Hyperhomocysteinemia is independently associated with percutaneous coronary intervention. Patients with renal dysfunction who underwent percutaneous coronary intervention (PCI).

**METHODS**

We conducted a prospective study involving 247 patients with type 2 diabetes and renal dysfunction (eGFR < 60 mL/min per 1.73 m²). PCI was performed with standard procedure. Plasma levels of homocysteine were measured before PCI. Based on the plasma homocysteine levels, patients were divided into three groups: the first tertile (n = 82, homocysteine < 12.4 μmol/L), the second tertile (n = 82, 12.4-16.9 μmol/L), and the third Tertile (n = 83, >16.9 μmol/L). CIN was defined as an elevation of serum creatinine by ≥25% or >0.5 mg/dL from baseline within 48 h after PCI. Multivariate logistic regression analysis was performed to determine the predictors of CIN.

**RESULTS**

The incidence of CIN was significantly higher in patients with the third homocysteine tertile, when compared to those with the first and second tertile (28.04% vs. 10.97% vs. 8.43% respectively, \( P < 0.001 \)). At the same time, the levels of plasma homocysteine significantly increased in CIN patients than those without CIN (18.1±4.6 μmol/L, 14.4±3.7 μmol/L, \( P < 0.001 \)). After adjustment for the other risk factors such as age, anemia, eGFR, myocardial infarction, IABP, LVEF, Hba1c and contrast volume, multivariate logistic regression analysis considered that hyperhomocysteinemia was an independent predictor for CIN (Odds ratio 1.574 (1.127, 2.365), \( P < 0.001 \)).

**CONCLUSIONS**

Hyperhomocysteinemia is independently associated with a greater risk of CIN in diabetic patients with renal dysfunction who underwent PCI.
OBJECTIVES To investigate the feasibility and safety of anterograde and retrograde technique in thoracic endovascular aortic repair in the treatment of complicated type B aortic dissection.

METHODS From February 2009 to January 2014, 102 cases of complex type B aortic dissection patients admitted to our hospital, 89 cases who received TEVAR by routine transcutaneous retrograde wire technique as control group. 13 cases who received TEVAR by anterograde and retrograde technique following failure of routine transcutaneous retrograde wire technique as treatment group. Compare the aortic maximum false lumen and minimum true lumen diameter in two groups of preoperative and postoperative 3 months, in-hospital mortalities, time of X ray exposure and length of stay.

RESULTS Angiography after the operation showed that the proximal thoracic aorta dissection were sealed completely, and the visceral arterial blood supply was restored mainly via the true lumen in all patients. The instant success rate of operations was 100% in treatment group, compared with the control group was 93.5%. No case was occurred serious complications such as endoleak and para-plegia. Two groups of preoperative false lumen diameter are no statistical significance (P=0.23). Compare two groups of preoperative minimum true lumen diameter have statistical significance (P=0.028). Follow-up 3 months after operation revealed no major cardiovascular events happened, review the CTA aortic false lumen has no obvious expansion, and the postoperative maximum false lumen diameter was no evident difference between two groups (P=0.33).

CONCLUSIONS Anterograde and retrograde technique significantly increases the success rate of procedure in patients who failed in retrograde wire technique. It is feasible and safe to perform anterograde and retrograde technique in complicated type B dissection patients with adequate short-term outcome.

GW26-e2286
MRI tissue perfusion evaluation in patients with chronic limb ischemia compared with healthy subjects.
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OBJECTIVES The prevalence of chronic limb ischemia ranges from 3 up to 10%. As the main cause of non-traumatic amputations, peripheral artery disease (PAD) leads to a working age population decrease. This is a serious social problem which causes the urgent need to improve the diagnostic approaches. Nowadays there is a great need to develop the new methods for a sensitive and specific assessment of a skeletal muscle perfusion. Magnetic-resonance imaging (MRI) provides a non-invasive tissue perfusion evaluation.

METHODS A total of 43 subjects were studied. 35 PAD patients with claudication symptoms and an ancke-brachial index (ABI) 0.3-0.8 and 8 healthy volunteers. All performed supine plantar flexion of the foot in a 1.5T MRI scanner for 5 minutes or until limiting symptoms with intravenous gadolinium-based contrast media administration (GdDPA). Peak tissue perfusion (TP) was measured by placing a region of interest in the region of a tibialis anterior muscle. Time-intensity curve of TP was generated by Siemens Mean Curve Software. TP level was evaluated in relative values.

GW26-e1562
Effects of Angiotensin blockades on marfan syndrome: a meta-analysis of randomized controlled trials
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OBJECTIVES To evaluate the efficacy of angiotensin blockades (ABs) in patients with Marfan syndrome (MFS).

METHODS We systematically searched Pubmed, Embase, Web of Science, and Cochrane Library of clinical trials databases from inception to December 31, 2014 to identify all randomized controlled trials (RCTs) evaluating the effects of ABs including angiotensin receptor blockers and angiotensin-converting enzyme inhibitors on MFS. The primary outcome was change in the diameter of the aortic root. Secondary outcomes were elective aortic surgery and combined adverse events (CAEs) including aortic dissection or rupture incidence and death.

RESULTS We included 5 RCTs with a total of 904 MFS patients. The 5 trials of ABs therapy had 455 patients; 10 (2.2%) receiving perindopril(1 study), 445(97.8%) receiving losartan(4 studies); the control group of 449 patients were receiving the placebo(2 studies) or beta-blockers (3 studies). When data were pooled across the 5 included RCTs, the ABs was superior to control in reducing the aortic root dilatation (MD -1.5, 95%CI -2.39 to -0.62). And we found that there was no significant difference in CAEs and elective aortic surgery between the 2 groups (OR 1.66, 95%CI 0.33 to 8.45; OR 1.59, 95%CI 0.86 to 2.94, respectively).

CONCLUSIONS ABs treatment reduces aortic root dilatation rate in patients with MFS. However, treatment with ABs could not prevent attainment of important clinical end points including death, aortic rupture or dissection, and elective surgery.