ischemic and hemorrhagic

risks demands an individualized, multidisciplinary approach.







Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Interventions and Ischemic Heart Diseases
Publishing Title:	EXCESSIVE MEDIASTINAL BLEEDING AFTER CARDIAC SURGERY WITH CARDIOPULMONARY BYPASS: ASSOCIATED FACTORS AND CLINICAL OUTCOMES IN A MEXICAN COHORT
Author Block:	Edgar Alejandro Sáenz Ordóñez, Daniel Manzur Sandoval, Alexandra Arias-Mendoza, Rodrigo Gopar-Nieto, Mario Torres, Instituto Nacional de Cardiología Ignacio Chávezvez, Ciudad de México, Mexico
Abstract Body:	**Background:** Excessive mediastinal bleeding after cardiac surgery with cardiopulmonary bypass (CPB) is clinically important, but local data are limited. We evaluated its prevalence, associated factors and postoperative outcomes in a Mexican cohort. **Methods:** Retrospective analytical study of 831 adults undergoing cardiac surgery with CPB and admitted to cardiovascular intensive care from June 2022 to June 2025. Demographic, surgical, hemodynamic and clinical outcomes were compared between patients with and without excessive bleeding; $p<0.05$ was significant. **Results:** Excessive mediastinal bleeding occurred in 101 patients (12.1%). Compared with patients without bleeding, affected patients had longer CPB time (150 vs 141 min; p=0.002), longer aortic cross-clamp time (103 vs 96 min; p=0.0056) and higher EuroSCORE II (2.4 vs 1.94; p=0.0046). Bleeding was associated with vasoplegic syndrome (21.8% vs 6.9%; $p<0.001$), acute kidney injury (50.5% vs 27.7%; $p<0.001$), renal replacement therapy (11.9% vs 4.7%; p=0.003), hepatic injury (17.8% vs 7.7%; p=0.001), postoperative atrial fibrillation (24.8% vs 13.7%; p=0.004), transfusion (80.2% vs 42.7%; $p<0.001$) and higher mortality (6.6% vs 4.9%; $p<0.001$). **Conclusion:** Excessive mediastinal bleeding after cardiac surgery with CPP was frequent and associated with greater surgical complexity, organ dysfunction, transfusion requirement and mortality. Early recognition and

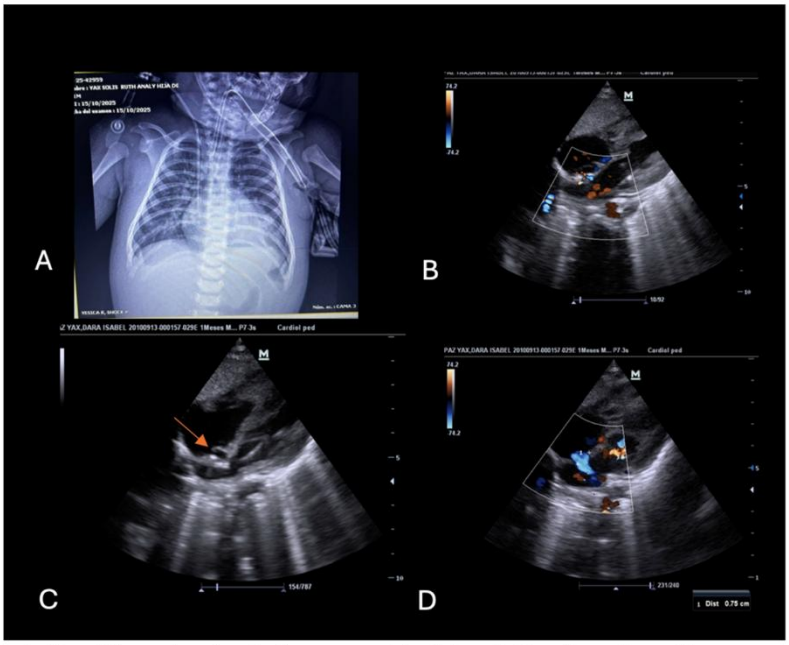
standardized bleeding-management protocols may improve outcomes.

Figure 1. Logistic regression for risk factors and outcomes associated with excessive mediastinal bleeding.

Variable	OR	95% CI	p
ASSOCIATED RISK FACTORS			
Male sex	1.73	1.10-2.71	0.016
EUROSCORE 2	1.28	1.08-1.52	0.004
Cardiopulmonary bypass time	1.22	1.08-1.38	0.002
Aortic cross-clamp time	1.25	1.09-1.43	0.005
ASSOCIATED OUTCOMES			
Variable	**OR**	**95% CI**	**p**
Vasoplegic syndrome	3.79	2.24-6.41	<0.001
Hypovolemia	1.62	1.06-2.47	0.022
Delirium	2.43	1.40-4.20	0.003
Hospital-acquired pneumonia n(%)	1.67	0.91-3.05	0.092
Blood transfusion n(%)	5.45	3.23-9.18	<0.001
Acute kidney injury n(%)	2.68	1.75-4.10	<0.001
Renal replacement therapy n(%)	2.75	1.37-5.51	0.003
Hepatic injury n(%)	2.60	1.42-4.75	0.001
Atrial fibrillation n(%)	2.07	1.23-3.49	0.004
In-hospital mortality n(%)	2.19	1.20-3.98	<0.001

OR: Odds Ratio; **CI:** Confidence Interval

Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Interventions and Ischemic Heart Diseases
Publishing Title:	ATRIAL SEPTOSTOMY USING A STATIC BALLOON GUIDED BY BEDSIDE ECHOCARDIOGRAPHY: AN EMERGENCY PROCEDURE IN AN INFANT WITH A LATE DIAGNOSIS OF TRANSPOSITION OF THE GREAT ARTERIES
Author Block:	Mario Robin Perez Barrios, Carlos R. Herrera Donis, María Inés Montiel, Hospital Roosevelt, Guatemala, Guatemala
Abstract Body:	**Background:** Transposition of the Great Arteries is one of the most common cyanotic congenital heart defects in the neonatal period, leading to severe and progressive hypoxemia in the absence of shunts that allow oxygenated and deoxygenated blood to mix. **Case:** 45-day-old female presenting with irritability for the past 48 hours, cyanosis, gasping, a grade III/VI holosystolic murmur, requiring mechanical ventilation; chest X-ray showing the “egg-on-a-string” sign; transthoracic echocardiogram showing AV concordance and VA discordance, (D-TGA), restrictive patent foramen ovale with a gradient of 6.5 mmHg and left-to-right shunt, small ventricular septal defect of 2.7 mm with a gradient of 19 mmHg and left-to-right shunt, patent ductus arteriosus measuring 6 x 4 mm with bidirectional flow, preserved left ventricular function, and mild pulmonary stenosis. **Decision-making:** A static balloon atrial septostomy is performed at the bedside under echocardiographic guidance via right femoral access; a 7.5-mm interatrial communication is achieved post-procedure; hemodynamic stability is attained, with improved oxygen saturation and blood pressure. **Conclusion:** Immediate hemodynamic stabilization underscores the importance of this procedure as a critical therapeutic bridge. In the context of a developing country, where immediate access to a catheterization laboratory or corrective surgery may be limited by various factors, this approach takes on even greater diagnostic and therapeutic significance



A. Chest X-ray showing the “egg-on-a-string” sign. B. Baseline echocardiogram showing a patent foramen ovale in the closure pathways. C. Atrial septostomy with a static balloon. D. Ventricular septal defect obtained

Session Title: **Saturday Afternoon Poster Session**

Topic 1: Interventions and Ischemic Heart Diseases

Publishing Title: SOCIODEMOGRAPHIC AND CLINICAL PHENOTYPES OF WOMEN WITH STEMI IN LATIN AMERICA

Author Block: Marlon Miguel Espaillat, Pamela Pina Santana, Alexandra Arias-Mendoza, Sara Divanne González, Miguel Delgado, SR, Ana M. Coeto, Edith Tonalli Adame-Avilés, Dulce Renee Soto Gonzalez, Hector González, Paula Polanco-Lou, Sebastian Pérez, Sonia Margarita Moreno-Díaz, Jose Alfaro, Iván Paredes Heredia, Diego Rengifo, Diana Llumipanta, Cristian Eduardo Vimos Gagñay, Liliana Cardenas, JAIME SALGUEIRO BUSTILLOS, Carlos Garcia Lithgow, SR, Jose Antonio Cornejo-Guerra, Cesar J. Herrera, LATAM-STEMI Network, CEDIMAT Cardiovascular Center, Santo Domingo, Dominican Republic, Instituto Nacional de Cardiología Ignacio Chavez, Ciudad de México, Mexico

Abstract Body: **Background:** Sex-based disparities in STEMI recognition and outcomes are well documented, yet data characterizing women with STEMI across Latin America remain scarce.

Methods: We retrospectively analyzed consecutive STEMI network cases from 4 LATAM regions (Caribbean, Central America, Mexico and South America) collected over the last five years. Wilcoxon and chi-square tests were used as appropriate.

Results: Of 5,766 patients, 1,205 (20.9%) were women. Compared to men, women were older (64 vs. 60 yrs; $p<0.001$) with higher rates of hypertension, diabetes, obesity, CKD and prior stroke/TIA (all $p<0.001$). Women also had more atypical presentation, Killip III-IV, cardiogenic shock, and cardiac arrest on admission (all $p\leq0.002$). In addition to lower rates of prior MI, prior PCI, and multivessel disease, women had higher rates of SCAD and MINOCA/non-obstructive disease (all $p<0.001$).

Conclusion: While women represented a minority of this Latin American STEMI cohort, they were older, had a higher-risk clinical profile, greater cardiometabolic burden, more severe presentation, and higher rates of SCAD

and MINOCA/non-obstructive disease.

Sociodemographic characteristics, cardiovascular risk factors and clinical presentation

Variables	Overall N = 5,766[1]	Sex		p-value[2]
		Women N = 1,205[1]	Men N = 4,561[1]	
Age (years)	60.0 [53.0, 68.0]	64.0 [56.0, 72.0]	60.0 [52.0, 67.0]	<0.001
BMI (kg/m²)	27.1 [24.7, 29.8]	26.7 [23.9, 30.3]	27.2 [24.8, 29.7]	0.018
Geographic Region				<0.001
Caribbean (Dominican Republic)	375 (6.5)	100 (26)	275 (73)	
Central America (Guatemala)	622 (10.8)	185 (29)	437 (70)	
South America (Ecuador/Bolivia)	473 (8.2)	162 (34)	311 (65)	
Mexico	4,289 (74.5)	757 (17)	3,532 (82)	
Medical Insurance type				0.016
Public	5,381 (93.9)	1,104 (92.4)	4,277 (94.3)	
Private	349 (6.1)	91 (7.6)	258 (5.7)	
Rural residence	364 (26.6)	97 (23.1)	267 (28.2)	0.057
Hypertension	2,966 (51.7)	825 (69.0)	2,141 (47.2)	<0.001
Diabetes mellitus	2,383 (41.6)	660 (55.2)	1,723 (38.0)	<0.001
Dyslipidemia	828 (14.5)	172 (14.4)	656 (14.5)	>0.9
Smoking status				<0.001
Current	367 (6.4)	60 (5.0)	307 (6.7)	
Former	1,548 (26.9)	175 (14.6)	1,373 (30.2)	
Self-reported obesity	1,278 (24.7)	284 (27.5)	994 (24.0)	0.022
Chronic kidney disease	189 (3.3)	58 (4.8)	131 (2.9)	0.001
Prior MI	528 (9.2)	75 (6.3)	453 (10.0)	<0.001
Prior PCI	334 (6.2)	36 (3.2)	298 (6.9)	<0.001
Prior CABG	25 (0.5)	1 (0.1)	24 (0.6)	0.071
Prior stroke/TIA	91 (1.7)	31 (2.8)	60 (1.4)	0.002
Prior heart failure	169 (3.1)	35 (3.1)	134 (3.1)	>0.9
Atypical presentation	201 (3.7)	73 (6.6)	128 (3.0)	<0.001
Killip class				<0.001
I	3,171 (55.8)	588 (50.0)	2,583 (57.3)	
II	2,024 (35.6)	453 (38.5)	1,571 (34.9)	
III-IV	487 (8.6)	136 (11.6)	351 (7.8)	
ECG location				0.007
Anterior	2,605 (48.7)	516 (47.6)	2,089 (48.9)	
Inferior	2,490 (46.5)	493 (45.5)	1,997 (46.8)	
Inferolateral/Lateral	145 (2.7)	39 (3.6)	106 (2.5)	
Posterior	70 (1.3)	24 (2.2)	46 (1.1)	
Cardiogenic shock on admission	279 (5.0)	79 (6.9)	200 (4.5)	0.001
Cardiac arrest on admission	84 (1.5)	29 (2.6)	55 (1.3)	0.002
LVEF during hospitalization (%)	46.0 [38.0, 54.0]	48.0 [39.0, 55.0]	46.0 [37.0, 53.0]	<0.001
Hemoglobin (g/dL)	15.2 [13.7, 16.6]	13.6 [12.1, 14.8]	15.6 [14.2, 16.9]	<0.001
Creatinine (mg/dL)	1.0 [0.8, 1.3]	0.9 [0.7, 1.2]	1.0 [0.9, 1.3]	<0.001
LDL cholesterol (mg/dL)	102.0 [77.0, 129.0]	98.6 [75.2, 133.0]	102.0 [77.4, 128.0]	0.5
HDL cholesterol (mg/dL)	36.8 [31.0, 44.0]	38.1 [32.0, 47.0]	36.1 [30.7, 43.0]	<0.001
Triglycerides (mg/dL)	140.0 [107.0, 185.0]	148.0 [113.0, 189.0]	138.0 [106.0, 184.0]	0.001
Multivessel disease	2,663 (52.8)	461 (46.3)	2,202 (54.4)	<0.001
Obstructive atherosclerosis	2,324 (45.8)	478 (48.0)	1,846 (45.3)	0.14
Suspected/confirmed SCAD	51 (1.0)	30 (3.0)	21 (0.5)	<0.001
MINOCA / non-obstructive	100 (2.1)	38 (4.2)	62 (1.6)	<0.001

