

**RESULTS** The number of vessels diseased and per capita implant frame in the PCI group with elevated hs-cTnT is higher than the PCI group with normal hs-cTnT ( $P < 0.05$ ). The incidence rate of cardiovascular events in the PCI group with elevated hs-cTnT is higher than the PCI group with normal hs-cTnT and the control group ( $P < 0.05$ ); However, there is no significant difference between the PCI group with normal hs-cTnT and the control group.

**CONCLUSIONS** Hs-cTnT combined with FFR can guide the coronary artery interventional therapy in treating critical lesion, and predict the rate of major adverse cardiac events after interventional therapy.

#### GW26-e5422

**Patients with residual ischemia on intracoronary electrocardiogram after stenting coronary bifurcation lesions have more angina at 12 month follow-up - insights from intracoronary electrocardiography based strategy for treatment of coronary bifurcation lesions**

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**OBJECTIVES** To evaluate influence of icECG-guided strategy for treatment of side branch after stenting main vessel (in provisional T-stenting strategy) on one year angina or new-onset heart failure symptoms recurrence

**METHODS** 132 patients with stable or unstable angina followed at least 12 months. Inclusion criteria - coronary bifurcation lesions, RVD  $\geq 2.5 - 4.5$  mm; SB RVD  $\geq 2.0$  mm. Exclusion criteria: STEMI; LM stenosis; CTOs; lesion of interest located at infarct-related artery; LVEF  $< 30\%$ ; moderate/severe degree valvular disease; primary cardiomyopathy; L/RBBB, atrial fibrillation/flutter with no identifiable isoelectric line. Intracoronary ECG-guided strategy was followed: after stenting main vessel, icECG from SB was recorded; if ST-segment elevation was recorded then balloon dilatation +/- kissing balloon inflation was performed. Depending on results from icECG (occurrence of ST-segment elevation, STE) 6 groups were formed: Group 1 - SB%DS $>50\%$  after stenting, with icECG STE in side branch region, no further intervention on SB. Group 2 - SB%DS $>50\%$  after stenting, no icECG STE; no additional treatment of side branch. Group 3 - SB%DS $>50\%$  after stenting, icECG STE in side branch region, balloon dilatation of side branch ostium and icECG STE was eliminated afterwards. Group 4 - SB%DS $>50\%$  after stenting, icECG STE in side branch, ballooning of SB ostium, but sustained icECG STE on final record from side branch. Group 5 - icECG STE in side branch region after stenting, but ostial stenosis was less than 50% and no treatment performed. Group 0 - SB%DS  $< 50\%$  after stenting and no icECG STE.

**RESULTS** The rates of angina recurrence or new-onset heart failure at 12 months are presented in the table. On multivariate analysis, the residual ischemia on icECG was independently associated with recurrent angina or new-onset heart failure (HR = 3.731, CI = 1.085 - 27.027,  $p = .037$ ).

	Angina or NO CHF (-)	Angina or NO CHF (+)	p
Group 0	21 (100%)	0 (0%)	p = 0.003
Group 1	8 (67%)	4 (33%)	
Group 2	28 (85%)	5 (15%)	
Group 3	29 (83%)	6 (17%)	
Group 4	12 (57%)	9 (43%)	
Group 5	5 (50%)	5 (50%)	

**CONCLUSIONS** At 12 months patients with residual ischemia on icECG had more recurrent angina or new-onset heart failure symptoms. That was independent from chosen treatment strategy for side branch stenosis.

#### GW26-e1392

**Impact of Tongguan Capsule on periprocedural myocardial injury undergoing percutaneous coronary intervention in coronary heart disease**

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**OBJECTIVES** Percutaneous coronary intervention (PCI) has become a frequently procedure for coronary revascularization in patients with

Coronary heart disease (CHD). Although technical advances in PCI are becoming better and more effective medical therapy can be used, the incidence of periprocedural myocardial injury (PMI) is still high, which is associated with increased subsequent mortality. Here we aimed to analyze the effects of Chinese herbal compound Tongguan Capsule (TGC) on PMI underwent elective PCI in CHD.

