

**Methods:** June 2008 to June 2013, 1620 cases of diabetes patients underwent coronary angiography, using quantitative coronary analysis method (QCA) to cumulate the sum of the respective integral stenosis. Coronary artery lesion is expressed by ACC/AHA lesion types. According to the 2007 "China Adult dyslipidemia prevention guide" TG  $\geq$  2.26mmol/L, HDL-C  $\leq$  0.88mmol/L defined as high TG/ low HDL-C level.

**Results:** (1) 1620 cases of diabetic patients with high TG/ and low HDL-C in patients was 1069 cases (65.99%). (2) The coronary stenosis score of diabetic patients with high TG/ and low HDL-C is  $10.5 \pm 3.6$ ; The coronary stenosis score of diabetes mellitus was  $7 \pm 3.5$ , there are significant differences between two groups ( $P < 0.05$ ). (3) In Diabetic patients with high TG/ and low HDL-C, the lesions type of B2, C is accounted for 69.6%; in diabetes mellitus group, the lesions type of B2, C is accounted for 47.6%. (4) Stepwise regression analysis showed that, there is a linear relation between coronary artery stenosis degree integral and TG, HDL-C.

**Conclusions:** High TG / low HDL-C may constitute a major cardiovascular risk of diabetes residual dyslipidemia type.

#### GW25-e0243

##### Different levels of glycosylated hemoglobin will influence severity and long-term prognosis of coronary heart disease patients with stent implantation

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**Objectives:** To investigate the relationship between glycosylated hemoglobin (HbA1c) levels and severity and long-term prognosis of coronary heart disease (CHD) with stent implantation.

**Methods:** 2825 consecutive patients with stent implantation were stratified into 3 groups base on the levels of HbA1c: low HbA1c group (group A, HbA1c  $< 5.92\%$ , n=1035), moderate level HbA1c group (group B,  $5.92\% < \text{HbA1c} < 6.82\%$ , n=1025) and high HbA1c group (group C, HbA1c  $> 6.82\%$ , n=765). The impact of HbA1c on the gensini score and long-term prognosis of CHD with stent implantation were observed.

**Results:** After an average of 1 years of follow-up of 2825 patients in a hospital cohort. Participants with low ( $< 41$  mmol/mol or 5.9%) or high ( $> 51$  mmol/mol or 6.8%) HbA1c had a higher risk of MACE, TLR than that of participants with moderate (41-51 mmol/mol or 5.9-6.8%) HbA1c after adjusting for multiple potential confounders (hazard ratios = 1.505, 1.478 and 1.626, 1.522, respectively). Analysis of HbA1c as a continuous variable showed that each XX mmol/mol (1%) increase of HbA1c was significantly associated with a decreased risk of MACE and TLR of 53.5% and 54.2% in those with an HbA1c level of less than 41 mmol/mol (5.9%) and with an increased risk of MACE and TLR by 9.5% and 9.2% in those with an HbA1c level of 41 mmol/mol (5.9%) or higher, suggesting a U-shaped association between HbA1c and risk of MACE and TLR.

**Conclusions:** HbA1c levels, either as a continuous variable or a categorical variable, has a U-shaped correlation with MACE and TLR in CHD patients with stent implantation, even after adjustment for multiple confounders.

#### GW25-e0404

##### Influence of diabetes mellitus on hospitalization costs in patients with acute myocardial infarction

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**Objectives:** To evaluate the impact of type 2 diabetes mellitus co-morbidity on hospitalization costs in patients with acute myocardial infarction (AMI).

**Methods:** Retrospective analysis of data from the case retrieval system of Qilu Hospital of Shandong University located in Jinan city of Shandong Province was conducted in patients with AMI from January 1, 2011 to December 31, 2012.

**Results:** Stent is an important factor affecting total costs of hospital admission ( $\beta = 0.663$ ,  $P = 0.000$ ), total costs per hospital day ( $\beta = 0.561$ ,  $P = 0.000$ ), treatment costs ( $\beta = 0.418$ ,  $P = 0.000$ ) and treatment costs per hospital day ( $\beta = 0.378$ ,  $P = 0.000$ ) of AMI patients over follow-up period (duration of hospital stay only). Stent is also a protective factor to prevent AHF over follow-up period (OR = 0.247, 95%CI: 0.125-0.487,  $P = 0.000$ ). Diabetes group's inpatient incidence of acute heart failure (AHF) is higher than non-diabetes group's (14.0% vs. 6.8%;  $P = 0.002$ ). Implementation of PCI can reduce inpatient incidence of AHF of diabetic (23.3% vs. 4.1%,  $P = 0.000$ ) and non-diabetic (14.5% vs. 2.8%,  $P = 0.000$ ) patients, and elevate inpatient incidence of event-free survival of diabetic (77% vs. 94%,  $P = 0.000$ ) and non-diabetic (86% vs. 94%,  $P = 0.002$ ) patients. Diabetic patients' incremental cost-effectiveness ratio (ICER) estimate for implementing PCI is higher than non-diabetic patients'.