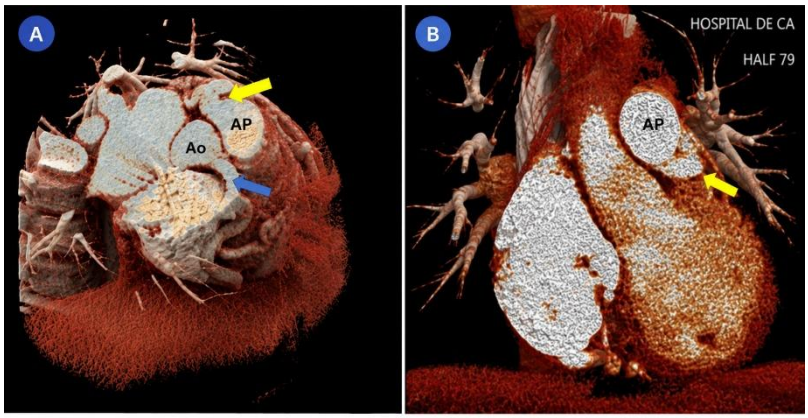
[1]Median [IQR]; n (%)

[2]Pearson's Chi-squared test; Wilcoxon rank sum test

Abbreviations: BMI, body mass index; CABG, coronary artery bypass grafting; CKD, chronic kidney disease; ECG, electrocardiogram; HDL, high-density lipoprotein; IQR, interquartile range; LAD, left anterior descending artery; LCx, left circumflex artery; LDL, low-density lipoprotein; LMCA, left main coronary artery; LVEF, left ventricular ejection fraction; MI, myocardial infarction; MINOCA, myocardial infarction with non-obstructive coronary arteries; PCI, percutaneous coronary intervention; RCA, right coronary artery; SCAD, spontaneous coronary artery dissection; STEMI, ST-segment elevation myocardial infarction; TIA, transient ischemic attack.

Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	ANOMALOUS LEFT CORONARY ARTERY FROM THE PULMONARY ARTERY (ALCAPA) IN AN ADULT PRESENTING AS SYNCOPE: A MULTIMODAL IMAGING DIAGNOSIS
Author Block:	ERICK REY PALMA FIERRO, Alan Jhoset Meneses Ruiz, Axel Hiram Hernández Pineda, Susana Guadalupe Marcos Cruz, Israel García Dávalos, Sheila Vania Sánchez López, Lucelli Yáñez Gutiérrez, Eduardo Almeida Gutierrez, Karina Lupercio Mora, Hospital de cardiología, Centro médico nacional Siglo XXI, Ciudad de México, CA, Mexico
Abstract Body:	**Background:** Anomalous origin of the left coronary artery from the pulmonary artery (ALCAPA) is a rare congenital anomaly associated with ischemia, heart failure, and sudden cardiac death. Adult presentation is uncommon and often underdiagnosed. **Case:** An 18-year-old man presented with syncope initially suspected as epilepsy. Physical examination revealed a grade II/VI mesosystolic murmur. ECG showed left ventricular hypertrophy without repolarization changes. Exercise testing was stopped due to 2.5 mm ST depression in inferior leads. Echocardiography demonstrated preserved biventricular function with abnormal retrograde flow into the pulmonary artery. Coronary CT angiography confirmed ALCAPA with extensive collateralization from the right coronary system. Myocardial perfusion imaging showed mild reversible ischemia. **Decision-making:** Multimodality imaging was essential for diagnosis, with CT angiography defining anatomy. Functional testing confirmed inducible ischemia despite preserved ventricular function, indicating high risk of sudden cardiac death and supporting surgical referral. **Conclusion:** ALCAPA may present in adulthood with nonspecific symptoms and preserved ventricular function. Multimodal imaging is essential for diagnosis. Normal ejection fraction does not exclude clinically significant ischemia, and early surgical correction is required to prevent sudden cardiac

death.

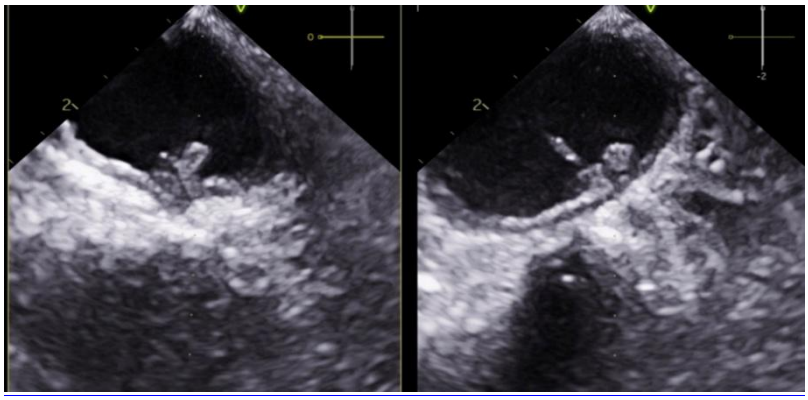


Coronary CT angiography:

(A) Yellow arrow: anomalous origin of the left coronary artery (LCA) from the pulmonary artery (AP).
Blue arrow: Origin of the right coronary artery (RCA) from the aorta (Ao).
(B) Yellow arrow: Origin of the left coronary artery (LCA) from the pulmonary artery (AP).

Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	A RARE AND PERFECT STORM - SIMULTANEOUS TRIPLE-TERRITORY INFARCTION FROM DUAL-SOURCE PARADOXICAL EMBOLISM
Author Block:	Nithin Karnan, Kaushik Darbha, Radu Hagau, MercyOne North Iowa, Mason City, IA, USA
Abstract Body:	**Background:** Simultaneous embolism to pulmonary, renal, and cerebral territories is exceedingly rare. Mobile aortic atheromas (MAA) are an underappreciated embolic source, and acute pulmonary embolism (PE) can reopen a patent foramen ovale (PFO), enabling paradoxical embolism. Transesophageal echocardiography (TEE) detects MAA, vegetations, and PFO far more reliably than transthoracic echocardiography (TTE). **Case:** 65-year-old male presented with aphasia, confusion, and syncope. CT showed bilateral submassive PE with embolic showering to bilateral kidneys. MRI confirmed multiterritory cerebral infarcts with hemorrhagic conversion; Day 10 MRI showed new infarcts despite anticoagulation. TTE was nondiagnostic. TEE revealed two grade 5 MAA in the descending aorta, a 1 cm tricuspid valve mass consistent with nonbacterial thrombotic endocarditis, and a PFO with mobile atrial septal aneurysm. **Decision-making:** Dual-source embolism was identified: tricuspid mass embolized directly to lungs causing PE, while MAA embolized paradoxically through the PE-reopened PFO to cerebral and renal circulations. IVC filter bridged anticoagulation holds for hemorrhagic complications. Follow-up TEE confirmed complete resolution of the tricuspid mass. **Conclusion:** In multiterritory embolism, a nondiagnostic TTE should prompt immediate TEE. Dual-source embolism requires comprehensive source

localization rather than single-source assumptions.



Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	BEYOND ISCHEMIA: STEPWISE MULTIMODAL IMAGING REVEALS ADVANCED CHAGASIC ARRHYTHMOGENIC CARDIOMYOPATHY
Author Block:	Lucy Susanibar Andrade, Ivon Orellana Tovar, Eliana Rafael Horna, Hospital Nacional Guillermo Almenara Irigoyen, Lima, Peru
Abstract Body:	**Background:** Chronic Chagasic cardiomyopathy may closely mimic ischemic heart disease, making sequential multimodality imaging pivotal for definitive etiologic characterization. **Case:** A 77-year-old woman with recent ventricular tachycardia requiring cardioversion presented with chest pain, dyspnea, and palpitations. Invasive angiography excluded coronary disease. Echocardiography disclosed left ventricular dilation, apical aneurysm and an irregular left atrial mass. Cardiac computed tomography identified a dyskinetic apical aneurysm with a thrombotic left atrial lesion. Cardiac magnetic resonance demonstrated apical edema, transmural apical scar, additional nonischemic intramyocardial fibrosis, and elevated native T1. Positive serology established advanced chronic Chagasic cardiomyopathy. **Decision-making:** Stepwise anatomical, functional, and tissue characterization redirected diagnostic from suspected ischemic disease to a complex arrhythmogenic, and thrombotic myocardial substrate. Because of left atrial thrombosis, implantable cardioverter-defibrillator implantation was deferred until completion of anticoagulation, while guideline-directed heart failure therapy was initiated. **Conclusion:** When ventricular arrhythmias outweigh coronary findings, multimodal imaging techniques can redefine the diagnosis and guide

appropriate treatment.

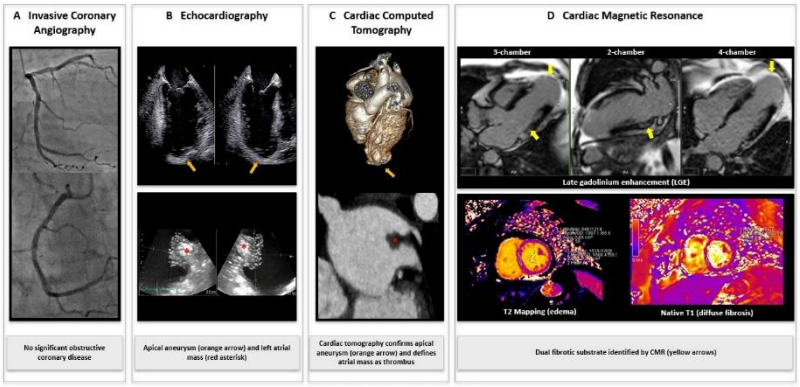


Figure. Stepwise Multimodal Imaging Characterization

Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	SEVERE PULMONARY HYPERTENSION AS THE FIRST CLUE TO SYSTEMIC LUPUS ERYTHEMATOSUS
Author Block:	Edil Rosalio Argueta Machado, Gamaliel Alejandro Velasquez, SR, Daniela Delgado, Carlos Haroldo Ixcamparij, Rocio Aceves-Millan, Jose Magaña, Melannie Ixcamparij, National Medical Center “20 de Noviembre” ISSSTE, Mexico City, Mexico
Abstract Body:	**Background:** Pulmonary hypertension (PH) is a rare but serious manifestation of systemic lupus erythematosus (SLE), especially when presenting as the initial sign. Clinical manifestations range from asymptomatic to life-threatening. **Case:** A 27-year-old woman presented with a 3-week history of progressive dyspnea, palpitations, diaphoresis, and lower-limb edema. On examination, she was hypotensive, tachycardic, and tachypneic, with jugular venous distension and agrade 4/6 parasternal systolic murmur. Echocardiography revealed right atrial and ventricular dilation, severe tricuspid regurgitation, and an estimated systolic pulmonary artery pressure of 90 mmHg. Cardiac magnetic resonance imagingconfirmed pulmonary hypertension (PH). Serologies showed antinuclear antibody (ANA) positivity (1:320) with normal complement. NT-proBNP was elevated. Right heart catheterization confirmed precapillary PH. **Decision-making:** In a young woman with severe PH and right heart dilation, absence of typical symptoms or risk factors, along with positive ANA titers, led to early suspicion of SLE. This prompted the decision to start immunosuppressiveand dual vasodilator therapy. The case highlights the need for diagnostic vigilance in atypical presentations. **Conclusion:** In young women with unexplained PH, autoimmune diseases like SLE must be actively considered, even without classic symptoms. Early clinical suspicion is crucial, because the eyes can't see what the mind does not know,

early on.

