TCTAP A-183
Impact of Dyslipidemia on 3-year Clinical Outcomes in Patients with Significant Coronary Artery Spasm

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Background: Dyslipidemia is a risk factor of significant coronary artery disease (CAD). Coronary artery spasm (CAS) is also known to be a major cause of myocardial ischemia. However, whether dyslipidemia adds any long-term clinical risk in CAS patients (pts) is largely unknown. We evaluated the impact of dyslipidemia on 3-year clinical outcomes in pts with significant CAS.

Methods: A total of 2,797 consecutive pts without significant CAD who underwent acetylsalicylic acid (Ach) provocation test were enrolled between Nov 2004 and Oct 2010. Pts were divided into two groups according to existence of dyslipidemia (Dyslipidemia group: n=241, Normal group: n=1,136) and major clinical outcomes were compared between the two groups up to 3 years.

Results: At baseline, pts with dyslipidemia had a higher incidence of elderly, hypertension, diabetes and fixed coronary lesion than pts without dyslipidemia. During Ach provocation test, there was no difference in angiographic and clinical parameters between the two groups. At 3 years, the dyslipidemia group had higher incidence of recurrent chest pain (9.9% vs. 5.7%, p=0.012) and major adverse cardiac & cerebrovascular events (MACCE) including all-cause mortality, myocardial infarction, coronary revascularization and cerebrovascular accidents (2.0% vs. 0.5%, p=0.023). However, after multivariate analysis, the only remaining difference was in recurrent chest pain before discharge (HR: 1.32, 95% CI: 1.11-2.98, p=0.016) and after propensity score matching analysis (HR: 2.86, 95% CI: 1.29-6.30, p=0.009).

Conclusion: In this study, pts with dyslipidemia showed significant association with higher recurrent chest pain up to 3 years clinical follow up, suggesting higher chance of profound endothelial dysfunction requiring intensive anti-anginal management and close clinical follow up.

TCTAP A-184
One-year Predictive Factors of Mortality in Diabetic Patients Presenting with Acute Myocardial Infarction in the Tunisian Context

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Background: Diabetes mellitus is a major coronary risk factor in the emerging countries with a deep impact on early and long-term prognosis. We sought to study predictive factors of 1-year mortality in diabetic patients presenting with acute myocardial infarction (AMI).

Methods: We retrospectively studied data from our monocentric AMI registry including 1,386 consecutive patients. Patients were enrolled between January 1998 and January 2012. All patients were managed either by thrombolyis, primary percutaneous coronary intervention or medical treatment. Diabetic patients were first compared to non diabetics regarding demographic and prognostic features then one-year predictive factors of mortality in diabetics were studied in univariate and multivariate analysis.

Results: Out of the overall population, 487 (35.1%) patients were diabetics. Repro fusion therapies implemented were comparable between diabetics and non diabetics. Compared to non diabetics, diabetic patients were more frequently female (26.3% vs. 13%, p<0.0001), suffered more frequently heart failure during hospital stay (24.2% vs. 15.9%, p<0.0001) and had a higher 1-year mortality rate (12.7% vs. 7%, <0.0001). In univariate analysis, factors significantly related to 1-year mortality in diabetic patients were female gender (39.3% vs. 24.3%, p=0.013), an age >75 (17.7% vs. 9.4%, p=0.045), heart failure on admission (51.6% vs. 20%, p<0.001), renal failure on admission (35.5% vs. 8.5%, p<0.0001) and glycaemia higher than 15 mmol/L on admission (63.8% vs. 3.7%, p<0.0001). In multivariate analysis, factors independently associated with 1-year mortality were heart failure on admission (HR: 3.4, 95% CI: 1.8-6.3, p<0.0001), renal failure on admission (HR: 4, 95% CI: 2.8-1, p<0.0001) and a glycaemia higher than 15 mmol/L on admission (HR: 2.2, 95% CI: 1.2-4.1, p=0.009).

Conclusion: In diabetic patients presenting with AMI heart failure, renal failure and a glycaemia higher than 15 mmol/L on admission are independent predictive factors of 1-year mortality.

