039

The outcome of PCI in the elderly is mostly related to the clinical presentation at admission: insights from a registry study

Anne-Céline Martin, Stéphane Manzo-Silberman, Aurel Chaib, Olivier Varenne, Emmanuel Salengro, Philippe Allouch, Arnaud Jegou, Christian Spaulding

CHU Cochin, Cardiologie, Paris, France

Optimal management of coronary artery disease in very old patients – over eighty years of age – remains unclear due to the absence of large randomized trials in this high-risk subgroup and the benefit/risk ratio of percutaneous coronary intervention (PCI) is difficult to assess in clinical practice.

Aim: The aim of our study was to evaluate the in-hospital and mid-term outcomes of PCI in octogenarians in a prospective registry including patients with clinical presentation ranging from stable angina refractory to medical treatment to cardiogenic shock and to identify the criteria of our decision-making process.

Methods and Results: Between 2003 and 2009, 582 octogenarians were admitted for coronary events. 336 patients benefit from a coronary angiogram; PCI was performed in 232. Mean age was 82 ± 2.6 and 45% were women. The procedures were unplanned due to ST elevation myocardial infarction (STEMI) (32.8%), cardiogenic shock complicating STEMI (9%), and non ST elevation myocardial infarction (NSTEMI) (30.6%). 36.6% of procedures were performed for stable angina refractory to optimal medical therapy. Radial access was used in 87% of cases. Primary success rate was 93%. Three criteria for invasive strategy refusal were identified in our clinical practice: renal insufficiency, anemia and cognitive disorders. Rates of in hospital mortality were respectively 12.5% in all patients; 85.7% in cardiogenic shock, 14.5 % in patients with STEMI without shock, 2.8% in those with NSTEMI and 2.35% in patients with stable angina. The overall three years mortality rate is significantly lower with PCI than with conservative strategy (35% versus 58%, p=0.0002).

Conclusion: In octogenarians, in hospital outcome is strongly related to the clinical presentation at admission. PCI display significantly beneficial effects on mid-term overall mortality in these old patients provided an easy to do selection regards three pitfalls: renal dysfunction, anemia and cognitive impairment.

040

Non-ST-elevation myocardial infarction with a normal coronary angiogram in women: is it serious?

Vincent Labbé, Johanne Silvain, Nicolas Vignonnes, Anne Bellemain-Appaix, Olivier Barthelemy, Benjamin Bertin, Guillaume Cayla, Farzin Beygui, Jean-Philippe Collet, Gilles Montalescot

CHU Pitié-Salpêtrière, Cardiologie, Paris, France

Background: The incidence and long term prognosis of women presenting troponin positive NSTEMI without a normal angiogram is unknown.

Aim: To investigate the incidence, characteristics and long term prognosis of women presenting with a NSTEMI and normal coronary angiogram compared to women with NSTEMI and significant coronary artery disease (CAD) on the angiogram.

Methods: Between 1999 and 2008, we screened patients presenting with an acute coronary syndrome (ACS) to identify those with a positive troponin and a normal angiogram. Extra-cardiac causes of troponin elevation were excluded. Women were matched by age and presence or absence of ST-elevation with a 1:2 ratio, to women with significant CAD. We compared characteristics and outcomes of the two groups of women.

Results: Over 4085 ACS patients, 1581 had a significant elevation of troponin, with 343 women (21.7%) and 1238 men (78.3%). One hundred and twelve patients (7.1%) had a normal angiogram with a 3-fold higher proportion of women (14.5%; n=50) compared to men (5.0%, n=52); p=0.001. When these women with a normal angiogram were compared with 100 women with significant CAD, they were less likely to have a high peak of troponin (>5 times the upper limit of normal: 46% vs. 80%, p=0.001). No other significant difference was found between the two groups. Mean follow-up was 4.3±3.1 years. Women with a normal angiogram had an excellent survival rate of 91.3% compared to 71.2% in women with CAD (p=0.03), they had also a lower readmission rate for cardiovascular reason, (14% vs. 5.4%, p=0.01).

Conclusion: Women presenting with NSTEMI who have a normal angiogram, do not differ from women with NSTEMI and angiographic CAD. However, they have a smaller rise of troponin and a much better long-term prognosis.
Coronary disease in the type 2 diabetic: clinical angiographic aspects and therapeutic support (Moroccan experience)

Fatima Wadrahmane, Loubna Ouarga
CHU Ibn Rochd Casablanca, cardiologie, Casablanca, Maroc

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.

Materials and methods: A retrospective study on 150 patients with type 2 diabetes who have been realized a coronaryography and followed by the Department of Endocrinology and Cardiology CHU Ibn Rochd of Casablanca, between January 2009 and January 2010.

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, smoking in 35.83% of cases, 17.25% of obesity cases, hypercholesterolemia in 45% of cases.

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

Invasive arrhythmic assessment after myocardial infarction: actual results

CHU de Brabois, Cardiologie, Vandœuvre Les Nancy, France

Programmed ventricular stimulation (PVS) was proposed after myocardial infarction (MI) more than 25 years ago, but the management of MI has changed during this period. The purpose of the study was to look for the results of systematic PVS after MI according to the period of indication and remaining indications.

Methods: PVS was performed between 1982 and march 2010, from 4 to 8 weeks after acute MI in 797 patients (pts) without syncope or ventricular tachycardia (VT) to stratify the risk of arrhythmias: 301 (group I) were studied between 1982 and 1989, 315 (group II) between 1990 and 1999 and 179 (group III) between 2000 and 2010 PVS used the same protocol (up to 3 extrastimuli in 2 sites of right ventricle).

Results: Group III pts were older (61±10 years) than group I (56±11) and group II pts (58±11) (p <0.002). LVEF was lower in group III (36±11%) than in group I (44±15) and II (41±12) (p<0.05). PVS was as frequently negative in group III (58.5 %) as in group I (52 %) and II (47 %). Monomorphic VT > 270 b/min was induced as frequently in group III (27 %) as in group I (20 %) (21.5 %). Ventricular fibrillation was induced less frequently in group III (7 %) than in group II (12 %) and I (13 %) (p <0.04). Ventricular flutter (VT > 265 b/min) was induced less frequently in group III (8 %), than in group II (18 %, p < 0.001) and I (15 %) (p < 0.03). The only significant difference was the primary angioplasty with recanalization of occluded coronary artery, more systematic since 2000: total revascularization was obtained in 39 % of group III and 27 % of groups II and I (p <0.05).

Conclusions: The representation of PVS are now easier to interpret, because the induction of non specific arrhythmias, the ventricular flutter and fibrillation, is rarer than before 2000, although PVS was indicated in patients with lower LVEF. The decrease of the induction of this arrhythmia could be related to the more systematic indication of primary angioplasty in MI since 2000. PVS remains useful in pts with debatable indications of defibrillator to help to take a decision.

Coronary thrombectomy: technical comparison of two systems on a laboratory bench. Impact of bends, angles and thrombus age

(1) CHU Bocage, Cardiologie, Dijon, France – (2) CHU Bocage, Pharmacie, Dijon, France – (3) IFR 100 santé-STIC, LPPCE, Dijon, France

Background: Despite the results of recent randomized studies, the systematic use of aspiration techniques in ST-elevation myocardial infarction has not been included in the new guidelines. To date, there have been very few bench tests of the different systems and the aim of our study was to test two catheters on different models of arteries with 6 and 12-hour-old thrombi.

Conclusions: The refined analysis of the ABOARD study confirms the primary analysis of the two groups formed by randomization. Time to catheterization has no impact on clinical outcome when performed swiftly within the first 24 hours of admission.