rization (RAC) is associated with less bleeding complications. However it is not clear whether the benefit on bleedings associated with RAC could be translated into a reduction of long term major adverse cardiovascular events (MACE). In patients with ST elevation myocardial infarction (STEMI), we have to determine if the use of RAC allows the recanalization of the coronary artery in a timely fashion. We aimed to confirm that RAC reduces haemorrhagic complications and determine if this advantage on bleedings could be translated into a 6 months MACE reduction. We also checked if RAC did not lengthen the time puncture to balloon (TPB) in the subgroup of STEMI patents.

Methods: All patients hospitalized for an ACS and treated with PCI between 01/2008 and 12/2008 were considered for this study. Predictors of in hospital minor and major bleedings and 6 months MACE were sought by uni and multivariate analysis.

Results: Altogether, 626 patients were included. 509 treated with RAC and 117 with a femoral artery catheterization (FAC). As compared to FAC, RAC decreased in hospital minor and major bleedings, respectively by 80 %(OR=0.2, CI=0.06-0.6, p=0,004) and 74 % (OR=0.26, CI=0.1-0.7, p=0,007). In patients with STEMI, there was no difference in TPB whatever the arterial access used (13 min vs 14 min, p=0.7). At 6 months, RAC was found as an independent predictor for less MACE (OR=0.4, CI=0.1-1.1, p=0.05).

Conclusion: Patients treated by PCI derive benefit from the use of RAC on in-hospital bleedings but also on the reduction of 6 months ischemic events. In STEMI patients it does not extend the TPB. Use of RAC should have a widespread diffusion.

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Association Between Hyperglycemia and the Angiographic No-Reflow Phenomenon in Patients With Acute Myocardial Infarction

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It is now well accepted that an elevated blood glucose level is associated with increased mortality in patients presenting with acute myocardial infarction (AMI). However, the underlying mechanisms of these deleterious effects of hyperglycemia are not well understood. Impaired microvascular function, or the no-reflow phenomenon may be one of these factors.

Objectives: We investigated the association between hyperglycemia and the no-reflow phenomenon in patients with AMI.

Results: A total of 250 patients presenting with AMI were evaluated.

The no-reflow phenomenon was found in 29 (11.6 %) patients, their glucose level on hospital admission was significantly higher than patients who did not exhibit this phenomenon (16.5 ± 9.3 vs. 12. 2 ± 7.1 mmol/l; p = 0.008). There was no difference in patients characteristics except for diabetes (51.7% vs. 29.7% ;p=0.017). Maximum level of creatine kinase (CK) were significantly higher in patients with no-reflow (4320 ± 1981 vs. 2980.3 ±1955 IU, p= 0.01).

Patients with no-reflow presented more frequently with heart failure (44.8% vs. 14.1%;p<0.01).

In multivariate analysis the blood glucose level was an independent prognostic factor for no-reflow (OR: 1.8; 95% CI: 1.2-4, p <0.01).

Conclusions: Hyperglycemia might be associated with impaired microvascular function after AMI, resulting in a larger infarct size and worse functional recovery.

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Determinants of st segment resolution after primary pci for stemi

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Objectives: ST segment resolution (STR) is a recognized intermediate prognosis parameter in STEMI reflecting the quality of tissue reperfusion. The aim of our study was to identify clinical, biological and angiographic determinants of STR.

Methods: 157 consecutive patients treated by primary PCI within 6 hours of symptom onset were included. STR was calculated in the lead with maximal ST segment elevation. Complete STR was defined as a regression more than 70%.

Results: Mean age of the population was 58,7±13,7 ans, the sex ratio 4 men for one woman. Maximal ST segment elevation was 0,33Â±0,18 mV before and 0,16Â±0,19 mV 59Â± minutes after PCI. Complete STR was achieved in 43,3% of patients. STR significantly correlated with enzymatic peak CPK (r= -0,33 p<0,00001), peak troponine I (r= -0,26 p=0,01), echographic LVEF (r=0,35 p<0,0001) and plasmatic creatinin concentration 48 hours after admission (r= -0,31 p=0,0001). In univariate analysis, complete STR was significantly associated with young age, an elevated SpO_2, angiographic TIMI flow grade 2 or 3 before angioplasty, low plasmatic BNP or HbA1c or fibrinogen concentrations. A trend of association for complete STR was observed with Killip class (p=0,075), number of Q waves (p=0,075), the use of direct stenting (p=0,08) and the use of abciximab (p=0,07). In multivariate analysis the independant predictors of STR were inferior location of infarction (OR=1,35 ; IC 1,16-1,55), TIMI risk score<5 (OR=1,24 ; IC 1,05-1,59) and angiographic TIMI flow grade 2 or 3 before angioplasty (OR=1,07 IC 1,009-1,15).

Conclusion: Our results suggest that STR is related to the size of myocardial infarction. The resolution of ST elevation is multifactorial and mainly deriven by inferior location of myocardial infarction, low TIMI risk score and better angiographic TIMI flow grade before PCI (>1).

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Differences between algerian woman and man presenting with acute coronary syndrome across the continuum of epidemiologic transition

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Introduction: Women until menopause remains protected from coronary artery disease, and its epidemiology is different from that in men.

Objective: The aim of this work is to assess the prevalence, clinical and biological features of acute coronary syndrome of Algerian women compared to men.

Materiel and method: This is a retrospective study, descriptive, conducted in our cardiology department near the patients hospitalized in intensive care unit cardiac, from 1/12 2006 to 30/ 04/2008 for ACS.A total of 413 patients is included, with 276 men (66.83%) and 137 women (33.17%) aged 20 to 101 years with an average age of 60.80 years.

Results: In univariate analysis: the Algerian woman is older, occurring mainly in an array of SCA (ST-),is more often diabetic, hypertensive, overweight (waist circumference and BMI).There is also a disturbance renal function more marked, blood glucose and lipid more troubled. The Algerian man has a far more important smoking and ventricular systolic dysfunction more severe.

In multivariate analysis: the only parameters that appear significant in women are: ACS (ST-) (or:0.3.046ci:1.78-5.20 p:0.000), smoking (or:13.182 ci:5.982-29.052 p:0.000)and diabetes google(or:0.543 ci:0.319-0.923 p:0.024).

Discussion: Algerian women has different clinical and biological characteristics in relation to the algerian man who require levels of care different.