

Abstract No. **30**

Category: **Heart Failure and Cardiomyopathies**

Title: **Myocardial Perfusion Imaging Abnormalities in Chagas Cardiomyopathy**

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**Abstract:**

Background: Coronary microvascular dysfunction represents a hallmark in the pathogenesis of chronic Chagas Cardiomyopathy (CCM), causing frequently myocardial perfusion defects (MPD). No characterization of these perfusion patterns in Colombian population have been reported.

Methods: Cross-sectional study. From 2015 to 2019 twenty-three patients (median age: 69 years; 52% females) from an endemic area of Chagas Disease and with a positive serologic diagnosis underwent dipyridamole myocardial perfusion imaging (MPI) through two-day (stress-rest) SPECT at the Fundación Cardiovascular de Colombia.

Results: Eleven patients (47.82%) had a normal scan. From the twelve with MPI defects three (25%) had a moderate reduction in perfusion while nine (75%) showed a severe reduction, being only one defect reversible. The most common segments affected were the lateral (58.33%) and the inferior walls (41.66%) and the median extension of the defects was 15% (IQR 12.5-22.5). A post-stress left ventricular ejection fraction (LVEF) reduction  $\geq 5\%$  was observed in six patients (50%), being significantly associated to individuals with inferior wall involvement ( $p=0.041$ ).

Conclusion: MPI using SPECT represents a valuable non-invasive tool capable of assessing the typical alterations of CCM, being the areas of involvement correlated to the ones reported to be affected in Chagas Disease using echocardiography and cardiac magnetic resonance.