Results: Over a 5-year period, a total of 298,105 patients underwent coronary angiography (CAG) and 176,166 patients underwent percutaneous coronary intervention (PCI). Diagnosis was acute coronary syndrome (ACS) in 22%, stable angina or silent ischemia in 23% and atypical chest pain in 9% of cases. Normal coronary arteries or not significant coronary lesions were found in 26% of patients. Radial access was increasingly used over the years regardless of the indication. The average number of PCI per procedure was 1.5±0.7 (range from 1.3±0.7 to 1.5±0.7) and those of stents per procedure were 1.5±0.8 (range from 1.5±0.8 to 1.6±0.8). Drug-eluting stents (DES) were used in 45% (range from 34 to 62%).

Conclusions: Coronary anatomy is highly dependent on clinical presentation. Strategies to reduce the number of normal CAG performed for atypical chest pain should be developed. The management of ACS is associated with less radial access, more single PCI and fewer DES.

020

Impact of anti-platelets dose fractionation on platelet inhibition in type 2 diabetes mellitus

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Objective: The hypothesis of the study was that increased drug administration frequency [twice daily versus once daily] may provide more effective platelet inhibition in patients with type 2 diabetes mellitus.

Methods: Twenty patients with type 2 diabetes mellitus with stable coronary artery disease were prospectively recruited. All the patients received once daily 150 mg of aspirin and clopidogrel for two weeks. Then patients were switched to aspirin and clopidogrel 75 mg twice daily for two weeks. Pharmacodynamic assessment was performed by VerifyNow system accumetrics at fifteen and thirty days.

Results: There was no difference between the antiplatelet effect produced by 150 mg of aspirin given once daily and 75 mg of aspirin given twice daily. A twice-daily dose of 75 mg of clopidogrel is associated with significantly more effective platelet inhibition on the residual assay: PRU=38.2% once daily vs 53.8% twice daily (p= 0.001) and PRU=187 once daily vs 147 twice daily (p=0.005).

Conclusions: Increasing the frequency of clopidogrel administration to twice daily in patients with type 2 diabetes mellitus is significantly associated with more effective platelet inhibition. But our data do not support a twice-daily dose of aspirin to improve platelet response.

021

Clopidogrel low response and correlation between the different tests: light transmission aggregometry, VerifyNow-P2Y12 and VASP.

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Background: Clopidogrel low response correlates with poor prognosis after percutaneous coronary intervention (PCI). Many biological tests are currently available to test the clopidogrel response. However, the presence of any correlation between the different tests is today poorly reported.

Methods: In this prospective study, clopidogrel response was assessed in 100 consecutive patients. All patients were tested between 18h and 24h after a 600mg clopidogrel loading dose using 3 different tests: light transmission aggregometry with 10 µmol ADP (LTA, results expressed as platelet inhibition percentage), VerifyNow-P2Y12 (VN, results expressed as PRU) and vasodilatator stimulated phosphoprotein (VASP, results expressed as IRP). Patients under chronic clopidogrel therapy were excluded.

Results: The mean platelet inhibition percentage, PRU value and IRP value were 38.5±13% by LTA, 178±89 PRU by VN and 52±21% by VASP. When results were analyzed as continuous variables, there was a good correlation between the different tests: LTA/VN (R2=0,642, p<0,001), LTA/VASP (R2=0,409, p<0,001) and VN/VASP (R2=0,616, p<0,001). However, when results were analyzed as pre-specified cut-off points to define patients as "low or good responders" (according to the literature: 50% for LTA, 235 PRU for VN and 50% IRP for VASP), only 47% of the patients were defined as "good" or "low responders" by the 3 tests. Altogether, 33% of the patients were defined as "low responders" by only 1 test, 20% by 2 tests and only 16% by the 3 tests.

Conclusion: If the correlation between the different tests is good when results are analyzed as continuous variables, each individual is rarely (less than 50%) defined as "low or good responder" by all the 3 tests when recognized cut-off values are used. In that way, a sole test might not be sufficient to manage antiplatelet therapy in an individual patient.

022

Compared efficacy and safety of unfractionned heparins versus low-molecular-weight heparins in STEMI patients

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Background: Low-molecular-weight heparins have recently been introduced in the management of ST elevation myocardial infarction (STEMI) patients but evidence remains poor among specific populations particularly elderly and patients with renal dysfunction.

Objective: to compare the outcome (mortality and hemorrhage) between patients treated with unfractionned heparin (UFH) versus low-molecular-weight heparins (LMWHs) in the whole population and among elderly and renal dysfunction patients.

Methods: Patients admitted for STEMI between January 1995 and November 2011 were retrospectively enrolled in the MIRAMI (MonastIR Acute Myocardial Infarction) registry. We compared the outcome (mortality and hemorrhage) between patients who received UFH versus LMWHs in the global MIRAMI population, then among elderly (aged over 75 years) and renal dysfunction patients (defined by a creatinin level >130 µmol/l).

Résultats: UFH was more often used when thrombolysis was adopted as reperfusion therapy (80.6% vs 68.6% when primary angioplasty is adopted, p<0.001), when patients present with heart failure (p<0.001), among elderly (p<0.001) and in patients with renal dysfunction (p=0.002). High rates of prescription of UFH may be attributed to the enrollment of patients since 1995, before LMWHs introduction in clinical practice. Mortality was higher among patient treated with UFH. This difference was statistically significant in the global population (11.9% vs 3.1%, p<0.001), but there was no significant differences among elderly (22.3% and 13.3%, p=0.65) and in renal dysfunction patients (39% vs 20%, p=0.23). Use of LMWHs did not show an increase of hemorrhagic complications in the global population (p=0.118), among elderly (p=0.45) nor renal dysfunction patients (p=0.61).

Conclusion: In the MIRAMI registry, LMWHs seemed to be at least as safe and effective as UFH in STEMI patients, even in elderly or renal dysfunction population.

023

National observational study of diagnostic and interventional cardiac catheterization by the French Society of Cardiology (ONACI): results according to administrates regions (northern vs. southern)

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Background: The national observational study of diagnostic and interventional cardiac catheterization (ONACI) is a prospective multi-center registry

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