

comprehensive techniques. If the popliteal flow is restored in time, PAE has no significant effect on long-term patency and limb salvage rates.

## Cardiovascular Disease and Surgical Care

GW25-e4207

### Effect of nurse-led peer education program on self-management behavior for coronary stent implantation patients

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**Objectives:** To study the effect of community nurse-led peer education program on self-management behavior of coronary stent implantation patients.

**Methods:** The convenience sampling method was used in the study. A total of 120 coronary stent implantation patients were collected during April to October 2012. They are randomly divided into two groups, each group had 60 participants. The experimental group accepted the intervention of peer education program which organized and implemented by cardiologists and nurses. The program was provided in 6 sessions of 1-2 hour duration in 12 weeks. Peer educators introduce coronary stent implantation related knowledge including postoperative medication, diet, exercise, emotion management, etc. At the same time, the Peer educators and the audience share the experience of self-management. Two medical staff responsible for on-site supervision and provide consulting. Self-management behavior of 120 patients after coronary stent implantation were evaluated after the program using validated questionnaire.

**Results:** Compared with control group, there are significant differences in terms of smoking, drinking, drug compliance, physical activity, emotional control and disease knowledge ( $P < 0.05$ ).

**Conclusions:** Nurse-led peer education program will promote of self-management behavior of coronary stent implantation patients in communities.

GW25-e2101

### Correlation Analysis and Nursing about Patients' Anxiety and Surgical Complications in Coronary Intervention Diagnosis

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**Objectives:** With the progress of coronary heart disease intervention technology, the safety of the operation was greatly improved, but the postoperative blood vessel complications couldn't be eliminated. The aim of this study was to explore correlation analysis and nursing about anxiety and surgical complications in coronary intervention diagnosis.

**Methods:** 806 patients in Coronary Intervention were divided into two groups (the anxious group 390 and the not anxious group 416) and were compared in complications and postoperative pain degree (NRS with pain score), analyzed the cause of anxiety with the self-made questionnaire. There were no statistically significant differences in age, duration, diabetes between two groups. Spss16.0 was applied to compare the two groups, a chi-square test.

**Results:** The two groups were statistically significant differences in the low blood sugar, the vagus nerve reaction disease and pain score, (12.3%, 4%,  $\chi^2 = 4.893$ ,  $P = 0.027$ ), (12.3%, 0,  $\chi^2 = 5.321$ ,  $P = 0.021$ ) and  $Z = -4.341$ ,  $P = 0 < 0.05$ . The operation effect and the way (85.85%) pre-operation and complications (86.79%) post-operation were the main reasons for anxiety.

**Conclusions:** The postoperative complications in coronary intervention diagnosis and treatment were effected factors of anxiety, but some factors could be analyzed, so the systematic nursing service could prevent complications.

GW25-e3233

### Effects and mechanisms of Nicorandil anatomic no reflow after myocardial ischemia/reperfusion in rats

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**Objectives:** To establish the model of myocardial ischemia-reperfusion, to investigate effects and mechanisms of nicorandil and adenosine anatomic no reflow and ventricular remodeling after acute myocardial ischemia reperfusion in rats. To investigate the pharmacological effects and the safety between nicorandil with adenosine.

**Methods:** Male SD rats were randomized into sham operation group, control group, adenosine treatment group and nicorandil treatment group. For acute experiments, control group, adenosine treatment group and nicorandil treatment group were subjected ischemia for 45 minutes by ligation of coronary artery after thoracotomy and sequentially reperfusion for 120 minutes to establish acute myocardial ischemia/reperfusion no reflow models. Sham operation group weren't underwent occlusion of coronary artery. All rats were sacrificed after reperfusion for 120 minutes. Thioflavine

S, EB and TTC staining were performed to evaluate area of no reflow (ANR), infarcted area (IA), risk area (RA) of heart. For chronic experiments, control group, adenosine treatment group and nicorandil treatment group were subjected ischemia for 45 minutes by ligation of coronary artery after thoracotomy and sequentially reperfusion to establish myocardial ischemia/reperfusion no reflow models. Sham operation group weren't underwent occlusion of coronary artery. On the 28th day after operation, cardiac function in all surviving rats were evaluated by echocardiography. Rats were sacrificed. Picrosirius red staining plus light microscopy was used to quantitative analyze thickness of left ventricular free wall in infarcted region (LVWT, SPD and SPT/LVWT, MAAS and CVF).