TCTAP A-185
The Clinical Significance of Microalbuminuria in Patients with Chronic Kidney Disease who Received Drug-Eluting Stents

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Background: The clinical significance of microalbuminuria in CKD patients who underwent drug-eluting stent implantation is unknown. Its significance was examined in this study.

Methods: Subjects were 145 elective CKD patients with 235 lesions, who received a drug eluting stent, and were measured for urine albumin/creatinine ratio (UACR) on the day after PCI. 120 patients, 189 lesions, with UACR<30mg/g were classified the N group and 25 patients, 46 lesions, with 30mg/g≤UACR≤100 mg/g were classified the M group. Late cardiac and cerebrovascular event-free survival (average follow-up 32.8±13.9 months) was studied.

Results: There was no significant difference between the two groups in DM. There was no significant difference revealed between the two groups for late loss (N group 0.32±0.68mm, M group 0.27±0.65mm). Late adverse cardiac and cerebrovascular events were 1 cardiac death, 1 AMI, 1 heart failures requiring hospitalization, 9 cases of TLR in the N group and 1 AMI, 1 heart failures requiring hospitalization, 1 TLR, and 2 stoke in the M group, the M group had a significantly higher rate of stroke (p<0.05) and a tendency for lower freedom from late cardiac and cerebrovascular events (N group 91.7%, M group 80.0%, p=0.0335).

Conclusion: It was suggested that the presence or absence of microalbuminuria in CKD patients who received drug-eluting stents could be useful in predicting the occurrence of late cardiac and cerebrovascular events.

TCTAP A-186
Prognostic Significance of Normal Serum Creatinine Level and Reduced Estimated Glomerular Filtration Rate in Patients Receiving Coronary Revascularization

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Background: Renal function usually evaluated by detecting the serum creatinine level is an significant prognostic factor in patients with coronary heart disease, however, a normal range of serum creatinine can mask the established renal insufficiency. Therefore, patients with normal serum creatinine level and reduced estimated glomerular filtration rate (eGFR) are likely to be ignored before coronary revascularization, similarly, the prognosis of these group is easily neglected and still indeterminate.

Methods: A total of 6,005 consecutive patients with coronary artery disease received the coronary revascularization were prospectively recorded in this single-center registry study at Beijing Anzheng Hospital between July 2003 and June 2005. In present study, 5173 consecutive patients with normal serum creatinine were selected grouped by eGFR to follow up to analyzed prognosis after coronary revascularization. The serum creatinine <1.2 mg/dl was defined normal, eGFR (ml/min/1.73m²) was divided into 3 stages (90, 60~89 <60). We compared the groups in respect of the primary outcome of all-cause death, and the secondary outcome of main adverse cardiac and cerebral vascular events (MACCE) -- cardiac death, non-cardiac death, nonfatal myocardial infarction (MI), nonfatal stroke and repeat revascularization, at a median follow-up of 549 days.

Results: The mean serum creatinine was 0.97±0.32 (10.2, 6.5) mg/dl, with 5256 (87.3%) within normal limits. Among them, 5173 were suitable for our study; in 2265 (43.8%) eGFR was <90 ml/min/1.73m², 2713 (52.4%) was 60~89 ml/min/1.73m², 195 (3.8%) was 30~59 ml/min/1.73m², and none (0%) was <30 ml/min/1.73m².

During hospitalization, there were significant differences in in-hospital all-cause mortality (p=0.006) and no differences in MACCE (p=0.320) among the groups distinguished by eGFR. During follow-up, there were still significant differences in follow-up all-cause mortality (p=0.002) and no differences in MACCE (p=0.240).

On Cox regression analysis, the independent risk factors for all-cause death after coronary revascularization were age, body mass index (BMI), left ventricular ejection fraction (LVEF), history of diabetes mellitus, indication for revascularization, number of diseased coronary artery and failed revascularization; While, only LVEF, number of diseased coronary artery and failed revascularization for MACCE.

Conclusion: Patients with normal serum creatinine and reduced eGFR is common in patients receiving coronary revascularization, and in the present study, normal serum creatinine with mild or moderate renal insufficiency is associated with adverse clinical outcomes. In each group, the gender and mode of revascularization might lead to significant differences in prognosis. Therefore, it is essential to estimate the eGFR of patients even if their serum creatinine is within normal limits.