Abstract: P510

Predictors of mortality in long-term in acute coronary syndromes in young adults

Authors:
FM Moniz Mendonca¹, JAS Sousa¹, JM Monteiro¹, MN Neto¹, RR Rodrigues¹, GC Caires¹, DF Freitas¹,
¹Hospital Dr. Nélio Mendonça, Cardiology - Funchal - Portugal,

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Background/Introduction: Acute coronary syndromes has a high prevalence in mortality in long-term in young adults. The purpose of this study was to determine the factors that are associated with poor prognosis in a long-term in this population.

Methods: We performed a prospective analysis with consecutive inclusion of 259 patients who were admitted with acute coronary syndrome. The inclusion period was from October 2009 to September 2012, aged equal or less than 60 years old. We classified these patients into 2 groups: those who have died (n=33, 12.7%, 78.8% male) and those who have survived (n=226, 87.3%, 85.4% male) during the follow-up of 5 years. First, we tested for factors that were associated with mortality during the follow-up. Then, we used a multivariable logistic regression to identify the predictors of mortality in long-term.

Results: During the follow-up of 5 years, age-independent predictors of mortality were: chronic kidney disease (OR 30.199; p=0.002), myocardial reinfarction (OR 14.022; p=0.041), preceding cardiac arrhythmias (OR 13.922; p=0.035), heart failure following myocardial infarction (OR 7.994; p=0.001), cardiogenic shock (OR 7.219; p=0.007), admission and 72 hours Killip = 2 (OR 4.620; p=0.000), hemorrhagic complications (OR 5.273; p=0.017) and diabetes (OR 2.650; p=0.035). Continuous variables isolated were serum creatinine (OR 2.311; p=0.011) and heart rate (OR 1.027; p=0.003). The patients that registered higher mortality rate were the ones that were less frequently submitted to angioplasty (OR 0.309; p=0.003), that weren’t as promptly selected and treated in the emergency department (OR 0.298; p=0.014) and that suspended dual anti-platelet therapy before 1 year (OR 0.276; p=0.007). Continuous variables isolated were hemoglobin (OR 0.717; p=0.003) and hematocrit values (OR 0.906; p=0.012). Then, we have analyzed those variables using Backwards:wald method and we have observed that diabetes, Killip class at admission = 2, myocardial reinfarction, heart rate, serum creatinine were the strongest predictors of mortality and standard dual anti-platelet therapy a predictor of survival.

Conclusions: Young adults admitted with acute myocardial infarction, the strongest predictors of mortality during the follow-up of 5 years were diabetes, admission Killip = 2, myocardial reinfarction, heart rate and serum creatinine. The standard dual anti-platelet therapy during the follow-up of 1 year was an independent survival predictor.