

Abstract No. **7**

Category: **Arrhythmias and Clinical EP**

Title: **Association Between Late Gadolinium Enhancement by Cardiac Magnetic Resonance and Ventricular Arrhythmia in a Cohort of Patients with Chronic Chagas Disease in Colombia**

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Abstract:

Background: The presence of late enhancement to gadolinium (LGE) by cardiac magnetic resonance (CMR) is a predictor of major adverse cardiac events, including ventricular arrhythmia and death, in patients with ischemic, non-ischemic and hypertrophic cardio-myopathies. There is paucity of data regarding the prognostic ability of LGE in patients with Chagasic cardio-myopathy (Ch-CMP)

Methods: Patients from the "CMR as a predictor of sudden cardiac death in Chagas Disease" cohort were analyzed in a cross-sectional study. We determined the association between LGE and the presence of premature ventricular complexes (PVC's), and heart rate variability (HRV). Comparisons were made using chi2 test, relating 2 dichotomous variables in the contingency table and calculating OR with 95% CI

Results: A total of 77 Ch-CMP patients were included with a mean age of 63 +/- SD age; of these, 46/77 (60%) had some degree of LGE. PVC's were noticed in 37% of patients with LGE, compared to 9% without LGE (OR: 2.8 CI 95% 1.6-4.8, p: 0.0003). Also, most of the patients without LGE had preserved left ventricular ejection fraction measured by CMR (OR: 0.35 CI 95% 0.18-0.67 p: 0.002) and there was no association with HRV (OR 0.87 CI 0.51-1.50 p: 0.61)

Conclusions: In Ch-CMP patients with positive LGE by CMR, PVCs were more frequent compared to those without LGE; no association was found between scar during CMR and changes HRV. LGE could be an early predictor of sudden cardiac death or ventricular arrhythmia in Ch-CMP.