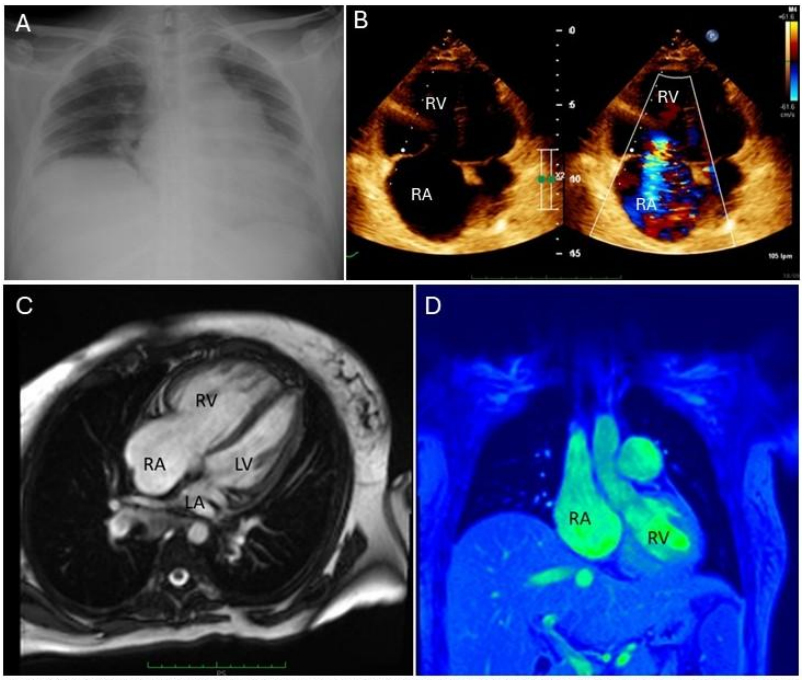
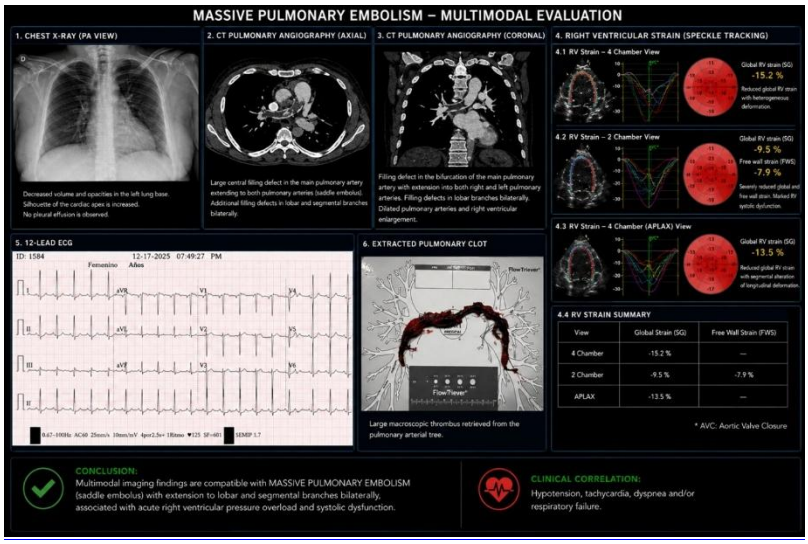


Figure.(A) Chest radiograph demonstrating cardiomegaly and bilateral pleural effusions.(B) Transthoracic echocardiography showing severe right atrial (RA) and right ventricular (RV) dilation with severe tricuspid regurgitation.(C–D) Cardiac magnetic resonance imaging confirming marked right-sided chamber enlargement on four-chamber (C) and coronal (D) views.
LA: left atrium; LV: left ventricle

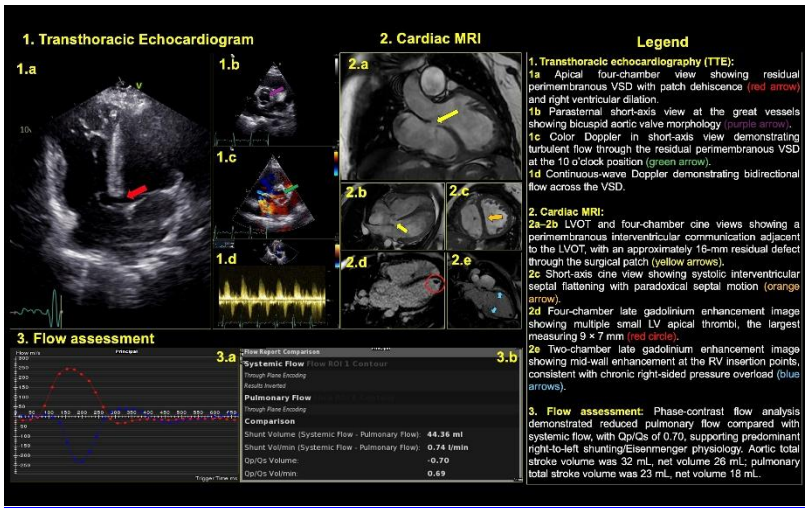
Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	NOT JUST ANXIETY: MASSIVE PULMONARY EMBOLISM IN A 26-YEAR-OLD WOMAN WITH SUDDEN RESPIRATORY COLLAPSE
Author Block:	Junior Luis Cedeño, Grace Paredes, Marvin Alberto Morales Calero, Katihurca Almonte Montes de Oca, Instituto Dominicano de Cardiologia, Santo Domingo, Dominican Republic
Abstract Body:	**Background:** Massive pulmonary embolism (PE) is associated with right ventricular (RV) failure and high mortality. Diagnosis may be difficult in young patients with nonspecific symptoms. **Case:** A 26-year-old woman with hypertension, type 1 diabetes mellitus, prior preeclampsia, and recent lower-limb immobilization presented with acute dyspnea and respiratory distress. Laboratory testing showed elevated D-dimer and troponin. Echocardiography and computed tomography pulmonary angiography were performed. **Decision-making:** The patient developed severe hypoxemic respiratory failure requiring CPAP. Echocardiography demonstrated RV dilation, septal flattening, pulmonary artery dilation, TAPSE 12 mm, and mildly reduced left ventricular systolic function. Computed tomography confirmed massive bilateral PE with RV strain. Persistent respiratory compromise despite anticoagulation prompted successful mechanical thrombectomy with progressive improvement. Hospitalization was complicated by acute kidney injury.



Conclusion: Massive PE may occur in young patients with transient thromboembolic risk factors. Early recognition of RV strain and multidisciplinary management, including mechanical thrombectomy, may improve outcomes in high-risk PE.

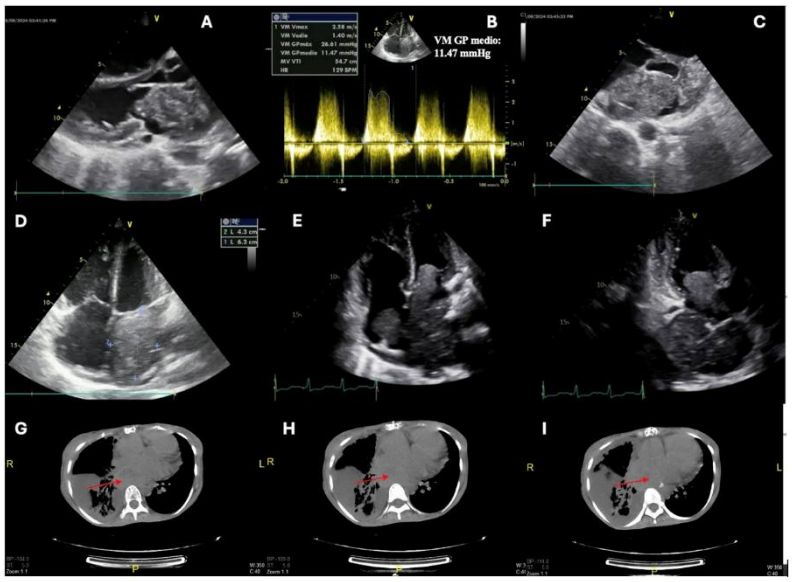
Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	TOO LATE TO REVERSE: THE COST OF INTERRUPTED SURVEILLANCE AFTER CHILDHOOD VENTRICULAR SEPTAL DEFECT REPAIR
Author Block:	Jose Valdez, Monica Rosario, Pamela Pina Santana, CEDIMAT Cardiovascular Center, SANTO DOMINGO, Dominican Republic
Abstract Body:	**Background:** Lifelong surveillance after congenital heart disease repair is essential, yet pediatric-to-adult transition often fails in LMICs. **Case:** A 23-year-old man with VSD repair at age 4 and interrupted follow-up at age 18 was referred with progressive dyspnea, worsened after a viral illness, followed by cyanosis, orthopnea, and peripheral edema. **Decision-making:** TTE showed patch dehiscence with residual perimembranous VSD, bidirectional shunting, biventricular dilation and dysfunction, and estimated mPAP 56 mmHg. CMR confirmed a 16-mm residual defect, severe biventricular dysfunction, septal flattening, RV insertion-point LGE and LV apical thrombi with intracavitary stasis. Phase-contrast flow showed Qp/Qs 0.70, supporting right-to-left shunting/Eisenmenger physiology. LV dysfunction was suspected to reflect long-standing severe pulmonary hypertension and ventricular interdependence, although myocardial injury was considered. Given advanced remodeling, he was deemed ineligible for reintervention and referred for PH, heart failure, and sudden-death risk assessment. **Conclusion:** Interrupted surveillance after childhood VSD repair may allow residual lesions to progress to irreversible pulmonary vascular disease and biventricular failure. Ensuring continued access and adherence to CHD follow-up is essential, particularly in LMICs where socioeconomic barriers often

prevent patients from remaining in care.



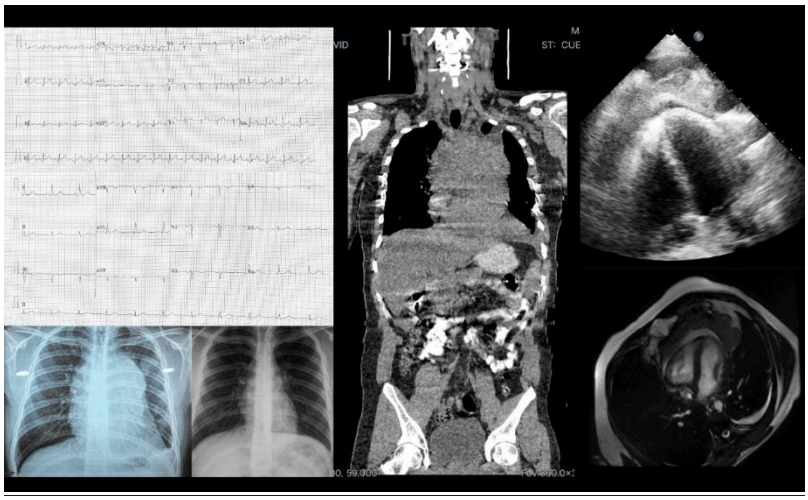
Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	WHEN A “MYXOMA” IS MASKING SOMETHING ELSE
Author Block:	Michelle Diaz, Yocy Grey Novas, Jenniffer Mateo, Pamela Pina Santana, CEDIMAT Cardiovascular Center, Santo Domingo, Dominican Republic
Abstract Body:	**Background:** Primary cardiac sarcomas are rare aggressive tumors that may mimic benign left atrial masses. Undifferentiated pleomorphic sarcoma lacks lineage-specific differentiation, complicating diagnosis. **Case:** A 33-year-old woman with sickle cell disease and a known left atrial mass presented with 3 months of fatigue, weight loss, fever, palpitations, and dyspnea. Physical exam revealed a mid-diastolic low-pitched murmur. TTE showed a large left atrial mass prolapsing across the mitral valve, causing severe dynamic mitral obstruction, biatrial enlargement, right ventricular dilation, moderate tricuspid regurgitation, and severe pulmonary hypertension. She underwent resection under the suspicion of LA myxoma and was discharged without complications. Pathology depicted an undifferentiated pleomorphic sarcoma. **Decision-making:** One month later, she returned with dyspnea, cough, and fever. Chest CT on ER depicted a nodular tissue density posterior to LA. Repeat echocardiography then revealed multiple masses involving both atria and the posterior left atrial region, recurrent mitral obstruction, severe pulmonary hypertension, and right ventricular dysfunction. Recurrence of the pleomorphic sarcoma was considered. She deteriorated rapidly and died 3 days later. **Conclusion:** Cardiac sarcoma can masquerade as myxoma but behave aggressively. Early recurrence with obstruction and pulmonary hypertension

may be fatal despite surgery.



