

Category : **Cardiovascular: coronary syndromes**

A355 - Evaluation of the hear score to exclude the hypothesis of acute coronary syndrome in patients consulting the emergency department for chest pain

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Introduction:

Chest pain is one of the most common presentations to the emergency department (ED), the main diagnosis representing a short-term life-threatening emergency is acute coronary syndrome. Several studies have concluded that the HEAR score would allow, if it is ≤ 2 , to exclude the hypothesis of acute coronary syndrome (ACS) with a low risk of false negatives. The main objective of our study was to evaluate the performance of the HEAR score in patients consulting for acute chest pain in the ED.

Methods:

This was a prospective, descriptive study. Done over a period of seven months (from June 2022 until January 2023), carried out at the emergency room service. We included patients consulting for non-traumatic chest pain and whose clinical, biological and electrocardiographic data were complete. The Hear score was calculated. ACS was retained on the diagnostic criteria based on the European society of cardiology recommendations and after consultation with the cardiologist.

Results:

We included 416 patients. The mean age was 56 ± 14 years with a sex ratio of 1.88. Among these patients 27.5% had known coronary artery disease. Only 15.3% benefited from pre-hospital transport. The diagnosis of ACS was retained in 58.6% of patients. The HEAR score was ≤ 2 for 9.7% of patients, 96.8% of them had a troponin level lower than 3 times the normal value. The negative predictive value for ACS in patients with a low risk HEAR score was 94.5. By analyzing the ROC curve ($P < 0.01$; air under the curve=0.83; CI [0.79-0.87]). The cut-off value was 1.5 sensitivity and specificity were 99.1% and 78.3%, respectively.

Conclusion:

The HEAR Score is an interesting tool for daily practice which could allow a withdrawal from emergency departments by returning patients at low risk of ACS to home earlier.