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**Echocardiographic prognosis score and stratification of the risk of major cardiovascular events after acute coronary syndrome.**

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**Introduction**
The stratification of the risk of a major cardiovascular event after an acute coronary syndrome by doppler echocardiography provides prognostic support to the different clinical models and allows a non-invasive evaluation of the risk, independent of comorbidities. The echo-score provides a better definition of the categories of high-risk and intermediate patients for whom a more aggressive approach improves outcomes.

**Purpose**
The aim of our study is to identify the echocardiographic parameters predictive of major cardiovascular events in the acute phase and after six months of follow-up of an acute coronary syndrome.

**Methods**
To identify the echocardiographic parameters associated with major cardiovascular event, we recruited 302 patients in intensive care unit of cardiology for acute coronary syndrome consecutively on admission. Patients were assessed by clinical risk scores (GRACE, TIMI, CRUSADE) and resting echocardiography.

**Results**
We have 181 patients with major cardiovascular event. After studying the survival curves, univariate and multivariate analysis, acute coronary events echoscore (HR 1,95 ; p<0,0001), has four echocardiographic variables (VG-Simpson - biplane ejection fraction, VD-surface - Simpson shortening fraction, M-strain longitudinal total deformation and pulmonary ultrasonic comet). Its discrimination capacity (AUC= 0,85) greater than that of the scores clinical prognosis, (GRACE; AUC = 0,72, TIMI; AUC = 0,71, HR 1,33; p<0,0001) and (CRUSADE; AUC = 0,76; HR 1,03; p=0,005)

**Conclusion**
The developed echocardiographic model could prove very useful in the decision-making process and optimization of the therapeutic strategy in some high-risk patients with acute coronary syndromes following an invasive strategy. It is appropriate for expert interpretation, yet relatively simple because it contains only four echocardiographic variables as predictors, (score 4 points for low risk with a probability of major cardiovascular event 3.4%, up to 16 points for risk high with a probability of 15.1%)