A-D. Initial TTE demonstrating a markedly dilated left atrium occupied by a large heterogeneous mass measuring 63×43 mm, with echogenic foci compatible with calcification. The mass prolapsed across the mitral valve into the left ventricle, causing dynamic mitral inflow obstruction with a peak velocity of 2.58 m/s and mean gradient of 11.5 mmHg. **E-F.** Follow-up TTE one month after resection showing multiple recurrent masses involving the right atrium, left atrium, and posterior extracardiac/left atrial region, with recurrent mitral inflow obstruction, consistent with aggressive tumor recurrence/progression. **G-I**. Axial Chest CT images depicting a subcarinal tissue density lesion compressing and deforming the left atrium (red arrows).

Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	CARDIAC TAMPONADE AND EXTRINSIC CARDIAC COMPRESSION AS THE INITIAL PRESENTATION OF MEDIASTINAL NON -HODGKIN LYMPHOMA
Author Block:	Sara Nieto, Guillermo Llamas-Esperon, SR, Daniel Gámez González, Omar Alejandro Morales Vazquez, Eduardo Nieves Paredes, SR, Francisco Javier Campos Hernández, Zoe Rivera, Jorge Salas Villar, Hospital Cardiológica Aguascalientes, Aguascalientes, Mexico
Abstract Body:	**Background:** Mediastinal masses may rarely cause cardiovascular compromise due to external cardiac compression. Multimodality imaging is essential for diagnosis and management **Case:** An 18-year-old male presented with progressive dyspnea, chest pain, cough, inspiratory stridor, and weight loss. Electrocardiogram showed sinus tachycardia with ST-segment elevation in lateral leads. Computed tomography revealed a 145 × 107 mm anterior mediastinal mass compressing mediastinal vessels and left cardiac chambers, associated with pleural effusion. Transthoracic echocardiography demonstrated circumferential pericardial effusion and extrinsic left ventricular compression with early tamponade physiology. Cardiac magnetic resonance confirmed a large prevascular mass displacing the heart posteriorly without myocardial infiltration. CT-guided biopsy was consistent with non-Hodgkin lymphoma. **Decision-making:** Initial findings suggested a primary cardiovascular process. However, multimodality imaging demonstrated extrinsic cardiac compression secondary to mediastinal lymphoma, allowing prompt multidisciplinary management and early chemotherapy initiation with rituximab, cyclophosphamide, doxorubicin, and vincristine, with subsequent clinical improvement. **Conclusion:** Mediastinal lymphoma may present as a cardiovascular emergency. Multimodality imaging was crucial to identify cardiac involvement and guide treatment.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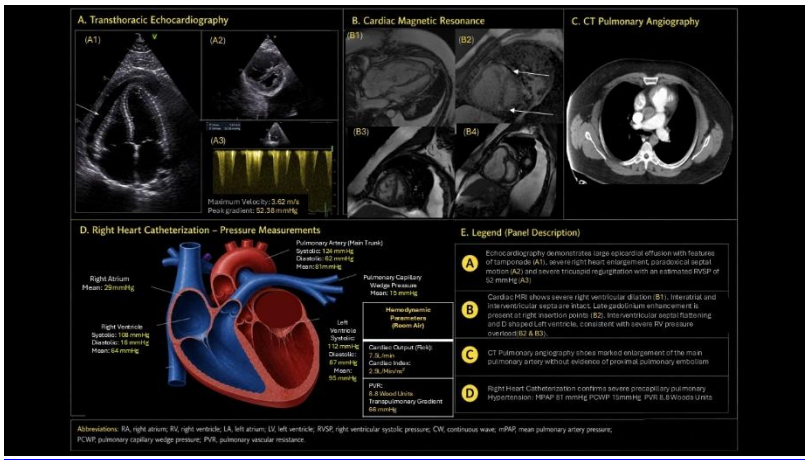
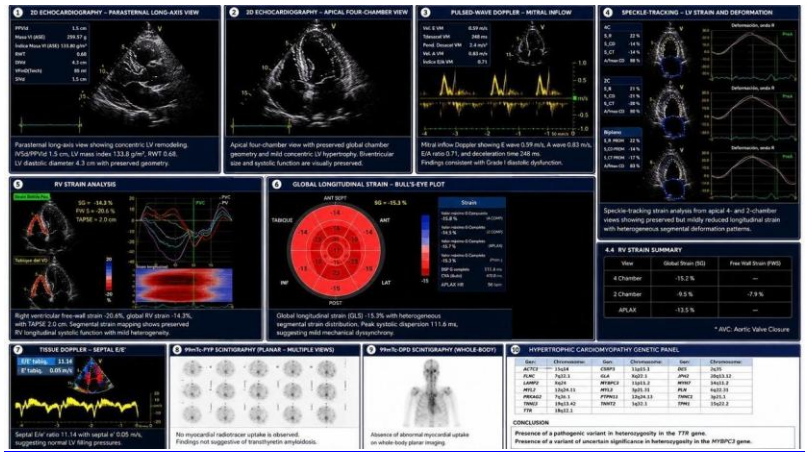
Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	UNMASKING SEVERE PRECAPILLARY PULMONARY HYPERTENSION
Author Block:	Carlos jimenez, Monica Rosario, Pamela Pina Santana, CEDIMAT Cardiovascular Center, Santo Domingo, Dominican Republic
Abstract Body:	**Background:** Pulmonary arterial hypertension (PAH) in young adults can be difficult to classify when pericardial disease, obesity, and sleep apnea coexist. Multimodality imaging and invasive hemodynamic (IH) evaluation is often required to exclude mimics and appropriately classify disease. **Case:** A 31 Yo man with hypertension and morbid obesity presented with tamponade physiology requiring emergent pericardial window and drainage. Autoimmune testing, thoracic imaging, and pericardial biopsy were unrevealing. Over 3 years, he developed progressive dyspnea, edema, ascites, and reduced exercise tolerance. Serial echocardiography showed RV dilation, dysfunction, septal flattening, and elevated pulmonary pressures. Pulmonary embolism and intracardiac shunt were excluded, however prior constrictive physiology, newly diagnosed sleep apnea and morbid obesity complicated diagnosis. **Decision-making:** Development of syncope, hypotension, right-sided congestion, and atrial flutter prompted IH assessment. Right heart catheterization confirmed severe precapillary PAH: mean PA pressure 81 mmHg, wedge pressure 15 mmHg, RA pressure 29 mmHg, PVR 8.8 Wood units, and transpulmonary gradient 66 mmHg, without shunt or constrictive physiology. Oxygen challenge with FiO_2 60% failed to reduce pulmonary pressures. He was referred for PH therapy. **Conclusion:** In complex right-heart failure, IH are essential to distinguish PAH from pericardial, thromboembolic, shunt-related, or postcapillary mimics.


A. Transthoracic Echocardiography
(A1)
(A2)
(A3)
Maximum Velocity: 3.62 m/s
Peak gradient: 52.38 mmHg
B. Cardiac Magnetic Resonance
(B1)
(B2)
(B3)
(B4)
C. CT Pulmonary Angiography
D. Right Heart Catheterization – Pressure Measurements
Pulmonary Artery (Main Trunk)
Systolic: 124 mmHg
Diastolic: 62 mmHg
Mean: 81 mmHg
Right Atrium
Mean: 29 mmHg
Pulmonary Capillary Wedge Pressure
Mean: 15 mmHg
Right Ventricle
Systolic: 108 mmHg
Diastolic: 16 mmHg
Mean: 64 mmHg
Left Ventricle
Systolic: 112 mmHg
Diastolic: 67 mmHg
Mean: 85 mmHg
Hemodynamic Parameters (Room Air)
Cardiac Output (Fick): 7.3L/min
Cardiac Index: 2.9L/Min/m²
PVR: 8.8 Wood Units
Transpulmonary Gradient 68 mmHg
E. Legend (Panel Description)
A
Echocardiography demonstrates large epicardial effusion with features of tamponade (A1), severe right heart enlargement, paradoxical septal motion (A2) and severe tricuspid regurgitation with an estimated RVSP of 52 mmHg (A3).
B
Cardiac MRI shows severe right ventricular dilation (B1). Interatrial and interventricular septa are intact. Late gadolinium enhancement is present at right insertion points (B2), interventricular septal flattening and D shaped Left ventricle, consistent with severe RV pressure overload (B2 & B3).
C
CT Pulmonary angiography shoes marked enlargement of the main pulmonary artery without evidence of proximal pulmonary embolism
D
Right Heart Catheterization confirms severe precapillary pulmonary Hypertension: MPAP 81 mmHg, PCWP 15mmHg, PVR 8.8 Woods Units
Abbreviations: RA, right atrium; RV, right ventricle; LA, left atrium; LV, left ventricle; RVSP, right ventricular systolic pressure; CW, continuous wave; mPAP, mean pulmonary artery pressure; PCWP, pulmonary capillary wedge pressure; PVR, pulmonary vascular resistance.

Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	GENETIC OVERLAP HEREDITARY TRANSTHYRETIN AMYLOID CARDIOMYOPATHY AND HYPERTROPHIC CARDIOMYOPATHY: A DUAL-VARIANT HYPERTROPHIC PHENOTYPE
Author Block:	Junior Luis Cedeño, Grace Paredes, Marvin Alberto Morales Calero, Katihurca Almonte Montes de Oca, Instituto Dominicano de Cardiologia, Santo Domingo, Dominican Republic
Abstract Body:	**Background:** Differentiating hypertensive remodeling, hypertrophic cardiomyopathy, and early ATTR cardiomyopathy is challenging with overlapping genetic substrates and inconclusive scintigraphy. Concomitant TTR and sarcomeric variants may produce atypical phenotypes and imaging discordance. **Case:** A 68-year-old hypertensive man presented with exertional dyspnea. Echocardiography revealed concentric left ventricular hypertrophy, reduced global longitudinal strain with apical sparing, impaired relaxation, and reduced left atrial strain, suggesting early infiltrative cardiomyopathy. Bone scintigraphy showed equivocal uptake (Perugini I; H/CL 1.1). Genetic testing identified a pathogenic TTR Val142Ile mutation and a sarcomeric variant associated with hypertrophic cardiomyopathy. **Decision-making:** This case highlights the complexity of early ATTR amyloidosis with concomitant sarcomeric substrate. Borderline scintigraphy may reflect early amyloid deposition, while strain abnormalities and concentric remodeling suggest subclinical infiltrative cardiomyopathy. Coexisting TTR mutation and sarcomeric VUS may increase myocardial stiffness and impair longitudinal mechanics through a dual-hit mechanism.



Conclusion: TTR mutations with sarcomeric variants may produce overlapping hypertrophic phenotypes with equivocal scintigraphy and imaging discordance. Combined strain imaging and genetic testing may allow earlier recognition of evolving ATTR cardiomyopathy.

Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	TWO IS BETTER THAN ONE: A LATE DIAGNOSED DOUBLE-CHAMBERED RIGHT VENTRICLE
Author Block:	Dary Deivy Varela Arache, Alberto Bermejo, Sara Divanne González, Nestor Barinas, Ramón Romano, Tanya Massiel Mateo Garcia, Monica Rosario, Pamela Pina Santana, CEDIMAT Cardiovascular Center, Santo Domingo, Dominican Republic, John H. Stroger Jr. Hospital, Cook County Health & Hosp Sys, Chicago, IL, USA
Abstract Body:	**Background:** Double-chambered right ventricle (DCRV) is a rare anomaly in which muscular bundles divide the right ventricle into high- and low-pressure chambers. Adult presentation is uncommon and may mimic Fallot physiology. **Case:** A 32-year-old woman with a childhood diagnosis of presumed pentalogy of Fallot and no definitive repair presented with progressive exertional dyspnea, cyanosis, and pleuritic chest pain. She had completed pregnancy despite counseling against gestation. Examination revealed congenital limb malformations. **Decision-making:** TTE demonstrated ASD, VSD, dilated left-sided chambers, anomalous muscular bundles dividing the right ventricle into two chambers, and severe intracavitary flow acceleration. CMR confirmed RV subdivision by anomalous bands and defined associated defects and biventricular morphology. Shunt quantification showed Qp/Qs 3:1, consistent with a significant left-to-right shunt. These findings favored DCRV with associated intracardiac defects over pulmonary stenosis or classic Fallot physiology. Late presentation, unrepaired shunts, progressive obstruction, chamber dilation, and extracardiac malformations supported referral for adult congenital heart disease evaluation, surgical planning, and possible genetic assessment. **Conclusion:** DCRV should be considered in adults with unexplained RV obstruction or atypical Fallot physiology. Multimodality imaging can correct

prior diagnostic labels and guide management.

