

Risk Assessment in AMI Care (Poster Session)
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The SAMU Network Minimizes Treatment Delays for ST-Elevation Myocardial Infarction: Insights From a Three-Year Registry

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Background : Shortening total ischaemic time is essential for thrombolysis and also for PCI, but registries highlight prolonged reperfusion delays and accordingly a sizeable proportion of patients who never benefit from such therapies. In the Paris area, pre-hospital medical teams of the SAMU network conducted a prospective, observational survey, the e-MUST registry, to describe patterns of time to treatment for STEMI patients and to analyse the decision making process from onset of symptoms to reperfusion therapy .

Material and method : From january 2002 to december 2004, 5231 patients are enrolled. Different process of care interval times are studied : delay from onset of symptoms to seeking care, pain-to-drug (PTD), pain-to-needle (PTN) and pain-to-balloon (PTB) times, presentation of medical team to needle and to balloon times. The results of the three years are compared. Predicting factors for not benefiting from reperfusion therapy are also screened in the registry. Early major adverse cardiac events are investigated.

Results : The delay for seeking medical care is less than two hours for 63.5% of patients. The majority (89%) of patients is treated with either pre-hospital thrombolysis (PT) or PCI. The coronary reperfusion agent of choice is primary PCI for 55% of patients and PTB is less than 120 min for 15%. Median time from scene to balloon is 119 min while median time to needle is 82 min. PT is initiated within 120 min for 54.5% of patients and PTD is less than 180 min for 75% of patients. The ratio of patients who receive reperfusion therapy increases significantly from 87.5% in 2002 to 91,5% in 2004 ($p<0.005$).The registry exhibits predicting factors for not benefiting from reperfusion therapy : age over 75 (24% versus 7%), female (20% versus 8.5%) and prolonged delay from onset of symptoms. When the delay for seeking care is between 6 to 12 hours, 30% of patients never receive any reperfusion therapy.

Conclusion : The e-MUST registry highlights beneficial effects of the french SAMU network for STEMI patients. The network contributes to increase the number of patients eligible for coronary reperfusion by early triage, and also, in minimizing treatment delays, close to benchmarks recommended by guidelines.