Does a regional system of care impact on reperfusion strategies in ST-segment elevation myocardial infarction?

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Purpose: Regionalization of care for ST-segment elevation myocardial infarction (STEMI) has been advocated, although its effect on processes of care – compared with secular evolution – remains uncertain. The aim of this study was to evaluate the impact of a regional system of care on reperfusion strategies for STEMI patients relative to control hospitals.

Methods: We analysed the original data from two nationwide, prospective cohort studies, with the same methods. The first was conducted in November 2000 (FAST MI 2000) and the second in November 2005 (FAST MI 2005). A total of 160 French hospitals participated in both studies. Seven hospitals (2 with percutaneous coronary intervention facilities and 5 without) were involved in a regional system of care implemented in the Northern Alps in 2002 (RESURCOR); 153 control hospitals were located in other French areas with no corresponding regional system of care. From 2002 to 2005, RESURCOR promoted prehospital fibrinolysis followed by routine/rescue coronary angiography. We compared change in rate of prehospital fibrinolysis and routine/rescue coronary angiography after fibrinolysis between 2000 and 2005 in the RESURCOR region versus the control hospitals.

Results: A total of 102 STEMI patients were enrolled in the Northern Alps hospitals and 2377 in the control hospitals. In the RESURCOR area we observed a larger absolute increase in the use of prehospital fibrinolysis (18% vs 63%, P<0.01, respectively, in 2000 and 2005) compared with the control hospitals (14% vs 31%, P<0.01, respectively, in 2000 and 2005). In the RESURCOR area we observed a larger absolute increase in the use of routine/rescue coronary angiography after fibrinolysis (9% vs 44%, P<0.01, respectively, in 2000 and 2005) when compared with control hospitals (7% vs 22%, P<0.01, respectively, in 2000 and 2005).

Conclusion: Regionalization of care for STEMI patients may impact on reperfusion strategy in STEMI.

Management of ST-elevation myocardial infarction in octogenarian patients. Data from ORBI, a prospective registry of 5000 patients.

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Purpose: To determine the actual management of ST-elevation myocardial infarction (STEMI) in octogenarian patients and more.

Methods: We analyzed data collected in “ORBI”, a 6 years prospective registry of STEMI patients admitted within 24 h of symptoms onset to an interventional cardiology centre of Brittany (France). Main data about management and intra hospital outcome were compared between patients older (Group 1) and younger (Group 2) than 80.

Results: 550 of the 5000 patients (11%, mean age 84.6 ±3) constituted group 1, with a larger female prevalence (51 vs 20% in group 2, p<0.0001). Group 1 had a much longer median delay between onset of symptom and call for medical assistance (65 vs 45 min.), and between admission and reperfusion (53 vs 45 min.). Table 1 presents data about the management in the 2 groups, both in the acute phase and at discharge. Last, intra hospital mortality is much higher in group 1 (16.5 vs 4.1%, p<0.0001).

Conclusions: Octogenarian patients and more represent a large part of patient treated for STEMI, with significant differences in their presentation and management, and a high mortality.

Comparison of bleeding complications and three-year survival of low molecular-weight heparin versus unfractioned heparin for acute myocardial infarction. The FAST-MI registry

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Background: Recent clinical studies suggest that low molecular weight heparin (LMWH) could be an effective and safe alternative to unfractionated heparin (UFH) for patients with acute myocardial infarction (AMI).

Aims: To assess the impact of the choice of anticoagulant (LMWV vs. UFH) on bleeding, the need for blood transfusion and three-year clinical outcomes in patients with AMI from the FAST-MI registry.

Methods: FAST-MI is a nationwide registry carried out in France over a 1-month period in 2005, including consecutive patients with AMI admitted to intensive care unit <48h from symptom onset in 223 participating centers.