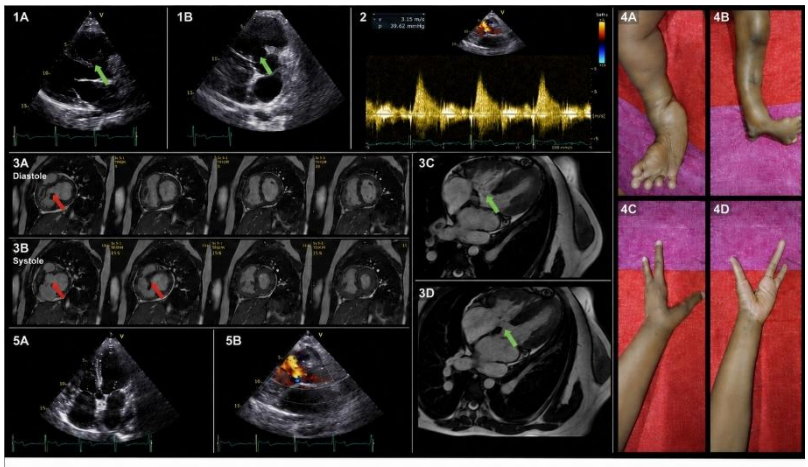
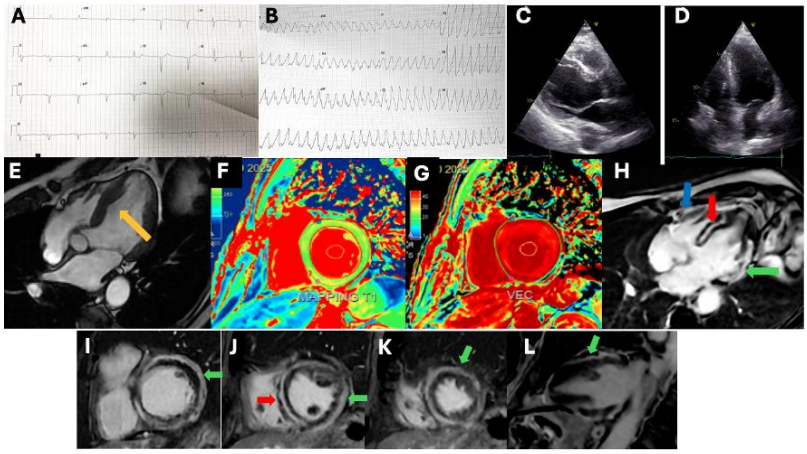


Figure 1. Multimodality imaging of a double-chambered right ventricle with associated congenital anomalies. 1A–B: TTE reveals anomalous muscular bundles dividing the right ventricle. 2: Continuous-wave Doppler demonstrates significant intraventricular obstruction with flow acceleration. 3A–D: Cardiac MRI confirms right ventricular subdivision and delineates the obstructive anatomy. 4A–D: Limb malformations raise suspicion for an associated syndromic condition. 5A–B: Subcostal color Doppler imaging demonstrates an atrial septal defect.

Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	UNMASKING BIVENTRICULAR ARRHYTHMOGENIC CARDIOMYOPATHY
Author Block:	Elaine E. Nunez Ayala, Katherine Delgado, Pamela Pina Santana, Cesar J. Herrera, Cedimat, Santo Domingo, Dominican Republic
Abstract Body:	**Background:** Arrhythmogenic cardiomyopathy (ACM) may present with biventricular involvement and mimic nonischemic dilated cardiomyopathy (DCM). Recognition is clinically relevant when ventricular arrhythmias and scar burden exceed the degree of systolic-dysfunction. **Methods:** 78-year-old man with long-standing presumed nonischemic DCM, referred for syncope and worsening functional capacity. Baseline ECG showed left intraventricular conduction delay, QRS duration of 146 ms. Holter monitoring revealed 9,000 premature ventricular complexes and nonsustained ventricular tachycardia. TTE showed LVEF 39% with global hypokinesia. Coronary CT angiography showed no-obstructive coronary artery disease. **Results:** CMR demonstrated biventricular systolic-dysfunction, paradoxical septal motion, diffusely elevated native T1 and extracellular volume, and extensive late gadolinium enhancement: circumferential subepicardial involvement from base to apex, mid myocardial enhancement in the basal-to-mid-septal and anterior walls, and right ventricular free-wall involvement, with an estimated fibrosis burden of 46%. These findings supported late-recognized biventricular ACM rather than isolated DCM. After CMR-based reclassification and sustained ventricular tachycardia, an ICD was implanted. **Conclusion:** CMR can reclassify presumed DCM by revealing a biventricular arrhythmogenic substrate, guiding sudden cardiac death risk stratification and device strategy beyond LVEF alone.



A. Baseline ECG showing QS complexes in V1–V2 and intraventricular conduction delay. **B.** ECG during ventricular tachycardia, with morphology suggestive of lateral/posterobasal LV origin. **C-D.** Long axis and apical 4CH TTE demonstrating paradoxical septal motion with dilated LV. **E.** 4CH CMR cine image showing paradoxical septal motion. **F.** Native T1 map showing diffuse elevation, with global values >1200 ms. **G.** Extracellular volume map showing diffuse elevation, with global ECV >35%, consistent with myocardial fibrosis. **H.** 4CH LGE image demonstrating mid-myocardial septal enhancement in the basal and mid segments, with subepicardial enhancement involving the entire lateral wall and the right ventricular free wall. **I-K.** Short-axis LGE images showing circumferential subepicardial enhancement extending from the base to the apex, associated with mid-myocardial enhancement of the septal wall and of the basal-to-mid anterior wall. **L.** 2CH LGE image showing subepicardial enhancement of the anterior wall.

Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	INFLAMMATION-RELATED MINOCA IN ACTIVE TAKAYASU ARTERITIS MIMICKING LEFT MAIN ISCHEMIA
Author Block:	Pedro Duque Duque, David Aristizabal-Colorado, Luis Pajaro, Samir Pantoja, University of Antioquia, Medellín, Colombia, Colombia

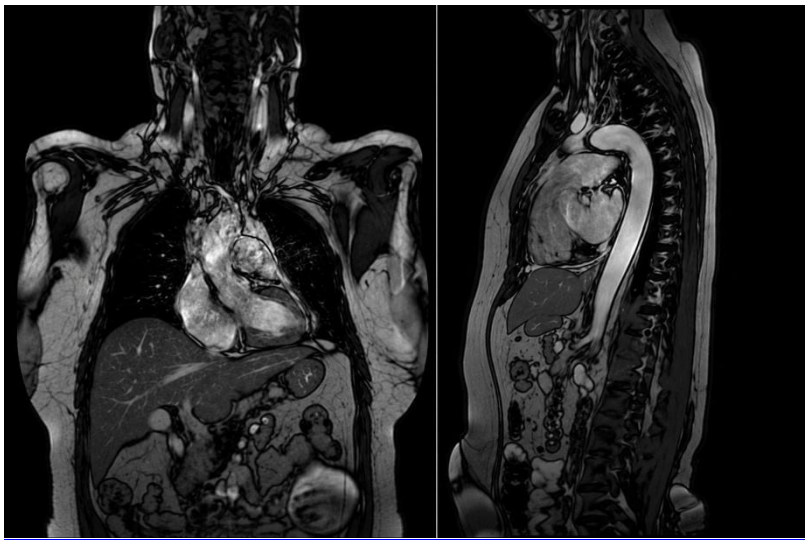
Abstract Body:

Background: Takayasu arteritis is a large-vessel vasculitis in which myocardial ischemia may occur without epicardial coronary obstruction, creating diagnostic challenges in acute coronary syndrome.

Case: A 50-year-old woman with type V Takayasu arteritis involving the aorta and supra-aortic vessels presented with acute chest pain. Electrocardiogram showed diffuse ST depression with ST elevation in aVR suggesting left main ischemia. High-sensitivity troponin was mildly elevated. Echocardiography demonstrated preserved ventricular function without regional abnormalities. Angio-magnetic resonance imaging revealed active aortic inflammation consistent with disease relapse. Coronary angiography showed nonobstructive arteries establishing myocardial infarction with MINOCA. Stress echocardiography reproduced ischemia with hypotension, while coronary CT angiography showed no epicardial disease. Findings supported inflammation-related coronary microvascular dysfunction. High-dose corticosteroids were initiated with clinical improvement.

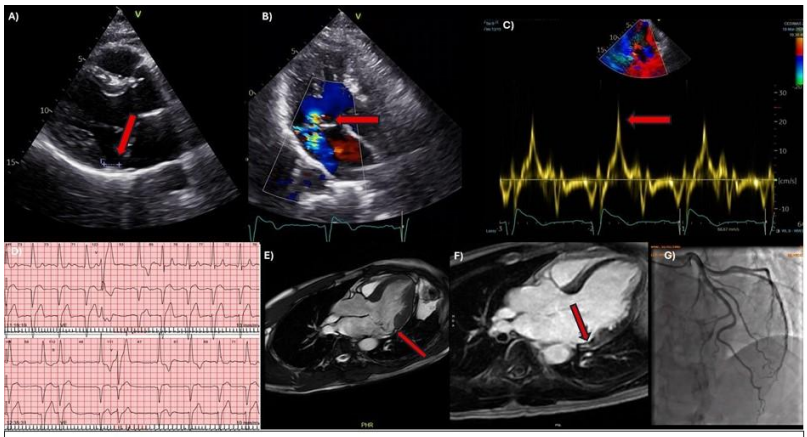
Decision-making: Takayasu arteritis may cause myocardial ischemia through inflammatory microvascular involvement. This case highlights MINOCA mimicking high-risk coronary syndrome and emphasizes multimodality imaging to guide immunosuppressive therapy when obstructive disease is excluded.

Conclusion: Active vasculitis should be considered in MINOCA associated with systemic inflammatory disease.



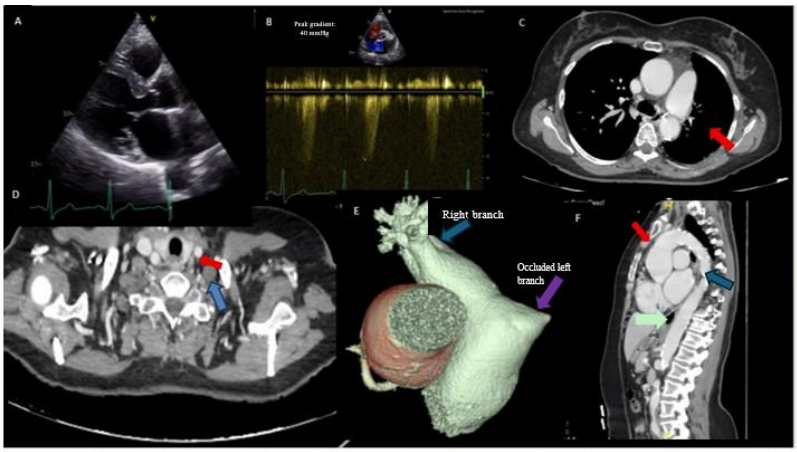
Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	FROM PICKELHAUBE SIGN TO FIBROSIS: MULTIMODALITY IMAGING OF HIGH-RISK MITRAL ANNULAR DISJUNCTION
Author Block:	Luis Cuello, Katherine Delgado, Ruddy M. Garcia Safadit, Ricardo Blanchery, Pamela Pina Santana, Cesar J. Herrera, Cedimat Cardiovascular Center, Santo Domingo, Dominican Republic
Abstract Body:	**Background:** Mitral annular disjunction (MAD) is increasingly recognized as part of an arrhythmogenic mitral valve prolapse (MVP) phenotype associated with ventricular arrhythmias and sudden cardiac death. Multimodality imaging may refine risk assessment beyond valve morphology and mitral regurgitation (MR) severity. **Case:** A 39-year-old man presented with palpitations, dizziness while driving, and exertional chest pain. Examination revealed a midsystolic click and late systolic murmur. TTE demonstrated bileaflet MVP, severe MR, MAD, and Pickelhaube sign. Holter monitoring showed infrequent LVOT-origin ventricular ectopy without nonsustained VT. CMR confirmed 15-mm MAD and mid-myocardial late gadolinium enhancement in the basal inferolateral wall. Coronary angiography excluded obstructive coronary disease. **Decision-making:** Severe MR, bileaflet MVP, MAD, Pickelhaube sign, and inferolateral fibrosis supported an arrhythmogenic MVP/MAD phenotype, despite low arrhythmic burden on Holter. He was referred for surgical mitral valve repair if feasible, with continued rhythm surveillance and individualized sudden-death risk assessment. **Conclusion:** This case illustrates how multimodality imaging can identify mechanical and structural risk markers in MVP with MAD. It highlights the uncertainty of risk stratification when fibrosis and annular disjunction coexist

without complex ventricular arrhythmias.



