cardiac arrest (OHCA) patients, but data on the long-term survival are scarce. We performed a study to assess long-term survival in OHCA patients managed with CA on admission and PCI if indicated and to compare survival between patients with and without acute myocardial infarction (AMI).

**Methods:** Retrospective single-center study including patients ≥18 y.o. resuscitated from an OHCA without an obvious non-cardiac cause. AMI was diagnosed angiographically as the presence of ruptured plaques with fresh thrombus and critical stenosis easily crossed by an angioplasty wire. Survival was recorded at discharge and 5-years survival probability was estimated by Kaplan-Meier survival curves. Data are expressed as numbers (percentages) and median (interquartile range–IQR).

**Results:** 300 comatose patients aged 56 (48-67) were included from 2002 to 2011. 130 patients (43%) had ventricular fibrillation, 116 (39%) asystole, 54 (18%) had other/unknown initial rhythm. All patients had CA on admission and 93 (31%) had an AMI. PCI was attempted in 85 (91%) of AMI patients, successful in 79. Therapeutic hypothermia was performed in 256 (84%) patients. Survival at discharge was 32.3% (97/300). After discharge, 5-year probability of survival was 81.7±5.4%. Probability of survival from admission to 5 years was 26.2±2.8%. AMI patients had better survival at discharge, 40.8% (38/93) versus 28.5% (59/207) in non-AMI, p=0.047. Probability of survival from discharge to 5 years in AMI patients was 92.2%±5.4% versus 73.4±8.6% in non-AMI, hazard ratio (HR)=2.7, confidence interval (CI)=(0.8-8.9), p=0.1. Survival probability from admission to 5 years was better for AMI patients, 37.4%±5.2% versus, 20.7±5.0% in non-AMI, HR=1.5, CI=(1.12-2), p=0.067.

**Conclusions:** We observed a very favourable post-discharge prognosis in OHCA patients undergoing on-admission CA with PCI if indicated. Patients suffering OHCA due to AMI had better survival to discharge and at 5 years follow-up than patients suffering OHCA due to other causes.

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**Elaboration of a New Risk Score for Predicting Distal Embolization during Primary Angioplasty in ST-Elevation Myocardial Infarction**

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**Background:** Distal embolization (DE) is a serious complication of primary-PCI for ST-elevation myocardial infarction, affecting mortality and morbidity rate. This study aims to develop and validate a new angiographic risk score to predict the risk of DE in patients undergoing p-PCI.

**Methods:** Study sample included data from 1200 pts undergoing p-PCI. Logistic regression was used to examine the relationship between risk factors and occurrence of DE. The cohort was randomly divided into a risk score development cohort (n=814), and a validation cohort (n=386). Each covariate in the model was assigned an integer score based on the regression coefficients.

**Results:** The rate of DE was 14.4%, with in-hospital mortality of 9.8%. At multivariate analysis, four variables resulted independent predictors of DE: the “cut-off” occlusion pattern of infarct-related artery, TIMI thrombus score ≥2, RVD ≥ 3.5 mm, length > 20 mm. Each variable was assigned a 0 to +2 points according to the strength of the statistical association. Risk scores 0 to 1 were considered low risk, 2 to 4 intermediate risk, and 5 to 7 high risks for DE. DE was different among risk score groups in both derivation cohort (p for trend < 0.0001; C-statistic 0.68) and in validation cohort (p for trend <0.0001; C-statistic 0.64).

**Conclusions:** Treatment LTBL in the setting of p-PCI is related to larger myocardial damage as detected by CE-CMR, regardless of angiographic detectable embolization. These findings suggest that in patients with LTBL thrombus aspiration before stenting should be considered.