**Results:** For acute experiments, after 120 minutes for reperfusion, there were no statistical differences in ARR/LV among control group, adenosine group and nicorandil group ( $P > 0.05$ ). A markedly reduced NA/AAR and ANR/AAR observed in nicorandil group and adenosine group, and the differences were significant compared with the control group ( $P < 0.01$ ). This illustrated that nicorandil and adenosine reduced size of myocardial infarct, area of no reflow and improved myocardial perfusion. For chronic experiments, after 28 days for reperfusion and then evaluating cardiac structure and function, cardiac ultrasound showed that the ejection fraction (EF) of rat in nicorandil group was significantly increased and the differences were significant compared with the control group ( $P < 0.05$ ), while end-diastolic volume (EDV) was decreased significantly ( $P < 0.01$ ). It showed that nicorandil could improve ejection fraction of left ventricle and reduce end-diastolic volume. Meanwhile, rats were sacrificed. There was myocardial fibrosis, Fibroblast proliferation and collagen deposition, in the area of myocardial infarction with control group, resulted in ventricular remodeling. The statistical differences were significant in reducing the degree of fibrosis compared with the control group ( $P < 0.01$ ). This displayed that nicorandil and adenosine both reduced the extent of myocardial fibrosis. Improved ventricular remodeling pathological stage of myocardial infarction.

**Conclusions:** This work The study concluded that nicorandil reduced size of myocardial infarct, area of no reflow and improved myocardial perfusion and ejection fraction, decreased end-diastolic volume, as well as reduced the extent of myocardial fibrosis improved ventricular remodeling pathological stage of myocardial infarction in the SD rats animal model of Myocardial ischemia reperfusion. The mechanism and effect between nicorandil and adenosine were resemble.

GW25-e4302

### Importance of Whole Range of Care and Love Mode for Patients of the Chest Pain Center with STEMI

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**Objectives:** Cardiovascular diseases, especially coronary heart disease has become the second leading cause of death from disease. The thrombolysis from a Rural hospital and a quickly transportation of the AMI patients in time window to the Central Hospital for direct PCI, that has become an important method of reducing acute mortality and improving the long-term prognosis. That is why the Chest Pain Centers came into being. The CPC will be to promote the advantages of multi-disciplinary integration, rational use of medical resources, that is the practice of managed care concept. Nursing care and love is a process that the nurses apply their expertise and skills to help patients restore or maintain a healthy. Nursing care and love is focused on understanding the uniqueness of each person and try to help patients restore or enhance response capabilities. It has three meanings: (1) the nursing behavior; (2) the care and love that attitude and emotional costs to treat patients; (3) the responsibility. And the whole range of care and love model in Chest Pain Center patients with STEMI is theoretically consistent with the purposes and objectives of CPC's established throughout. This study is to explore the effect of the care and love model evaluation practices in the treatment and rehabilitation for the patients with STEMI of CPC.

**Methods:** Selected the emergency "chest pain" STEMI patients from May 1, 2013 to June 1, 2013 (before the CPC), in the First Hospital of Jilin University, to admitted them for the control group, a total of 49 people; Chose the "chest pain" STEMI patients from 1 October 2013 to 1 November 2013 in the hospital for the experimental group, a total of 56 people. Both groups are voluntarily enrolled in the study, and the exclusion of non-independent activity, no self-care ability, no language ability of patients after admission underwent primary PCI. And the control group use traditional model of care in nursing; the experimental group use the nursing model of care and love until their return to the community for the entire continuity of care of the patient's care, including the application of the advanced equipments such as the IVT Que fly rescue system, rapid test systems, and the triple CT for rapid triage diagnosis and treatment, perioperative care, cardiac rehabilitation guidance and community follow-up guidance. Comparison with the Activity of Daily Living Scale (ADL) of patients, EF%, and the stenosis rates. Using SPSS17.0 statistical software for data analysis.

**Results:** The ADL scores of patients in the experimental group was (16.3±5.7) points, including the Physical Self-maintenance Scale (PSMS) score was (6.2±2.7) points, and the Instrumental Activities of Daily Living Scale (IADL) score was (9.9±3.5) points; ADL scores of patients in the control group was (23.1±8.5) points, including PSMS score was (7.2±2.4) points, IADL score was (15.9±6.5) min. The traditional model of care and nursing care for the whole pattern comparison in terms of ADL