A) Parasternal Long Axis in TTE demonstrating mitral annular disjunction and bileaflet mitral valve prolapse (red arrow). B) Color Doppler in apical 3 chamber view in TTE showing severe mitral regurgitation (red arrow). C) Tissue Doppler in apical 3 chamber view in TTE with a lateral mitral annulus velocity of 20 cm/s (Pickelhaube sign) (red arrow). D) Holter ECG strip showing the patients basal rhythm consisting of complete left bundle branch block and ectopic ventricular beats. E) 3 chamber CMR Cine demonstrating mitral annular disjunction measured at 15mm (red arrow). F) CMR LGE sequence revealing mid-myocardial LGE in the basal segment of the infero-lateral wall. (red arrow) G) Coronary angiography depicting normal coronary arteries.

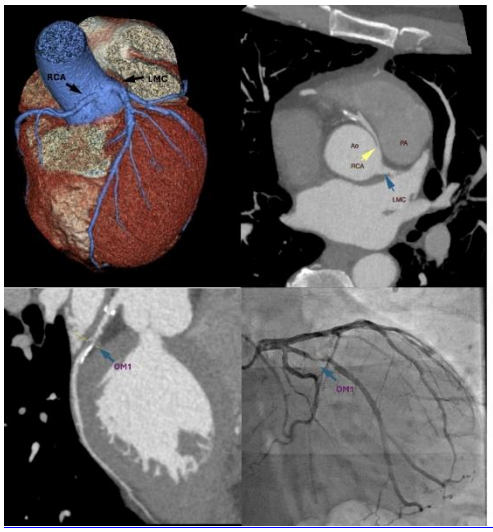
Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	MULTISYSTEM INVOLVEMENT IN LONGSTANDING TAKAYASU ARTERITIS.
Author Block:	Yocy Grey Novas, Michelle Diaz, Miguel A. Martinez, Pamela Pina Santana, Cesar J. Herrera, CEDIMAT Cardiovascular Center, Santo Domingo, Dominican Republic
Abstract Body:	**Background:** Takayasu arteritis is a chronic large-vessel vasculitis involving the aorta and its major branches. Longstanding untreated disease is now uncommon and may lead to severe fibro-stenotic and aneurysmal complications. **Case:** A 60-year-old woman with Takayasu arteritis diagnosed at age 18 after an ischemic stroke declined, immunosuppressive therapy. Over the subsequent decades, she developed progressive visual loss and later chest pain treated as presumed myocardial infarction. At presentation to our center, physical examination revealed markedly diminished carotid and upper-extremity pulses, with absent left carotid, brachial, and radial pulses. Upper-extremity blood pressure could not be obtained. **Decision-making:** Inflammatory markers were only mildly elevated. Echocardiography and computed tomography angiography demonstrated extensive chronic multi-territorial vascular injury, including supra-aortic, pulmonary, renal, and aortic involvement with aneurysmal change (Figure). **Conclusion:** This case illustrates the exceptionally prolonged natural history of untreated Takayasu arteritis, with severe accumulated vascular damage despite relatively low apparent inflammatory activity. Pulmonary artery involvement and secondary pulmonary hypertension further underscore the multisystem burden of advanced disease. Untreated Takayasu arteritis may progress silently for decades and present with extensive multivessel damage. **$$MISSING OR BAD GRAPHIC SPECIFICATION (E708E95C-10FF-4D37-B458-225A1B32F051) $$**



A.TTE showing left atrial dilation, mild hypertrophy of the interventricular septum, and dilation of the sinotubular junction. **B.** Continuous wave Doppler of the tricuspid valve depicting a maximum gradient of 40 mmHg, suggesting pulmonary hypertension (SPPA: 50 mmHg). **C.** Axial **CCT** demonstrating decreased left lung parenchyma (red arrow)**. D.** Axial CCT view revealing circumferential thickening of the left common carotid artery (red arrow) and total occlusion of the left subclavian artery (blue arrow). **E.** Volume Rendering CTT reconstruction highlighting the absence of the left pulmonary artery branch (purple arrow). **F.** Sagittal CCT view showing aneurysmal dilation of the tubular portion of the ascending aorta (red arrow), moderate calcification of the ascending and descending aorta (blue arrow), and diffuse circumferential thickening of the descending aorta throughout its course (green arrow).

Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	DANGEROUS COURSE: THE CHALLENGE OF THE ANOMALOUS ORIGIN OF THE RIGHT CORONARY ARTERY
Author Block:	Oscar Alberto Rodriguez Fernandez, Karen Alayo Rojas, Silvia Zavaleta Castillo, Hospital Nacional Edgardo Rebagliati Martins, Lima, Peru
Abstract Body:	**Background:** Anomalous aortic origin of the coronary arteries are rare, they present with angina, syncope and even sudden cardiac death as a major complication. Understanding high-risk features is key to early follow-up or intervention. **Case:** A 56-year-old male patient with no cardiovascular history or risk factors presented two episodes of cardiac syncope associated with mild to moderate activity. A transthoracic echocardiography showed hypokinesia of inferior and inferoseptal walls. The coronary CT angiography and coronary angiography revealed an anomalous origin of the right coronary artery from the left coronary cusp and an intramural course, also detected severe stenosis of the first marginal artery (OM1). No high-degree AV block or significant pauses were noted on 24h Holter. **Decision-making:** Due to the complexity of the case, the medical board concluded to perform a coronary angioplasty of the OM1 first and then a myocardial perfusion imaging to identify ischemia in the right coronary artery territory. **Conclusion:** This case emphasizes the importance of using multimodality imaging in coronary artery anomalies which, due to their infrequency and late symptoms, are often underdiagnosed. Furthermore a joint decision-making by the heart team is mandatory in order to lead to a proper and individualized

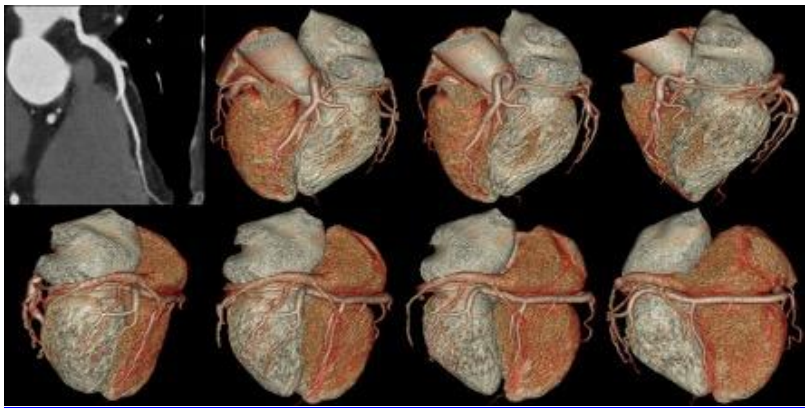
management.



Ao: Aorta
RCA: Right Coronary Artery
PA: Pulmonary artery
LMC: Left Main Coronary
OM1: Obtuse Marginal 1st

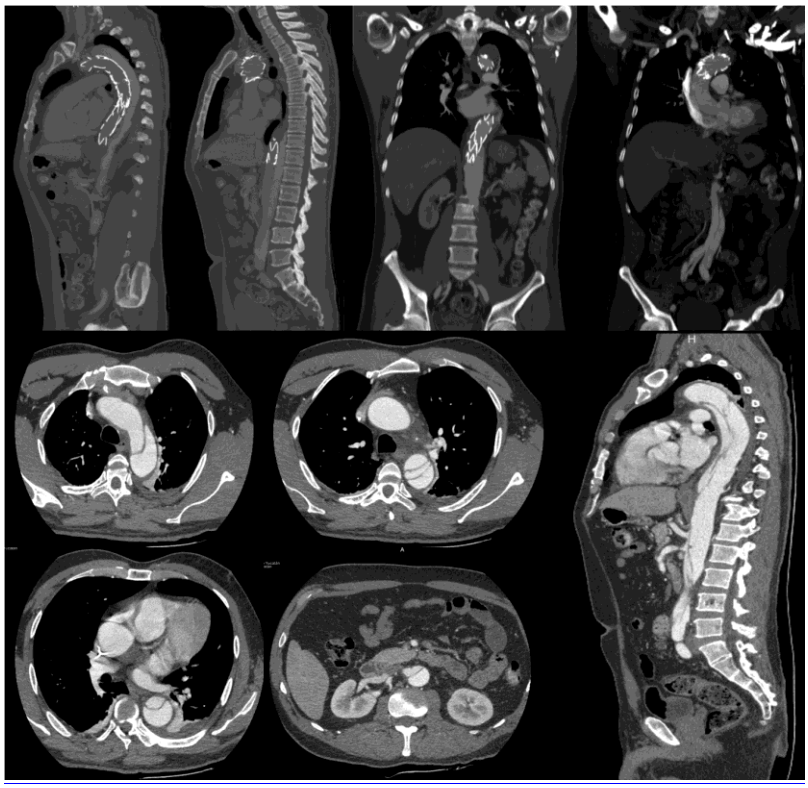
Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Multimodal Imaging
Publishing Title:	CONGENITAL ABSENCE OF THE LEFT CIRCUMFLEX ARTERY: A RARE CORONARY ANOMALY MIMICKING OBSTRUCTIVE DISEASE
Author Block:	Adriel Ismael Alonso Batun, SR, Miguel Santaularia Tomas, Alejandro Vazquez Calderon, Leonardo Luna, Amonario Olivera Mar, Andre Moguel Valladares, Valeria Lugo Niebla, Hospital Regional Alta Especialidad de la Península de Yucatán, Mérida, Mexico
Abstract Body:	**Background:** Congenital coronary anomalies are rare but clinically relevant, particularly when presenting with symptoms mimicking coronary artery disease. The congenital absence of the left circumflex artery (LCX) is extremely rare and can simulate chronic total occlusion on angiography. **Case:** A 64-year-old woman with well-controlled hypertension and exertional chest pain of eight years' duration (CCS Class II) was evaluated. Stress-induced angina occurred with stair climbing or emotional stress. ECG and echocardiogram were unremarkable. Cardiac CT angiography revealed the congenital absence of the LCX, with a superdominant right coronary artery supplying the lateral wall. **Decision-making:** Given the patient's exertional angina and normal ECG and echocardiogram, cardiac CT angiography was performed to rule out occlusion or anatomical variants. It revealed congenital absence of the LCX and a superdominant right coronary artery, explaining flow redistribution and exertional ischemia. This avoided unnecessary invasive testing. Conservative management with medical therapy and clinical follow-up was selected. **Conclusion:** Congenital absence of the LCX is a rare but benign coronary anomaly that may cause angina due to flow redistribution. Non-invasive imaging, especially CCTA, is crucial for accurate diagnosis and management. Recognizing this condition helps avoid misdiagnosis and unnecessary treatment. Fewer than 60 cases have been reported, with a prevalence of

0.003% to 0.067%.



Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Valvular Diseases
Publishing Title:	ENDOVASCULAR REPAIR OF MALPERFUSION-RELATED TYPE B AORTIC DISSECTION WITH RESIDUAL FALSE LUMEN
Author Block:	Alejandro Vazquez Calderon, Adriel Ismael Alonso Batun, SR, Roberto Andre Moguel Valladares, Karen Valeria Lugo Niebla, Oswaldo Etsau Rodríguez López, Luis Miguel Muñoz Zapata, Hospital Regional de Alta Especialidad de la Península de Yucatán, Merida, Mexico
Abstract Body:	**Background:** Complicated Stanford type B aortic dissection is a life-threatening emergency, particularly when malperfusion develops. Despite advances in thoracic endovascular aortic repair (TEVAR), persistent false lumen perfusion remains associated with adverse aortic remodelling and late complications. **Case:** A 49-year-old man with uncontrolled hypertension presented with abrupt chest and back pain and haemodynamic instability. Physical examination revealed pulse asymmetry and lower-extremity hypoperfusion. Laboratory testing showed inflammatory activation and renal dysfunction. Computed tomography angiography revealed extensive Stanford type B aortic dissection extending to the abdominal aorta with severe true lumen compression and visceral malperfusion. **Decision-making:** Urgent TEVAR was performed to seal the primary entry tear and restore distal perfusion. Left subclavian artery embolization reduced retrograde false lumen filling. Follow-up imaging demonstrated true lumen expansion and partial false lumen thrombosis; however, persistent distal false lumen perfusion remained despite clinical stabilization. **Conclusion:** TEVAR is a lifesaving strategy in malperfusion-related type B aortic dissection by restoring true lumen perfusion. Persistent false lumen perfusion remains associated with adverse remodelling and highlights the need for strict

imaging surveillance and individualized secondary interventions.



