

RESULTS Two groups of angina, non fatal myocardial infarction and readmission occurred with a statistically significant difference at 24 months ($p < 0.05$), but no significant differences in other follow-up time ($p > 0.05$). Follow up of 24 months, 10 patients in the A group recurrence of angina pectoris (23.26%), non fatal myocardial infarction in 0 cases. The B group had recurrence of angina pectoris in 24 cases (42.86%) of 5 cases of non fatal myocardial infarction (12.5%), a statistically significant.

CONCLUSIONS An important basis for

1. IVUS examination can be used as critical lesion for interventional therapy.

2. IVUS check the critical disease intervention to obtain a relatively high success rate and good clinical outcome.

GW26-e4507

Low-dose adjunctive cilostazol in patients with complex lesions undergoing percutaneous coronary intervention

Xintian Zheng,¹ Tong Liu,¹ Lingxia Xu,¹ Jingjin Che,¹ Seungwoon Rha,² Guangping Li,¹ Kangyin Chen¹

¹Tianjin Key Laboratory of Ionic-Molecular Function of Cardiovascular disease, Department of Cardiology, Second Hospital of Tianjin Medical University; ²Cardiovascular Center, Korea University Guro Hospital

OBJECTIVES Emerging studies suggest that patients with complex coronary lesions undergoing percutaneous coronary intervention (PCI) have more major adverse cardiac events (MACE) than do those with simple ones. Intensive antiplatelet therapy could reduce recurrent ischemic events in the patients with complex lesions. In the present study, we evaluated the safety and efficacy of routine dual antiplatelet therapy plus low-dose cilostazol in patients with complex coronary lesions undergoing PCI.

METHODS A total of 127 patients with complex lesions undergoing PCI in Cardiology Department of the Second Hospital of Tianjin Medical University from October 2012 to April 2014 were randomized to receive: dual (aspirin plus clopidogrel, DAPT, $n = 66$) or triple antiplatelet therapy (aspirin plus clopidogrel plus cilostazol, TAPT, $n = 61$). Patients in the TAPT group received adjunctive cilostazol (100mg loading, followed by 50mg BID) for 3-6 months. The primary endpoint was composite major adverse cardiac events (MACE). The complex coronary target lesions were defined as at least one of followings: left main disease, severe 3-vessel disease, chronic total occlusion (CTO) lesions, true bifurcation lesion (Medina classification: 1.1.1), ostial lesions of main vessels and highly thrombotic lesions.

RESULTS The 2 groups had similar baseline clinical and angiographic characteristics. One-year clinical outcomes showed that the TAPT group had significantly lower incidence of myocardial infarction (1.6% vs 13.6%, $P = 0.018$) and MACE (1.6% vs 16.7%, $P = 0.004$) than did the DAPT group. The DAPT group had 2 cases of stent thrombosis, while the TAPT group didn't have. Furthermore, low-dose adjunctive cilostazol didn't significantly increase the incidence of bleeding events (26.2% vs 19.7%, $P = 0.381$) regardless of major (4.9% vs 4.5%, $P = 0.921$) or minor (21.3% vs 15.2%, $P = 0.368$) events.

CONCLUSIONS Low-dose adjunctive cilostazol seems to be superior to dual antiplatelet therapy in reducing recurrent ischemic events with similar rates of bleeding events in patients with complex coronary lesions. Further study with larger population will be needed to get the definite conclusions.

GW26-e5430

Serum CTRP5 is associated with in-stent restenosis after percutaneous coronary intervention

Ying Shen, Chunyang Pan, Jianping Qiu, Lin Lu, Weifeng Shen
Department of Cardiology, Ruijin Hospital, Jiao Tong University School of Medicine, Shanghai 200025, China

OBJECTIVES To investigate the relationship of serum C1q/TNF-related protein 5 (CTRP5) with coronary artery restenosis after drug-eluting stent (DES) based percutaneous coronary intervention (PCI).

METHODS Clinical characteristics, biochemical measurements, medical treatments, left ventricular ejection fraction (LVEF), serum CTRP5 and coronary interventional features were assessed in 258 consecutive patients with angiographic ISR and 260 age- and sex-matched patients without ISR at one-year after PCI with

sirolimus-eluting stent implantation. Multivariate Logistic regression analysis was performed to determine the independent factors for ISR.

