

(87.6%) as PCI in other coronary arteries. Baseline characteristics, procedural features and outcome are given in the table. In the multivariate analysis left main PCI remained an independent predictor of mortality.

	Other vessels	Unprotected left main PCI	Protected left main PCI
Patients (n)	2106	280	19
Age	69.4 yrs	72.5 yrs	77.3 yrs
Diabetes	33.0%	38.7%	52.9%
STEMI	71.4%	64.3%	31.6%
3-vessel disease	50.7%	64.9%	94.7%
DES	44.6%	57.7%	53.1%
Thrombus aspiration	20.2%	11.1%	0%
GP IIb/IIIa	46.3%	51.8%	26.3%
TIMI 3 after PCI	77.8%	73.9%	84.2%
Mortality	39.4%	55.4%	63.2%

Conclusions: About 12% of all PCIs in the cardiogenic shock are performed in the left main. Despite an acceptable technical success rate left main PCI is associated with an impaired in-hospital outcome. Therefore additional measures should be considered in these high risk patients.

P2728

Identification of clinical and laboratory predictors of incomplete ST segment resolution in patients undergoing primary percutaneous intervention for ST elevation myocardial infarction

A. Somaschini¹, S. Cornara¹, M. Ferlini², G. Crimi², R. Camporotondo³, M. Gnechi¹, M. Ferrario Ormezzano², L. Oltrona Visconti², G.M. De Ferrari², S. De Servi⁴. ¹Coronary Care Unit – Fondazione IRCCS Policlinico San Matteo and University of Pavia, Department of Molecular Medicine, Pavia, Italy; ²Foundation IRCCS Polyclinic San Matteo - University of Pavia, Pavia, Italy; ³Coronary Care Unit, Fondazione IRCCS Policlinico San Matteo, Pavia, Italy; ⁴IRCCS MultiMedica Sesto San Giovanni, Department of Cardiology, Sesto San Giovanni, Italy

Background: Incomplete ST segment resolution (ISTR) is a well-known marker of poor outcome in patients undergoing primary percutaneous coronary intervention (pPCI) for ST elevation myocardial infarction (STEMI). The identification of patients at high risk for developing ISTR could improve risk stratification and allow the implementation of more aggressive interventional and pharmacological strategies.

Purpose: The aim of this study was to define risk factors of ISTR considering only clinical variables and simple laboratory values that could be available before pPCI.

Methods: We prospectively enrolled all STEMI patients undergoing pPCI in our University Hospital between 2005 and 2016 (n=2547). ISTR was defined as a <70% resolution of initial ST segment shift in the lead with maximal ST deviation 60 minutes after reperfusion. Comparisons between ISTR and no-ISTR patients were done by cross-tables and Chi-square test, while independent predictors of ISTR were evaluated with a multivariable logistic regression model. Mortality analyses were performed using Kaplan-Meier curves with log-rank test.

Results: ISTR occurred in 732 patients (28.7%). Patients with ISTR were older, presented more frequently anterior MI, a higher Killip class, and glucose value greater than 198 mg/dl (hyperglycaemia) and lower baseline hemoglobin values (all p<0.001). They present also greater use of intra-aortic balloon pump, greater value of baseline creatinine and rate of TIMI flow <3 after PCI (all p<0.001). Thirty-day and 1-year mortalities were higher in patients with ISTR (9.1% vs 2% and 11.7% vs 4.1% respectively, both p<0.001). Pre-procedural independent predictors of ISTR are reported in the Table.

Pre-procedural predictors of ISTR

Variables	Wald	p-value	Hazard ratio	5% CI	95% CI
Anterior acute MI	74,289	<0.001	2,35	1,93	2,85
Hyperglycaemia	13,756	<0.001	1,6	1,25	2,06
Killip class >1	21,357	<0.001	1,77	1,39	2,26
Age >75 years old	9,453	0,002	1,47	1,15	1,88
Anemia	12,234	<0.001	1,58	1,22	2,05
Systolic blood pressure below 90 mmHg	7,073	0,008	2,22	1,23	3,99

Conclusions: Patients with ISTR showed greater short- and long-term mortality compared with patients with no-ISTR. ISTR was significantly associated with clinical variables and simple laboratory values easily available at the beginning of pPCI. A rapid risk stratification with a consequent aggressive pharmacological and non-pharmacological intervention may reduce the likelihood of this phenomenon and improve clinical outcome.

