

Category : **Cardiovascular: coronary syndromes**

**A35 - Evaluation of the prognostic value of diastolic dysfunction in the acute phase of myocardial infarction.**

**R Benmalek<sup>1</sup>; A Maaroufi<sup>2</sup>; A Asklou<sup>2</sup>; I Nassour<sup>2</sup>; A Errami<sup>2</sup>; I Nouamou<sup>2</sup>; S Arous<sup>2</sup>; ME Benouna<sup>2</sup>; R Habbal<sup>2</sup>**

<sup>1</sup>University hospital IBN ROCHD, CARDIOLOGY, CASABLANCA, Morocco, <sup>2</sup>University hospital IBN ROCHD, Casablanca, Morocco

### **Introduction:**

During acute myocardial ischemia, left ventricular (LV) systolic dysfunction is accompanied by diastolic dysfunction which sometimes precedes systolic dysfunction. The recent development of Doppler echocardiography has allowed the non-invasive measurement of LV diastolic filling, which correlates well with other measures of LV filling. The aim of our study was to evaluate LV filling pressures (LVFP) and to demonstrate the prognostic value of their elevation in the acute phase of 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. All patients had Doppler echocardiography within the first four days of admission.

### **Results:**

The average age of our patients was  $60.27 \pm 12.35$  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. Coronary inheritance was found in 7.27% of our patients. 16.36% of our patients had high LVFP. Elevation of LVFP was a significant predictor of mortality ( $p = 0.01$ ) in addition to the occurrence of major cardiovascular events at 6 months of follow-up in our study population ( $p = 0.001$ ).

### **Conclusion:**

The study of diastolic function and especially the evaluation of the LVFP at the acute phase of acute coronary syndrome allows to refine the stratification of patients admitted for an acute coronary syndrome and to identify a group of high risk patients to benefit from more intensive treatment.