Conclusion: The use of DES in our center is characterized by a small rate and a good compliance of the recommendations of the French Society of Cardiology. This strategy is associated with a low rate of restenosis at 2 years of follow-up.

Keywords: Angioplasty, Drug-eluting stent, clinical restenosis

Gender difference in mortality after ST-segment elevation myocardial infarction in the Registre d’Infarctus Maine-Anjou (RIMA)

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Background: A greater mortality in women versus men in ST-segment elevation myocardial infarction (STEMI) is now well documented but remains unexplained.

Methods: We compared outcomes for STEMI in the “Registre d’Infarctus Maine-Anjou” (RIMA) from 2003 to 2009 between men and women.

Results: We analyzed data from 390 women (29%) and 962 men (71%) admitted for STEMI. Women were older, 72.93±14.21 versus 61.70±14.14 years old (p<0.001) and have more hypertension history (68.7% vs. 43.3%; p<0.001). Women received less percutaneous coronary intervention and thrombolysis than men, respectively 51.5% vs. 64.6% (p=0.001) and 9.5% vs. 22.1% (p=0.001). Admission delay was longer in women. In univariate analysis, in-hospital mortality was higher in women (13.59% vs. 6.13%; p<0.001), post-discharge mortality until one year was also higher in women (8.9% vs. 3.88%; p=0.001). No differences were observed for in-hospital mortality and post-discharge mortality in age-adjusted Odds Ratio (OR) (OR=0.77 [0.55-1.77]; p=0.127 and OR=0.78 [0.45-1.35]; p=0.38 respectively).

Conclusion: Our study suggests that older age in women explains most of the mortality difference.

Is primary PCI feasible in nonagenarians?

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Introduction: The reperfusion strategy requiring primary percutaneous coronary intervention (PPCI) for ST-segment elevation acute myocardial infarction (STEMI) in nonagenarian patients remains controversial. The purpose of this study was to evaluate the results and the outcome of PPCI in patients aged 90 years old or more with STEMI.

Methods: We conducted a monocentric retrospective study over the past 8 years and focused on nonagenarians treated with PPCI for STEMI.

Results: We enrolled 34 patients with STEMI who were treated with PPCI. Mean age was 92.7±2.5 years, 74% were women. Cardiogenic shock was present at admission in 9 (26%) of these patients, acute pulmonary oedema was diagnosed in 10 (29%) of them and 2 (6%) had severe conduction disorder. Mean delay between symptom onset and balloon was 92±12.7 hours and 29 patients (83%) underwent PCI through transradial approach. Among these patients, 16 (46%) had monotonuclear coronary heart disease and 31 (89%) had single- vessel PCI (3 LM, 53% LAD, 15% CX and 29% RCA). Revascularization procedure of the culprit vessel was successful in 88% of the patients, 16 (46%) had monotonuclear coronary heart disease and 31 (89%) had single-vessel PCI (3 LM, 53% LAD, 15% CX and 29% RCA). In-hospital stay was 4.8±4.6 days and in-hospital mortality rate was 24%.

Conclusion: In our study, PPCI in nonagenarians with STEMI is successful and feasible through a transradial approach. It is associated with high rate of successful reperfusion of the infarct-related artery. These results suggest that PPCI should be offered in selected nonagenarians with STEMI.

Coronary artery embolism

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Introduction: Coronary artery embolism (CAE) is a rare cause of acute myocardial infarction (AMI). The prevalence of this entity remains unknown because of its difficult diagnosis in the acute setting.

Purpose: To study the etiologies, angiography findings and the treatment of CAE.

Methods: Retrospective analysis between 2006 and 2011 year of 6 patients diagnosed with CAE in the department of cardiology, Habib Thameur hospital.

Results: We report the observations of 6 patients with AMI managed in our cardiology department. They were 2 men and 4 women, with mean age of 52.5 years, in whom CAE had been identified as final etiology for the AMI. All patients had no risk factors for coronary artery disease. Past medical history included rheumatic mitral stenosis in all cases and mitral valve replacement in 4 patients. The electrocardiogram revealed atrial fibrillation in 5 cases, complete left bundle branch block in 2 patients and ST segment elevation in the inferior leads in 4 cases. The mean INR level of patients was 1.8 on emergency admission.

All patients had received immediate medical treatment including aspirin, clopidogrel and. Thrombolysis had been performed in 3 cases. Three patients underwent cardiac catheterization within 90 minutes of arrival. The coronary angiography was normal in 3 cases and showed a total occlusion of the right coronary artery in 1 case and a total occlusion of distal left anterior descending artery with intra luminal defect in the remaining cases. Aspiration catheter was used in 3 cases. Balloon angioplasty was performed only in 1 case. Transthoracic echocardiographic examination and transosophageal echocardiographic study demonstrated normal valvular function in all patients and signs of thrombus on the valves or in the cardiac chambers in 5 cases. All patients had a favorable outcome.

Conclusion: In individuals presenting with AMI, CAE should be kept in mind in those with atrial fibrillation or prosthetic valves even in the absence of classical coronary risk factors. Angioplasty using aspiration catheter may be an effective treatment of this condition. The outcome looks gratifying.

The coronary arteries of diabetic: what strategy to support? (Series of 800 patients)

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Introduction: Diabetes is an independent risk factor for morbidity and mortality from cardiovascular disease, in addition to other traditional risk factors. The aim of our work is to illustrate the clinical, angiographic and therapeutic management of coronary artery disease in type 2 diabetics.

Methods: A retrospective study on 500 patients with type 2 diabetes who have been realized a coronarography and followed by the Department of Endocrinology and Cardiology CHU Ibn Rochd of Casablanca, between January 2009 and September 2011.