Session Title: **Saturday Afternoon Poster Session**

Topic 1: Valvular Diseases

Publishing Title: FORGOTTEN BUT STRIKING: COMPLETE TRICUSPID VALVE DEGENERATION UNMASKED BY LANCISI'S SIGN

Author Block: Gonzalo Martinez-Ruiz, Gerardo Martinez, Christopher Lopez, Bak Nin Choi, Luis A. Garcia Requena, Nickolle Cruz, Raul Villalobos, Bryan Sepulveda Bahamundi, Sebastian S. Leon Lausell, Abel Rivera, Coral del Mar Garcia Velazquez, Carlos Rodriguez, Roberto Romero, Jean Carlo Rivera, Paloma Delgado, Angel Negron, Tatiana Suarez Ortiz, Bryan Rodriguez, GLADYMAR GONZALEZ MARRERO, Jose Torres-Cintron, Jonathan Cordero-Jiménez, Jorge Juan Ballester Maldonado, Hospital Pavia Areciboal, Arecibo, PR, USA, Integrated Cardiovascular Solutions, Arecibo, PR, USA

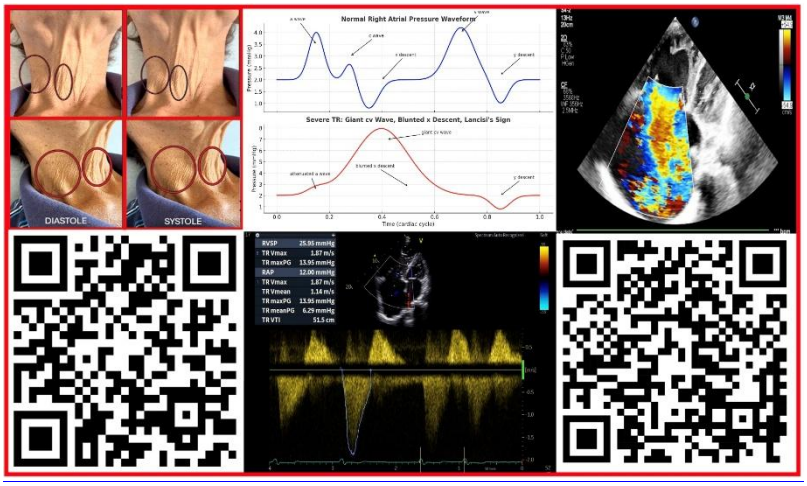
Abstract Body: **Background:** Tricuspid regurgitation (TR), historically referred to as the "forgotten valve" disease, is increasingly recognized as an independent predictor of right-sided heart failure and mortality. Lancisi's sign, characterized by prominent systolic jugular venous pulsations, remains an underrecognized but important bedside marker of severe TR.

Methods: A 60-year-old male with heart failure, chronic liver disease and remote infective endocarditis presented with progressive dyspnea, anasarca and volume overload. Examination demonstrated marked systolic jugular venous pulsations and absence of cardiac murmur. Imaging were performed.

Results: Echocardiography demonstrated complete degeneration of the tricuspid valve apparatus with severe TR, massive right-sided chamber dilation and right atrial ventricularization. Doppler interrogation demonstrated dense holosystolic regurgitation with rapid right atrial and ventricular pressure equalization. Given advanced right ventricular remodeling, systemic venous hypertension and end-organ involvement, the patient was not considered a candidate for intervention and was managed medically.

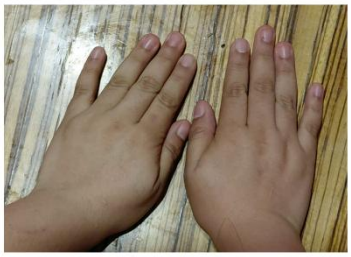
Conclusion: This case highlights the clinical importance of severe TR and the diagnostic value of Lancisi's sign in advanced disease, particularly when classic auscultatory findings are absent. Early recognition before irreversible right-sided remodeling develops remains critical to allow timely referral and

potential intervention.



Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Valvular Diseases
Publishing Title:	REPARACIÓN QUIRÚRGICA PRIMARIA DE TETRALOGÍA DE FALLOT EN ADULTOS
Author Block:	Katia Millaray Rivera, Rodrigo Gonzalez, Jhon Jhon, Francisca Arancibia, Polentzi Uriarte, Daniel Springmuller, Pamela Zelada, Instituto Nacional del Tórax, Santiago, Chile
Abstract Body:	**Background:** En la actualidad, el tratamiento quirúrgico reparador de la tetralogía de fallot (TF) se realiza antes del año de vida, siendo anecdótica su reparación en la edad adulta. Se presenta nuestra experiencia en reparación primaria de TF en el adulto. **Methods:** Estudio retrospectivo y observacional realizado entre enero de 2000 y julio de 2025. Se revisaron fichas clínicas, procedimientos quirúrgicos y datos de seguimiento a largo plazo, mortalidad operatoria. Se aplica la curva de Kaplan-Meier para evaluar la supervivencia. **Results:** Se operaron 25 pacientes, 14 hombres (56%), edad promedio de 30 años. Siete pacientes presentaban cromosomopatías,22 pacientes (88%) fueron derivados desde Hospitales de adultos. La saturación y hematocrito promedio era de 82.1% y 65% respectivamente. La técnica quirúrgica más utilizada fue el parche infundibular con preservación de la válvula nativa en 12 (48%). Estadía hospitalaria promedio fue de 9.2 días, con una mortalidad de 0% al alta hospitalaria. Los pacientes fueron seguidos un promedio de 16.8 años, con una supervivencia del 100% al año, 95% a los 10 años. Durante este período de seguimiento han requerido procedimientos adicionales 5 pacientes. El 81.2% se encuentran en CF I, con saturación basal promedio de 95%, hematocrito promedio 38.5%. **Conclusion:** La reparación quirúrgica primaria de la TF en adultos, en nuestro medio, puede realizarse con baja mortalidad y excelentes tasas de supervivencia a largo plazo.

Imagen 3: Manos sin cianosis de paciente con Tetralogía de fallot reparada



Seguimiento promedio 16.8 años

Saturación promedio 95%

Hematocrito promedio 38.5%

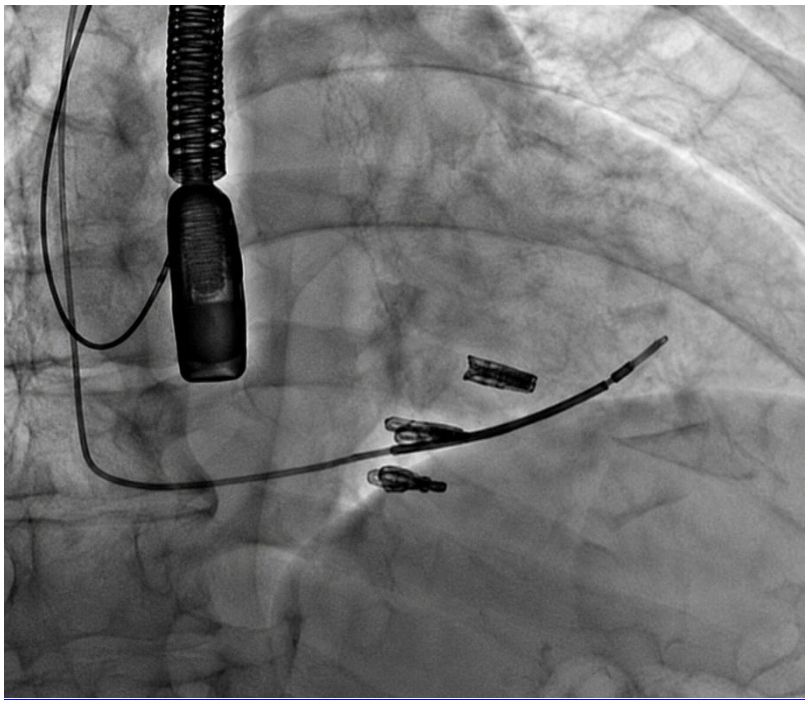
CF I 81.2 %

Aortopatía (aorta sobre 40 mm) 40%

Mortalidad (2)
Sepsis y SCA
2 - 17 años de la cirugía

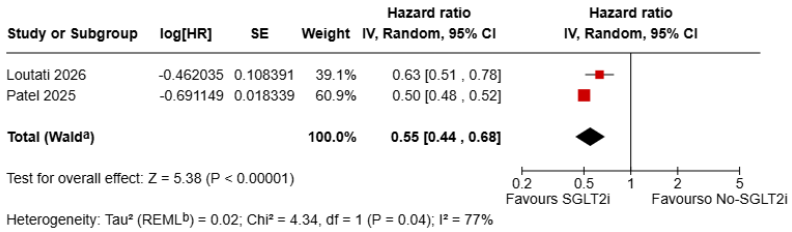
Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Valvular Diseases
Publishing Title:	PERCUTANEOUS MANAGEMENT OF SEVERE PURE NATIVE AORTIC REGURGITATION: A FEASIBLE ALTERNATIVE IN HIGH-RISK SURGICAL PATIENTS
Author Block:	Jhonattan Benavides, Laura Fernanda Gilon Cordoba, Juan David Zuluaga, hugo alvarado, Diana Bohorquez, EDGAR HURTADO, Fundación Clinica Shaio, Bogotá, Colombia
Abstract Body:	**Background:** Transcatheter aortic valve replacement (TAVR) is an established therapy for aortic stenosis, but its off-label use for pure native aortic regurgitation remains challenging due to the lack of annular calcification and dedicated devices. We report a single-center experience with TAVR for pure native aortic regurgitation in high-risk patients. **Methods:** A consecutive retrospective registry (2012-2026) analyzed high-risk patients undergoing TAVR for severe pure native aortic regurgitation. Mixed disease and valve-in-valve were excluded. **Results:** Seven patients underwent TAVR for pure native aortic regurgitation (2.8% of our volume). Five were female, mean age 81 years (77-88). Mean left ventricular ejection fraction was 45% (20-60%) and mean Society of Thoracic Surgeons score was 7.6% (4.6-10.7%). Implants included 6 SAPIEN 3 and 1 Myval. Procedural success and survival to discharge were 100%. Two patients needed a permanent pacemaker; both had baseline PR >200 ms. Echocardiography showed no severe paravalvular leak; 1 had mild PVL. Mean gradient was 8 mmHg (4-13). **Conclusion:** TAVR is feasible for highly selected high-risk patients with severe pure native aortic regurgitation, achieving excellent hemodynamics and survival. Permanent pacemaker need highlights the importance of baseline conduction evaluation.

Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Valvular Diseases
Publishing Title:	TRANSCATHETER EDGE-TO-EDGE TRICUSPID REPAIR IN A PATIENT WITH ADVANCED ISCHEMIC-CHAGASIC HEART FAILURE AND TORRENTIAL TRICUSPID REGURGITATION: A MULTIDISCIPLINARY APPROACH
Author Block:	Camilo Hernandez, Fernan del Cristo Mendoza-Beltran, Laura Victoria Mendoza, Julian Romero, Wilmer A. Cely, Edgar F. Hurtado, Fundacion Clinica Shaio, Bogota, Colombia, Universidad El Bosque, Bogota, Colombia
Abstract Body:	**Background:** Torrential tricuspid regurgitation (TR) in advanced heart failure is associated with recurrent hospitalizations and increased mortality. In patients with prohibitive surgical risk and favorable anatomy, transcatheter edge-to-edge repair (TEER) is a safe and effective therapeutic option. **Methods:** Descriptive observational case report study **Results:** A 71 year old man with ischemic-Chagasic dilated cardiomyopathy (ICC), LVEF of 29%, prior mitral TEER, dual-chamber pacemaker for complete atrioventricular block, and combined pulmonary hypertension presented with recurrent heart failure hospitalizations and NYHA class IV symptoms due to secondary torrential TR. Given prohibitive surgical risk (TRISCORE 10/12; estimated mortality 66%), he underwent tricuspid TEER with 2 clips placed in the anteroseptal and posteroseptal commissures under transesophageal echocardiographic and fluoroscopic guidance. Post-procedural echocardiography showed stable clip position and residual moderate TR. Patient showed improvement to NYHA II class, NT-proBNP (9,160 to 6,520 pg/mL), renal function (creatinine 1.8 to 1.3 mg/dL), and no further heart failure decompensation. **Conclusion:** This case highlights the value of Heart Team decision-making in complex patients. Tricuspid TEER improved functional status, laboratory parameters, and prevented recurrent hospitalizations in this patient in accordance with international literature, even in the setting of ICC and pulmonary hypertension.