P2729

Reasons for delayed reperfusion in STEMI and their association with mortality: insights from 1967 primary PCI performed over 12-year period

P. Rubartelli, D. Bartolini, F. Beccaria, S. Bellotti, M. Fedele, A. Iannone, L. Pastorino. Ospedale Villa Scassi, Genoa, Italy

Background: The prognostic relevance of first medical contact to balloon (FMCTB) time in primary PCI (pPCI) is well known. This time interval is influenced

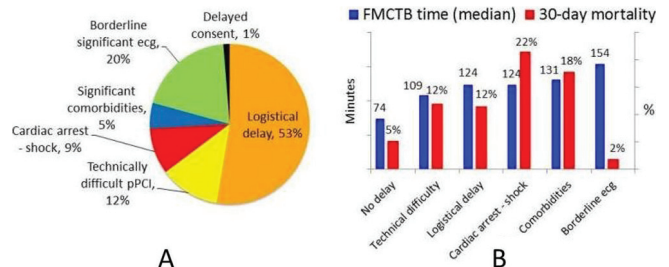
by various patient-related and logistical factors. However, the specific causes for delay in FMCTB and their association with outcome have not been well characterized. In addition, most available analyses used outdated metrics such as door to balloon time.

Purpose: We sought to assess the specific reasons for delay in FMCTB, their association with mortality, and their temporal trends.

Methods: Between January 2006 and December 2017, 1967 patients with STEMI underwent pPCI at a single Centre acting as a hub in a regional STEMI network. Delayed pPCI was defined as FMCTB time >90', or >120' for patients transferred from spoke Hospitals. For delayed pPCI the specific reason for delay was prospectively collected. These reasons were divided in logistical (e.g. ambulance not ready, busy cath lab) and patient-related (listed in figure).

Results: Overall, delayed pPCI were 27.7%, approximately half for logistical reasons (14.6%) and half for patient-related reasons (13.1%). 30-day mortality was 5.28% in timely pPCI, and 11.2% in delayed pPCI (p<0.001). The mortality rate in logistical delay was similar to the overall mortality rate in patient-related delay (11.5% vs 10.9%). The incidence of the various reasons for delay are shown in figure A. The median FMCTB time and 30-day mortality rate are depicted in figure B, showing that different reasons are associated to different delay and different mortality. Notably, the mortality rate did not parallel the length of delay (e.g. borderline significant ecg produced the maximum delay together with the minimal mortality).

Comparing the first 6-year period with the second, we observed a non-significant reduction of delayed pPCI from 30.2% to 25.3%. However, the logistical reasons for delay showed a more evident decrease from 58.4% to 43.9% (p<0.001).



Conclusions: Logistical delay is relatively unrelated to patients characteristics, and yet in associated with increased mortality, supporting the hypothesis that any delay in reperfusion affect mortality.

On the other hand, the impact of patient-related delay on mortality depend mainly on the specific cause, which is strictly related to risk profile of the patient.

In our experience, the logistical reasons for delay decreased over time, indicating improvement in the STEMI network, while the patient-related reasons rose, suggesting increase of patient complexity.

P2730

Targeted temperature management in STEMI patients after out-of-hospital cardiac arrest

M. Jarakovic, M. Kovacevic, A. Vulin, S. Bjelica, I. Srdanovic, M. Petrovic, S. Bjelic, M. Cankovic. Institute of Cardiovascular Diseases of Vojvodina, ICCU, Interventional cardiology, Sremska Kamenica, Serbia

Introduction: Sudden out-of-hospital cardiac arrest (OHCA) represents the leading cause of death in developed countries, with acute myocardial infarction being documented in many of these patients. Current guidelines recommend performing targeted temperature management (TTM) in cardiac arrest patients who remain unresponsive. However, the influence of TTM on survival in STEMI patients after OHCA is still a subject of discussion.

Purpose: The aim of this research was to evaluate the influence of targeted temperature management in STEMI patients after out-of-hospital cardiac arrest on intra-hospital survival and neurological outcome.

Methods: The research was performed as retrospective observational analysis of data taken from the hospital registry on OHCA. The evaluated group consisted of 98 patients hospitalized due to STEMI after OHCA who remained comatose, in the period from January 2007 until October 2017. The inclusion criteria for analysis were STEMI of any localization and unresponsiveness at admission defined as Glasgow Coma Score (GCS) less than 8. The favorable neurological outcome was defined as a cerebral performance category score (CPC) ≤2.

Results: The research included 98 comatose survivors of OHCA with STEMI. TTM was performed in 58 (59.8%) patients. Patients treated with TTM were younger (58 vs. 66; p<0.01). However, there were no differences concerning gender (p=0.178). Shockable rhythm was registered in 70 patients (71.4%), while non-shockable rhythm was registered in 28 (28.6%) patients. TTM was performed more frequently in witnessed cardiac arrest patients (64.1% vs. 42.1%; p=0.079), with initial shockable rhythm in comparison to non-shockable rhythm (68.6% vs. 35.7%; p=0.03), and when pre hospital defibrillation was performed (67.9% vs. 17.6%; p<0.01). The overall survival at discharge was 44.9% (n=44). Survival at discharge was higher in patients in whom TTM was performed (60.3% vs. 22.5%; p<0.01). The favorable neurological outcome is more often registered in patients who underwent TTM (68.6% vs. 55.6%; p=0.46). When the initial rhythm taking into consideration, survival rate was higher when the initial rhythm was shock-