associated genes have been identified, including the gene encoding cardiac troponin T type-2 (TNNT2). We examined polymorphisms of the TNNT2 gene in a Kazak family from Xinjiang, China, and in idiopathic DCM (IDCM) patients of both Kazak and Han ethnicity.

**METHODS** Peripheral blood samples were collected from 9 members of the FDCM, from 180 patients with IDCM (90 Kazak and 90 Han), and 180 healthy controls (90 Kazak and 90 Han). PCR was used to amplify 15 exons and nearby introns of the TNNT2 gene. The amplified products were sequenced and compared to the standard sequence in Pubmed by BLAST and CHROMAS software, to identify mutation sites.

**RESULTS** IDCM from Kazak and Han were compiled for Hardy-Weinberg equilibrium. There was a significant difference in the genotype distribution ($\chi^2 = 6.67, P = 0.015$) and allele frequency ($\chi^2 = 5.17, P = 0.0017$) between IDCM and controls of SNPs rs3729547. Meanwhile, it also has a difference in the genotype distribution ($\chi^2 = 7.62, P = 0.022$) and allele frequency ($\chi^2 = 6.73, P = 0.009$) between Han with IDCM and Han controls, but the rate of IDCM was descended. A novel variant (c.676G>T) was identified in one FDCM patient at exon 13, this mutation caused an amino acid substitution.

**CONCLUSIONS** The TNNT2 SNP rs3729547 is not only a possible independent risk factor for Han ethnicity, but also for Kazak ethnicity.

**GW26-e4659** Treatment for hypertrophic obstructive cardiomyopathy by coil embolization of a targeted septal artery

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**OBJECTIVES** To investigate the immediate and short-term therapeutic efficacy and feasibility of coil embolization of a targeted septal artery in patients with hypertrophic obstructive cardiomyopathy (HOCM).

**METHODS** Four patients with hypertrophic obstructive cardiomyopathy refractory to medication were chosen, and treated with coil embolization of a targeted septal artery. Preoperative, intraoperative and postoperative left ventricular outflow tract pressure gradient (LVOTPG), septal thickness and systolic anterior motion of mitral (SAM) phenomenon were compared. Postoperative complications and improvement of clinical symptoms were observed.

**RESULTS** Embolization of the targeted septal branch was successfully performed in 4 patients. Compared with preoperative LVOTPG of patients after balloon pressure and complete occlusion were significantly lower(92.50±26.30 vs. 38.00±6.93 and 28.25±6.24 mmHg; $P < 0.05$, respectively). The average septal thickness of patients at one month after operation was not statistically significant difference compared with the preoperative value(18.40±2.36 vs. 18.68±2.42 mm; $P > 0.05$, respectively). Follow-up of the 4 cases at 1 month after operation revealed remarkable attenuation of SAM phenomenon. We did not detect ventricular tachycardia and atrioventricular block. Postoperative NYHA classification were significantly lower than baseline (3.00±0.82 vs. 1.50±0.58; $P < 0.05$, respectively).

**CONCLUSIONS** The study showed treatment for hypertrophic obstructive cardiomyopathy by coil embolization of a targeted septal artery is feasible. In the treatment of HOCM, coil embolization of a targeted septal artery can significantly reduce LVOTPG and improve clinical symptoms.

**GW26-e4624** The effects of smoking and drinking on all-cause mortality in patients with dilated cardiomyopathy: a single-center cohort study

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**OBJECTIVES** Recent studies have shown that smoking and drinking are associated with poorer outcomes in patients with cardiomyopathy. The purpose of this study was to determine all-cause mortality in dilated cardiomyopathy (DCM) associated with smoking and drinking.

**METHODS** An observational cohort study was undertaken in DCM patients from November 2003 to September 2011. A total of 1188 patients were enrolled, with a mean follow-up of 3.5±2.3 years. Standard demographics were obtained, and transthoracic echocardiography and routine blood testing were performed shortly after admission. Outcome assessment was based on the all-cause death after admission.

**RESULTS** The patients were divided into three groups: non-smokers (n = 559), moderate smokers (n = 159) and heavy smokers (n = 366). The all-cause mortality rates showed no differences between the three groups (23.8%, 20.8% and 24%, respectively; log-rank  $\chi^2 = 1.281$, $P = 0.527$). There was also no significant difference in mortality between non-smokers (n = 579), mild smokers (n = 142) and moderate smokers (n = 229) (23.2%, 23.2% and 22.3%, respectively; log-rank  $\chi^2 = 2.342$, $P = 0.310$). In the Cox analysis, neither the smoking (HR 0.971, $P = 0.663$) nor the drinking status (HR 0.891, $P = 0.140$) was a significant independent predictor of all-cause mortality in patients with DCM.

**CONCLUSIONS** In conclusion, there were no significant differences in mortality between the smoking- and drinking-related patient groups, indicating no effect of smoking and drinking on all-cause mortality in patients with DCM in the present large-scale study.

**GW26-e0787** Correlation between Tei index and B-natriuretic peptide in dilated cardiomyopathy patients

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**OBJECTIVES** The growing number of heart failure patients is becoming an important issue in cardiology. B-natriuretic peptide (BNP) is a recognized marker of heart failure, including in patients with dilated cardiomyopathy. The Tei index is an indicator of left ventricular function. The aim of the study was to evaluate the relationship between Tei index and the concentration of plasma BNP in dilated cardiomyopathy patients.

**METHODS** Fifty patients with dilated cardiomyopathy were enrolled in the study. Fifty healthy individuals were assigned to the control group. BNP was measured by enzyme linked immunosorbent assay (ELISA). Echocardiography was performed to calculate Tei index.

**RESULTS** Median value of BNP in patients with dilated cardiomyopathy was 1086.1 pg/ml, and 42.8 pg/ml in control group ($P < 0.05$). The median value of the Tei index was 0.80 in patients with dilated cardiomyopathy, 0.30 in individuals with control group. LVEDD, LVESD, Tei index was found. The stepwise regression analysis showed closer positive correlation between Tei index and BNP.

**CONCLUSIONS** There was a significant difference in the genotype distribution ($\chi^2 = 5.17, P = 0.009$) between Han with IDCM and Han controls, but the rate of IDCM was descended. A novel variant (c.676G>T) was identified in one FDCM patient at exon 13, this mutation caused an amino acid substitution.

**GW26-e4626** Percutaneous transluminal coil embolization of septal artery for ablation of septal hypertrophy in hypertrophic obstructive cardiomyopathy

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**OBJECTIVES** To evaluate the feasibility and the safety after nonsurgical septal myocardial reduction by coil embolization in hypertrophic obstructive cardiomyopathy (HOCM).

**METHODS** Thirteen patients (pts) (male: 5 pts; mean age: 48 (10 years) with HOCM and drug-refractory symptoms underwent ablation of septal hypertrophy by coil embolization with detachable coils. The Torpede® coils (Cook Inc., Bloomington, IN, USA), with diameter of 2 or 3cm in length, were delivered through a 3F RenegadeTM Hi-Flo microcatheter (Boston Scientific Scimed, Maple Grove, MN, USA) positioned inside the target vessel as distally as possible. One or more straight coils were used for each target vessel until complete flow obstruction was noted. The intraventricular pressure gradient