Results: All our patients have type 2 diabetes lasting for 10 years. The mean age was 52 years with female predominance (55%), the average HbA1c is 8.5%. Like other cardiovascular risk factors, hypertension is noted in 66.9%
of cases, a smoking in 35.83% of cases, 17.25% of obesity cases, hypercholesterolemia in 45% of cases.

The coronaryography was performed in 69% of cases for acute coronary syndrome, assessment of stable angina in 32% of cases. Two-veessel coronary artery disease was noted in 20% of patients and Three-veessel disease represented 35% of cases.

Drug-eluting stents were used in 60% of cases, 10% of coronary artery bypass graft. We noted six deaths, including 2 postoperative.

Conclusion: Coronary artery disease is not only more frequent in diabetics, it is also more severe because of the spread and complexity of coronary lesions, with higher rates of thrombosis and restenosis of stents.

051
Prevalence of metabolic syndrome in patients with acute myocardial infarction (about 409 patients)

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Background: The prevalence of metabolic syndrome is correlated with the extent of damage in symptomatic cardiovascular disease

The aim of our study was to evaluate the impact of metabolic syndrome on morbidity and in-hospital mortality, particularly in terms of death and severe heart failure, and analyze the relative importance of different components that define the metabolic syndrome on the occurrence of these events.

Methods and results: The study included 409 patients admitted for myocardial infarction. The average age of our patients was 64, 42, with a male predominance. Fifty percent patients were hypertensive, 46% had type 2 diabetes, twenty percent of patients had hypertriglyceridemia and 45% a hypoHDLemia. Thirty percent patients have a positive microalbuminuria, 60% have a chronic smoking. The prevalence of metabolic syndrome was 45% defined by the combination of at least three risk factors from the definition of the IDF (International Diabetes Federation) on 2005. Nineteen percent patients had a history of myocardial infarction and 47% had heart failure. The death during hospitalization were 10%. The history of stroke were present in 10% of cases.

Conclusion: The patient who have a metabolic syndrome are at high cardiovascular risk and represent a strong signal that must be detected, managed and fight against all the factors that compose it.

052
Left ventricular aneurysm after myocardial infarction

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Introduction: Left ventricular aneurysm (LVA) constitutes an important complication of acute transmural myocardial infarction (MI). Angiographically defined, LVA has been reported in 7.6% of patients with coronary artery disease (CAD) referred for coronary angiography. It is well established that patients with LVA are exposed to a higher incidence of complications such as arrhythmias, thromboembolic phenomena, and congestive heart failure.

Case report: We report the case of a 76-year-old woman, hypertensive, diabetic, with a history of percutaneous coronary angioplasty with stenting of the distal and mid segments of left anterior descending artery (LAD) for myocardial infarction 10 months ago, admitted to our cardiology department for acute coronary syndrome without ST-segment elevation complicated by left ventricular failure. The electrocardiogram showed sinus rhythm at 100 beats per minute with abnormal Q waves (sequela of necrosis) in the inferior leads. Transthoracic and transesophageal echocardiography revealed an aneurysm of the infero-basal left ventricular wall, having implantation base of myocardial infarction, presents a management problem. Surgical treatment is usually effective and followed by a marked improvement in function but is burdened with a heavy postoperative mortality.

053
Evolution of antiplatelet therapy compliance during the first year after percutaneous coronary intervention: a 100 patients monocentric cohort.

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Aims: Non compliance to dual antiplatelet therapy (DAT) after PCI is associated to a higher cardiovascular mortality. Previous studies about DAT discontinuation only analysed non compliance during short periods, generally less than three months. The purpose of this monocentric prospective study was to analyse DAT discontinuation during a one year follow-up in real-life patients after PCI.

Method and results: We prospectively included 103 consecutive patients who underwent PCI. They underwent a phone questionnaire focusing on DAT compliance every three months on a one year follow-up. Three groups of patients were defined according to compliance WHO (World Health Organization) definition: DAT oversight more than once a week, self-willed DAT discontinuation and good adherers. A total of 100 patients had complete data. Global non compliance to DAT (oversight and discontinuation) was about 33% at twelve months. Twenty seven percent patients forgot DAT more than once a week at one year. More than 50% of DAT oversight occurred within the first month. Self-willed DAT discontinuation occurred in 13% cases, with a progressive increase on the first 12 months, mainly explained by weariness or treatment side effects.

Conclusion: Global DAT non compliance at one year was about 33% cases. There were two profiles of DAT non compliance: oversight, occurring almost within the first month and self-willed DAT discontinuation which progressively increased during the first year. Therapeutic education seems to be pivotal to prevent both behaviours.

054
Additive prognostic value of elevated left ventricular filling pressure during non ST segment elevation acute coronary syndrome

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Myocardial ischemia during acute coronary syndromes (ACS) without ST segment elevation is responsible for diastolic dysfunction. The aim of our study is to evaluate LVFP in patients suffering from an ACS without ST segment elevation and to appreciate the additive prognostic value of this parameter besides the Global Registry of Acute Coronary Events (GRACE) score and the left ventricular ejection fraction (LVEF). This study may lead to a better risk stratification in this population.

Methods: We performed a prospective study in 220 patients admitted to our coronary care unit for ACS without ST segment elevation from January 2007 to September 2008. Risk score stratification using the GRACE score and assessment of systolic and diastolic functions by echocardiography were performed in all patients. LVFP was estimated by the E/e' ratio and the difference between Ap and Am.

Results: The mean age was 58 years with a sex ratio of 4.3. Hypertension, diabetes and dyslipidemia were present in 45%, 45% and 32.2% of cases respecti...