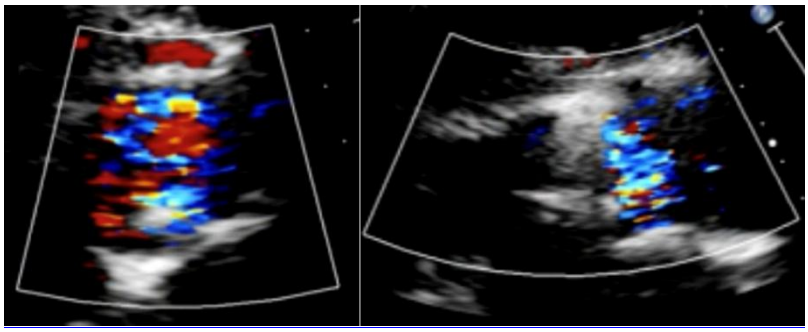


Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Valvular Diseases
Publishing Title:	IMPACT OF SGLT2 INHIBITORS ON MORTALITY IN PATIENTS WITH HEART FAILURE AND TRICUSPID REGURGITATION: A SYSTEMATIC REVIEW AND META-ANALYSIS OF 129,968 PATIENTS
Author Block:	Gustavo Adrian Medina Avalos, Antonio Jordan-Rios, Alberto Isaí Rodríguez Vázquez, Demian Casanova Campos, Jose Abraham Luna Herbert, Azucena Maribel Perez Perez, Universidad Autónoma de Baja California, Tijuana, Mexico, Instituto Nacional de Cardiología - Ignacio Chávez, Mexico City, Mexico
Abstract Body:	**Background:** Background: SGLT2i have emerged as key therapeutic agents in T2DM, offering benefits beyond glycemic control. SGLT2i have also demonstrated benefits in valvular heart disease; however, their role in tricuspid regurgitation remains unclear. Therefore, this study aimed to assess the impact of SGLT2i in patients with heart failure and tricuspid regurgitation. **Methods:** Methods: A systematic review of major databases was conducted through February 2026 to identify studies comparing SGLT2i versus control in patients with heart failure and tricuspid regurgitation. We pooled hazard ratios (HRs) for all-cause mortality. Pooled HRs and 95% confidence intervals (CIs) were calculated based on intention-to-treat analyses. **Results:** Results: A total of 2 studies (1 observational study and 1 RCT) encompassing 129,968 patients were included, of whom 52,834 received SGLT2i. Pooled analysis demonstrated that SGLT2i were associated with a significant reduction in all-cause mortality compared with control therapy (HR 0.55). Moderate-to-high heterogeneity was observed among the included studies. **Conclusion:** Conclusion: In patients with heart failure and tricuspid regurgitation, SGLT2i therapy was associated with a significant reduction in all-cause mortality compared with control therapy. These findings support the potential prognostic benefit of SGLT2i in this high-risk population; however,

further large-scale randomized studies are needed to confirm these results.

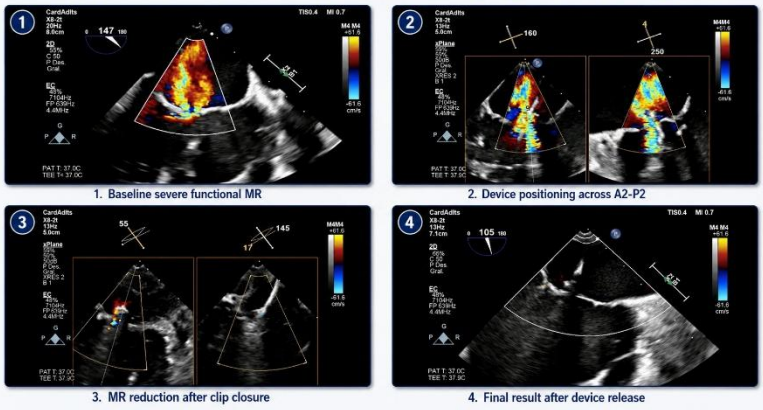


Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Valvular Diseases
Publishing Title:	SYSTEMIC THROMBOLYSIS AS AN ALTERNATIVE TO SURGERY FOR OBSTRUCTIVE MECHANICAL AORTIC VALVE THROMBOSIS WITH EMBOLIC COMPLICATIONS
Author Block:	Camilo Hernandez, Fernan del Cristo Mendoza-Beltran, Laura Victoria Mendoza, Julian Romero, Wilmer A. Cely, Hugo O. Alvarado, Fundacion Clinica Shaio, Bogota, Colombia, Universidad El Bosque, Bogota, Colombia
Abstract Body:	**Background:** Mechanical prosthetic valves offer greater durability than bioprosthetic valves but are more thrombogenic and require lifelong anticoagulation. Obstructive mechanical valve thrombosis (OMVT) is a life-threatening complication and may be treated with surgery or systemic thrombolysis. **Methods:** Descriptive observational case report study **Results:** A 63 year old man with a bileaflet mechanical aortic valve, hypertension, obesity, dyslipidemia, stage G3a chronic kidney disease and a dual-chamber pacemaker presented with progressive NYHA functional class II to IV after temporary warfarin interruption. Transesophageal echocardiogram (TEE) revealed aortic valve leaflet opening restriction, 69mmhg mean transprosthetic gradient (MTG), 0.2 doppler velocity index, 5.1m/s peak velocity and 0.7cm^2 effective orifice area, findings consistent with OMVT. Given the patient's hemodynamic stability and comorbidities, low-dose ultra-slow alteplase infusion (LDUSA) was administred. Follow-up TEE showed 18mmhg MTG and leaflet motion resolution. 24 hours later, the patient developed abdominal pain, small splenic and renal infarctions were detected on CT scan, managed conservatively and warfarin was resumed. At 3-month follow-up, the patient remained asymptomatic without recurrent complications. **Conclusion:** LDUSA has been described as an effective and safe thrombolysis protocol for OMVT treatment. Thromboembolic events may occur but are often minor and can be managed conservatively.



Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Valvular Diseases
Publishing Title:	BREAKING THE ECMO DEADLOCK: MITRAL TRANSCATHETER EDGE-TO-EDGE REPAIR TO ENABLE VA-ECMO WEANING IN CARDIOGENIC SHOCK
Author Block:	David David, Raul Eduardo Reyes Toledo, Gabriel Salazar, Juan Felipe Vasquez, Diego Alfredo Salas Marquez, Dario Echeverri, Jaime Cabrales, Echocardiography Department, Interventional and Hemodynamics Department,Fundación Cardioinfantil, Bogotá, Colombia, School of Medicine and Health Sciences, Universidad del Rosario, Bogotá, Colombia
Abstract Body:	**Background:** Venoarterial extracorporeal membrane oxygenation restores systemic perfusion in refractory cardiogenic shock, but may worsen left ventricular loading and pulmonary congestion. Severe functional mitral regurgitation may become a reversible barrier to weaning. **Case:** A 67-year-old woman presented with de novo heart failure. Echocardiography showed dilated cardiomyopathy, left ventricular ejection fraction 25-30%, severe left atrial dilation and functional mitral regurgitation. Coronary angiography showed no obstructive disease. Despite medical therapy, she progressed to refractory cardiogenic shock requiring peripheral venoarterial extracorporeal membrane oxygenation (VA-ECMO), atrial septostomy and intra-aortic balloon pump support. Severe functional mitral regurgitation was identified as the main barrier to VA-ECMO weaning. **Decision-making:** Given persistent left-sided congestion and failed weaning attempts, the heart team pursued mitral transcatheter edge-to-edge repair (TEER) as rescue therapy. Despite prior atrial septostomy and left atrial appendage thrombus, a MitraClip XTW was implanted at A2-P2 during ongoing mechanical support. Regurgitation decreased to mild, allowing decannulation the next day. **Conclusion:** In cardiogenic shock supported with VA-ECMO, severe functional mitral regurgitation may prevent liberation from temporary mechanical circulatory support. TEER can break this cycle in carefully selected patients.

Stepwise Reduction of Severe Mitral Regurgitation During TEER



1. Baseline severe functional MR
2. Device positioning across A2-P2
3. MR reduction after clip closure
4. Final result after device release

Session Title:	**Saturday Afternoon Poster Session**
Topic 1:	Valvular Diseases
Publishing Title:	SUCCESSFUL PREGNANCY AFTER MELODY VALVE-IN-VALVE IMPLANTATION IN REPAIRED TETRALOGY OF FALLOT
Author Block:	Juan David Castillo Peña, HERNAN RAMIREZ, David Esteban Hamon Rugeles, Jhon David Sánchez Mejía, Juan Pablo Moreno, Jonathan Dany Espitia, Manuel Álvarez Gaviria, Cardiology in Obstetrics and Congenital Heart Disease in Adults, Fundación Santa Fe de Bogota, Bogota DC, Colombia, Schools of Medicine, Universidad de los Andes and Universidad El Bosque, Bogota DC, Colombia
Abstract Body:	**Background:** Pregnancy in women with repaired tetralogy of Fallot (TOF) remains challenging, particularly after multiple right ventricular outflow tract interventions and transcatheter pulmonary valve implantation. **Case:** A 31-year-old woman with repaired TOF underwent balloon pulmonary valvuloplasty followed by complete surgical repair with transannular patch. At 13 years, she underwent surgical pulmonary valve replacement and later Melody valve-in-valve implantation due to prosthetic degeneration. During her first pregnancy, she remained under multidisciplinary cardio-obstetric surveillance. Transthoracic echocardiography showed mildly dilated right ventricle (RV) with mild dysfunction, preserved left ventricle function, mild tricuspid regurgitation, and normally functioning Melody valve without significant stenosis or regurgitation. NT-proBNP remained normal throughout pregnancy. Pregnancy progressed to 37 weeks without heart failure, arrhythmias, or valve-related complications. Cesarean delivery resulted in favorable maternal and fetal outcomes. **Decision-making:** Pregnancy after repaired TOF and Melody valve implantation requires individualized risk stratification and close surveillance due to potential RV failure, arrhythmias, and prosthetic valve dysfunction. **Conclusion:** Carefully selected women with repaired TOF and Melody valve implantation may achieve favorable pregnancy outcomes with structured

cardio-obstetric follow-up.

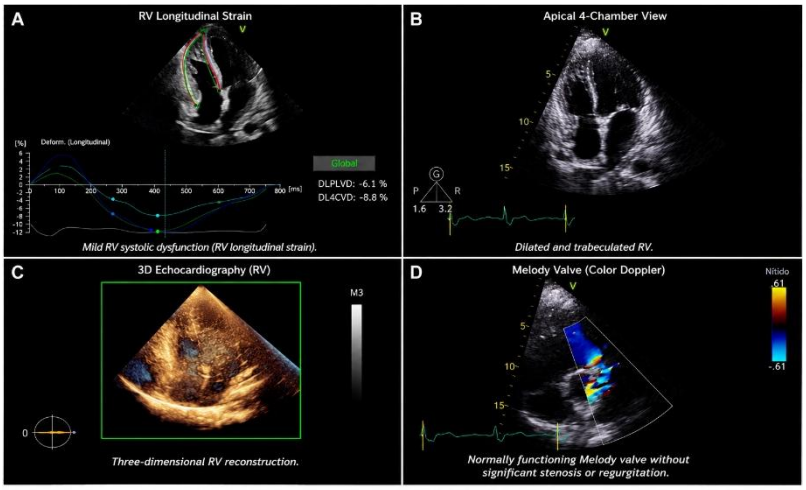


Figure. Transthoracic echocardiographic assessment during pregnancy in repaired tetralogy of Fallot after Melody valve-in-valve implantation. (**A**) Right ventricular (RV) longitudinal strain demonstrating mild RV systolic dysfunction. (**B**) Apical 4-chamber view showing dilated and trabeculated RV. (**C**) Three-dimensional RV reconstruction. (**D**) Color Doppler assessment of a normally functioning Melody valve without significant stenosis or regurgitation.