RESULTS Compared with non-ISR patients, those with ISR had higher incidence of prior myocardial infarction and were more likely to be diabetic and cigarette smokers. Serum levels of low-density lipoprotein cholesterol (LDL-C), apolipoprotein B, high-sensitivity C-reactive protein, and glycosylated hemoglobin were higher, but LVEF was lower in patients with ISR. Despite similar degree of coronary disease and site of stent implantation, stent diameter was smaller, stent length was longer, and bifurcation stenting was more common in patients with ISR. The level of CTRP5 in ISR group was significantly higher than that in the control group ($P < 0.05$). Multivariate Logistic regression analysis revealed that prior myocardial infarction (OR=3.23), diabetes (OR=2.33), cigarette smoking (OR=1.85), elevated hs-CRP (OR=1.06), LDL-C (OR=1.30), and CTRP5 (OR=1.51), and greater stent length (OR=1.08) were independent risk factors for ISR, whereas stent diameter (OR=0.39) and LVEF (OR=0.94) were inversely associated with ISR (all $P < 0.05$).

CONCLUSIONS ISR after sirolimus-eluting stent implantation was related to multiple clinical and coronary angiographic and interventional factors. Elevated serum CTRP5 level is an independent predictor for ISR. Optimal control of traditional risk factors and improvement of left ventricular function were crucial in reducing ISR, particularly for patients with small vessel disease, long lesion (stents) and bifurcation stenting. AR-SA', apolipoprotein B, high-sensitivity C-reactive protein, and glycosylated hemoglobin were higher, but LVEF was lower in patients with ISR. Despite similar degree of coronary disease and site of stent implantation, stent diameter was smaller, stent length was longer, and bifurcation stenting was more common in patients with ISR. The level of CTRP5 in ISR group was significantly higher than that in the control group ($P < 0.05$). Multivariate Logistic regression analysis revealed that prior myocardial infarction (OR=3.23), diabetes (OR=2.33), cigarette smoking (OR=1.85), elevated hs-CRP (OR=1.06), LDL-C (OR=1.30), and CTRP5 (OR=1.51), and greater stent length (OR=1.08) were independent risk factors for ISR, whereas stent diameter (OR=0.39) and LVEF (OR=0.94) were inversely associated with ISR (all $P < 0.05$).

GW26-e2932

A practical technique to protect the side branch during PCI for coronary bifurcation lesions: Side branch balloon opening technique

Mantian Chen, Chenxing Shen, Yachen Zhang, Shu Men, Yinggang Sun
Xinhua Hospital

OBJECTIVES Coronary bifurcations (CB) are frequently encountered and remain to be one of the most challenging lesion subsets for coronary intervention. The main strategy nowadays to treat CB lesions is the crossover technique. In brief, a stent was firstly implanted in the main vessel and then branch kissing balloon or the stent-angioplasty performed in the side branch according to the side branch stenosis.

METHODS Detailed steps are as follows:

(1) both SB and the main vessel are wired and then the small-diameter balloon is advanced into the SB beforehand and makes sure that the proximal portion of the balloon protrudes into the main branch at a distance of 2 mm.

(2) After the main vessel predilation and stent implantation, release the stent with minimum named pressure (8-10 atm).

(3) During the main vessel stent released with minimum named pressure (10 atm), Sequent balloon in the ostium of side branch is opening with 6-8 atm.

(4) After the 2.0×15 mm balloon was removed, the main vessel stent balloon released with more pressure (14-16 atm), or A NC-Sprinter balloon was put into the stent and post-dilated with 16 atm pressure.

Here we present one case of coronary heart disease, which performed this approach for side coronary bifurcations.

RESULTS The branch balloon opening technique has the following advantages over the traditional side branch wire protection. It can prevent the ostium of the side branch from aggravation. The stent implantation in the main vessel makes the plaque shift or change the kind of the stenosis, which will leads the compromise of the ostium of the side branch, occlusion or severe stenosis. Though there is report that the jailed balloon can protect the ostium of the side branch, but the just keep the balloon there or balloon the stent first. Here we used the technique that balloon open first and then stent in nominal pressure, the key point is that the opened balloon in the ostium can