

Abstract No. **59**

Category: **Acute Coronary Syndromes**

Title: **Correlation of high-sensitive troponin results and clinical characteristics with test of ischemia and coronary angiography in patients attending emergency department with supraventricular arrhythmia and chest pain**

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Abstract:

Background: Chest pain associated to supraventricular arrhythmia (SVA) is not infrequent, and the elevation of increasingly sensitive biomarkers as high-sensitive cardiac troponin I (hs-cTnI) contributes to the diagnosis of myocardial infarction in these patients.

Methods: Retrospective cohort study. We included patients with SVA and chest pain as companion symptom, measurement of hs-cTnI and tests of ischemia and/or coronary angiography. We performed unadjusted and adjusted multivariate logistic regression

Results: 274 patients were included. The average age was 68 years, 50,7% were men, 57,3% had hypertension, and 20,1% had previous coronary artery disease (CAD).

The proportion of patients with positive hs-cTnI was 40,2% (110/274). Factors associated with positivity were dyslipidemia (32,7 vs 21,9% p 0,047), history of coronary artery disease (CAD) (26,4 vs 15,9% p < 0,001), and faster heart rate (> 150 bpm 56% vs <150 bpm 31% p < 0,001).

The incidence of CAD was 14%. Factors associated were: positive hs-cTnI (79.3% vs 31.2% p <0.01), male (79.3% vs 20.7% p <0.01), and dyslipidemia (44,7% vs 23,3% p <0.01). In the multivariate adjusted analysis all the tested variables reached statistical significance again except for dyslipidemia

The operative characteristics of hs-cTnI for the detection of CAD were sensitivity 84,2%, and specificity 66,9%, the positive and negative predictive value were 29,1% and 96,3% respectively.

Conclusion: In patients with SVA and chest pain the elevation of hs-cTnI were correlated with a positive coronary angiography and/or positive tests of ischemia with high negative predictive value and sensitivity, but it lacks acceptable specificity for new CAD.