

Category : **Cardiovascular: coronary syndromes**

A40 - Evaluation of the association between c-reactive protein levels and coronary lesions severity and mortality in acute coronary syndromes.

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Introduction:

Inflammation is a major component of the response to tissue injury caused by acute myocardial infarction. C-reactive protein (CRP) levels might be a simple marker of the severity of this inflammatory response, providing prognostic information. The aim of this study was to evaluate the association between CRP elevation and coronary lesions severity as well as in-hospital mortality in patients presenting with acute coronary syndrome (ACS).

Methods:

We prospectively included 364 patients admitted to the cardiology intensive care unit of Ibn Rochd Hospital in Casablanca between September 2019 and January 2021 for ACS with or without persistent ST segment elevation. These patients were divided into 2 groups: Group 1 (N=201) patients with CRP >5mg/L and group 2 (N=163) with CRP ≤5 mg/L.

Results:

The average age of our patients was 60.27 ± 12.35 years [28-85 years]. There was a male predominance (64.7% of the population). More than two-thirds of the patients were smokers (76.36%). One-quarter were hypertensive (23.63%), nearly half were diabetic (50.9%), and one quarter of our population had dyslipidemia. The angiographic findings showed multi-troncular lesions in 60% of group 1 patients versus 26 % of the second group. After a multivariate analysis, In-hospital mortality and mortality after 3 months of follow-up were significantly higher in group 1 compared to group 2 ($p < 0,0001$ and $p = 0,019$ respectively).

Conclusion:

Our results demonstrate a strong association between CRP on admission and in-hospital mortality after an ACS, thus suggesting that CRP can be a marker of inflammatory response to myocardial ischemia, providing prognostic information.