**Conclusions:** Diabetes does not make an impact on total hospitalization costs and treatment costs of AMI patients, and stent is an important factor affecting hospitalization costs over follow-up period. From the perspective of reduction in the inpatient incidence of AHF and increased inpatient incidence of event-free survival after implementing PCI, implementation of PCI after an AMI in patients with diabetes mellitus has a higher level of cost-effectiveness than those without diabetes mellitus.

#### GW25-e0507

##### The effectiveness and safety of percutaneous coronary intervention on unprotected left main coronary arterial stenosis patients

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**Objectives:** To evaluate the effectiveness and safety of percutaneous coronary intervention (PCI) on unprotected left main coronary arterial (UMLCA) 2 years after PCI owing the UMLCA PCI is a challenging technique.

**Methods:** A total of 90 patients with UMLCA stenosis receiving PCI through angiography guidance were enrolled from Jan. 2008 to Jan. 2012. The primary endpoint was a composite of major adverse cardiac cerebral events (MACCE), including cardiovascular death, myocardial infarction, target vessel revascularization and all-cause mortality at 2 years following interval.

**Results:** Among the total 90 patients, male patients were 74.4%, the mean age was ( $63.4 \pm 15.2$ ) years old. The left main ostial, shaft and bifurcation lesions were 15.6%, 25.5% and 58.9%, respectively. The UMLCA stenosis severity was ( $74.6 \pm 12.8$ )%. The mean Syntax score was ( $19.6 \pm 5.2$ ). All 90 patients were stented successfully and 108 drug eluting stents were implanted. The mean stents length was ( $16.3 \pm 2.4$ ) mm and mean dilated stents diameter was ( $3.9 \pm 1.4$ ) mm. 55 patients (61.1%) received 1 stent implantation and 35 patients (38.9%) received 2 stent implantation. After followed 24 months, the all-cause mortality was 5.5%, the target vessel revascularization was 22.6% vs. 10.8% in double stents and single stent strategy respectively,  $P < 0.01$ .

**Conclusions:** PCI for UMLCA stenosis is safety and effectiveness. A strategy of 1 or 2 drug-eluting stents implantation for UMLCA stenosis reveal the single stent strategy was more effective in following 2 years period. The double stents in UMLCA with bifurcation lesions did not improve the 2-year MACCE rates. The 1 or 2 strategy of stents implantation by the operator decision was associated with improved results, the coronary artery bypass grafting was more effective for the UMLCA with bifurcation lesions.

#### GW25-e0852

##### Pro- BNP in patients with pulmonary vein electrical isolation predicts the recurrence of late atrial fibrillation after ablation in paroxysmal and persistent atrial fibrillation

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**Objectives:** To determine the protective value of serum Pro-BNP in the recurrence of late atrial fibrillation after pulmonary vein isolation in paroxysmal and persistent atrial fibrillation.

**Methods:** 94 patients in the present study had symptomatic paroxysmal AF and had failed to respond to at least one anti-arrhythmic drug. All patients underwent electrophysiological study and circumferential pulmonary vein isolation (CPVI) till to achieve PV isolation. Cardiac structure and function were measured with 2-D echocardiogram, and the cardiac biomarker N-terminal pro-brain natriuretic peptide (NT-pro-BNP) was measured before ablation and at long-term follow-up.

**Results:** After follow-ups for 12 months, 72 patients did not recurred any late atrial fibrillation. There was no significant difference of atrioventricular structure and function parameters and pro-BNP in patients between success group and recurrence group before ablation. Left atrial dimension (LAD) and pro-BNP levels fell only after successful AF ablation and NT-pro-BNP after 12 months follow-up. A decrease up of  $> 25\%$  of the baseline value of NT-pro-BNP at follow-up had a specificity of 90.6%, a sensitivity of 80.6 and a accuracy 84.04% for ablation success.

**Conclusions:** A decrease in NT-pro-BNP after CPVI may be a marker of long-term ablation success.

#### GW25-e1070

##### The value of adiponectin and interleukin-18 in predicting the vascular remodeling in coronary in-stent restenosis after percutaneous coronary intervention procedure

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