**METHODS** We retrospectively enrolled 288 consecutive patients with normal preprocedural cTnI underwent elective PCI. Patients were divided into the two groups according to whether or not took TGC at least one day before PCI: TGC group (n=104) and non-TGC group (n=186). PMI was evaluated by cTnI analysis within 24 hours. The relationship of TGC with peak cTnI values after PCI was examined.

**RESULTS** Peak postprocedural cTnI  $> 1 \times$  upper limit of normal (ULN),  $> 3 \times$  ULN, and  $> 5 \times$  ULN were detected in 159 (55.2%), 120 (41.7%) and 103 (35.8%), respectively. The baseline clinical and procedural characteristics between the two groups were not statistically significant ( $P > 0.05$ ). cTnI values of the two groups were not statistically significant ( $P = 0.828$ ) before PCI, but non-TGC group was significant higher than TGC group ( $P = 0.018$ ) after PCI. Then, TGC group postoperative cTnI elevation  $1 \times$  ULN was 47 patients (45.2%), and non-TGC group was 112 patients (60.9%), the difference between the two groups were statistically significant ( $P = 0.010$ ). Furthermore, TGC group postprocedural cTnI elevation  $3 \times$  ULN and  $5 \times$  ULN were 34 patients (32.7%) and 29 patients (27.9%), respectively. Non-TGC group postprocedural cTnI elevation  $3 \times$  ULN and  $5 \times$  ULN were 86 patients (46.7%) and 74 (40.2%), respectively, the difference incidence of PMI between the two groups were statistically significant ( $P < 0.05$ ). In the multivariable model, TGC group was associated with lower risk of postprocedural cTnI elevation above  $1 \times$  ULN (OR, 0.51; 95% CI, 0.29-0.89;  $P = 0.019$ ),  $3 \times$  ULN (OR, 0.51; 95% CI, 0.28-0.92;  $P = 0.025$ ),  $5 \times$  ULN (OR, 0.52; 95% CI, 0.28-0.98;  $P = 0.045$ ), respectively.

**CONCLUSIONS** Patients with CHD took TGC before PCI might effectively reduce the degree of postprocedural cTnI elevation and decrease the incidence of PMI, suggesting the Chinese herbal compound TGC might play an important role in myocardial protection.

#### GW26-e2127

**Hypoalbuminemia and contrast-induced nephropathy in patients undergoing percutaneous coronary intervention**

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**OBJECTIVES** Preoperative low albumin level is considered to be a risk factor for acute kidney injury in surgical patients. However, the impact of hypoalbuminemia on contrast-induced nephropathy (CIN) in patients undergoing percutaneous coronary intervention (PCI) is unknown.

**METHODS** A total of 674 consecutive patients who underwent selective PCI were included, in which 294 patients had a preoperative albumin level  $< 3.5$ g/dL (hypoalbuminemia), and 380 patients had a preoperative albumin level  $\geq 3.5$ g/dL. CIN was defined as an elevation of serum creatinine by  $\geq 25\%$  or  $\geq 0.5$ mg/dl from baseline within 48h after PCI. Multivariate logistic regression and propensity analyses were performed to evaluate the association between hypoalbuminemia and CIN.

**RESULTS** At last, 36 (12.24%) patients with hypoalbuminemia developed CIN, comparing to that 28 (7.37%) patients without hypoalbuminemia developed CIN ( $p = 0.032$ ). After adjustment for the other risk factors (old age, anemia, eGFR  $< 60$ ml/min-1.73m<sup>2</sup>, and diabetes mellitus), hypoalbuminemia was independently associated with CIN [multivariable logistic analysis: OR 1.452(1.106,2.224),  $p = 0.008$ ; propensity analysis: OR 1.362(1.112-2.235),  $p = 0.012$ ].

**CONCLUSIONS** Hypoalbuminemia might serve as a independent predictor in patients undergoing CIN.

#### GW26-e0100

**Comparison of Iodixanol and Iopromide in Patients with Renal Insufficiency and Congestive Heart Failure undergoing Coronary Angiography by Minimally-invasive Hemodynamic Monitor**

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**OBJECTIVES** Intra-arterial iodinated contrast media (CM) may increase the cardiac preload in the process of percutaneous coronary