(BNP>80pg/ml) and B group (BNP<80pg/ml). The incidence of cardiovascular events during hospitalisation and at 6 months after PCI was analysed.

**Results** Cardiovascular events during hospitalisation in A group included 12 cases, of which 3 died, heart failure occurred in 7 cases; recurrence myocardial infarction and angina in 1 case. 6 months after PCI, there were 4 cases of patients with heart failure and angina occurred in 5 cases. In group B, there were 7 cases of cardiovascular events, 0 deaths, 5 cases of heart failure, angina occurred in 2 cases. Six months later, cardiovascular events occurred in 6 cases, non-cardiac death in 2 cases; heart failure in 3 cases and angina in one. Compared with B group, the incidence of cardiovascular events in A group was significantly higher during hospitalisation (p<0.01), but no different at 6 months after PCI (p>0.05).

**Conclusion** BNP concentration in patients with ACS at 48 h after PCI can only predict short-term prognosis, but cannot predict the long-term prognosis.

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**e0384 THE ANALYSIS OF CLINICAL AND CORONARY ANGIOGRAPHIC CHARACTERISTICS FOR PRE-MENOPAUSAL WOMEN WITH CORONARY HEART DISEASE**

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**Objective** To analyse the clinical and coronary angiographic characteristics for pre-menopausal women with coronary heart disease in Jining City, Shandong Province.

**Methods** 85 female patients with pre-menopausal coronary angiography (CAG) were chosen in Jining First People’s Hospital from May 1, 2001 to May 30, 2010. The patients were divided into Coronary Heart Disease (CHD) group and non-CHD group according to coronary angiography. According to ≥50% stenosis of coronary artery, the patients were divided into three groups: single vessel disease, double vessel disease and triple vessel disease. Risk factors for CHD and angiographic characteristics were analysed. WHO diagnostic criteria was used in the diagnosis of hypertension and diabetes.

**Result** 51 patients were diagnosed with coronary heart disease, 54 patients diagnosed with normal coronary artery. Comparison of risk factors between the two groups: patients with hypertension were 49.4% vs 51.0%, with diabetes were 14.3% vs 3.1%, hyperlipidaemia was 55.6% vs 25.1%, coronary heart disease risk factor’s family history was 57.8% vs 12.6%. Results were above target and there was a significant difference between the groups. The family history of coronary heart disease 27% vs 19.1% showed no difference between the two groups. Typical angina symptoms more common in CHD group, mainly those with acute coronary syndrome. Single-vessel disease, coronary artery disease are more common, with an occurrence rate of 70.97% (22/31), two vessel disease 19.35% (6/31), triple vessel disease 9.7% (3/31). Anterior descending artery involvement is most likely occurring at a rate of 96.77% (30/31), lesion calcification was much lower in rate of occurrence due to the narrowing of the main limitations.

**Conclusion** Hypertension, diabetes, hyperlipidaemia and family history of coronary heart disease are risk factors. These risk factors are not as significant a risk factor in pre-menopausal women with coronary heart disease. Coronary artery disease occurs mainly in single-vessel disease. With the appearance of typical clinical symptoms of angina and multiple risk factors, especially a family history of pre-menopausal female patients, the possibility of major coronary heart disease is larger. For a clear diagnosis, CAG should be performed as soon as possible, in order to avoid misdiagnosis and missed diagnosis. For some patients Target lesion revascularization is necessary.

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**e0385 ANKLE-BRACHIAL INDEX AS A PREDICTOR FOR THE SEVERITY OF CORONARY ARTERY STENOSIS**

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**Objective** To study the relationship between ankle-brachial index (ABI) and the severity of coronary artery stenosis.

**Method** This study enrolled 180 patients, who underwent coronary angiography and ABI measurement in addition to date collection regarding cardiovascular risk factors. They were divided into two
EVALUATION OF CORONARY FLOW VELOCITY RESERVE IN HOMOZYGOUS FAMILIAL HYPERCHOLESTEROLAEMIA BY TRANSTHORACIC DOPPLER ECHOCARDIOGRAPHY AND DUALSOURCE CT

E0386

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Objective Homozygous familial hypercholesterolaemia (HoFH) is a rare disorder characterised by the early onset of atherosclerosis and usually occurs at the ostia of coronary arteries. In this study we used transthoracic Doppler echocardiography (TTDE) to evaluate the dynamic changes of coronary flow in HoFH patients and to detect aortic and coronary atherosclerosis by dual-source CT (DSCT).

Method 20 HoFH patients (12 females, 8 males, mean age 13.1±5.5 years, with a mean low density lipoprotein (LDL) cholesterol 583±113 mg/dl) was studied as experimental group and fifteen patients (8 females, 7 males, mean age 15.2±6.9 years, with a mean low density lipoprotein (LDL) cholesterol 128±71 mg/dl) as control group by TTDE and DSCT.

Result None of the patients showed evidence of ischaemia with standard exercise testing. Though the baseline coronary flow was similar between HoFH patients and normal controls, the hyperaemic flow velocities and thus the coronary flow velocity reserve (CFVR) were significantly lower in those with HoFH (3.36 vs 1.92 respectively, p<0.0001). All HoFH patients had aortic plaques, amongst which nine of them occurred at the coronary artery ostia, who had significantly higher LDL-cholesterol and lower CFVR than those without ostia plaques.

Conclusion Our data demonstrated that TTDE together with DSCT could be a useful non-invasive method for detection of coronary flow dynamics and atherosclerosis specifically in HoFH subjects with coronary ostia involved.

E0387 PERCUTANEOUSLY INTERVENTION WAS SUCCESSFULLY PERFORMED IN RIGHT CORONARY ARTERY COMBINED WITH RIGHT SINUS OF VALSALVA ANEURYSM

E0387

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Introduction Sinus of Valsalva aneurysms (SVA) are rare cardiac anomalies. They may be congenital or acquired and are usually asymptomatic unless complicated by such developments as intracardiac rupture with formation of a fistula or aortic valvular insufficiency. The following case is unusual in that the presenting symptom was angina pectoris due to severe atherosclerotic coronary disease with development of an aneurysm of the sinus of Valsalva secondary to atherosclerotic involvement of the aorta.

Case report A 50-year-old male patient presented with 2-week history of increasing exertional chest pain and intermittent chest pain at rest for 1 week. Echocardiography as well as contrast enhanced aorta CT revealed dilatation and irregular protrusion of the right sinus of Valsalva encroaching on right ventricular inflow tract. The aneurysm of the right sinus of Valsalva was about 4.2 cm in diameter. The aortic valve annulus and aortic valve leaflets were normal. Besides that, contrast enhanced aorta CT showed multiple spotted or comma calcification at aeurysm wall, and at the whole range of aorta accompany by irregular intima thickness. In addition, selective coronary angiography showed 95% discrete diameter stenosis at the proximal segment of right coronary artery. A 50% and a 70% tubular diameter stenosis were separately noted at the proximal segment of left descending artery and at the origin of first diagonal branch. With these findings, severe coronary atherosclerosis combined with unruptured aneurysm of the right sinus of valsalva was diagnosed. Percutaneously coronary intervention (PCI) was successfully performed, and one drug-eluted stent was deployed in the proximal right coronary artery. There was no dissection at the localisation of stent and aortic root.

Conclusions In general, the surgical method for treating severe coronary heart disease associated with unruptured SVA generally consists of coronary artery bypass grafting and closure of the opening of the aneurysm. To our knowledge, it is the first report that percutaneously intervention was successfully performed in right coronary artery combined with right sinus of valsalva aneurysm. Thereby, PCI may be an alternative treatment strategy for this clinical situation.