patients were followed up for major adverse cardiovascular events (MACE) during one year after PCI. MACE include cardiac death, nonfatal myocardial infarction and target vessel revascularization (TVR).

RESULTS In postmenopausal women with acute coronary syndrome, low-density lipoprotein (LDL-C) and triglycerides (TRIG) were significantly increased, while, high-density lipoprotein (HDL-C) was decreased obviously in diabetic patients compared with non-diabetic patients. Moreover, SYNTAX score and proportion of patients with SYNTAX score > 23 in poor-control diabetics group were much higher than non-diabetics group and good-control diabetics group (P < 0.05). Diabetics compared with non-diabetics have obvious downtrend of left ventricular ejection fraction (LVEF), the lowest was poor -control diabetes. There was some correlation between HbA1c and SYNTAX score (regression coefficient = 0.081, P < 0.05). There was some correlation between HbA1c and LVEF (regression coefficient = -0.109, P < 0.01). The rate of MACE and TVR in poor-controlled diabetics was prominently higher than that in non-diabetics. Present uni- and multi-variable Cox regression analysis for predictors of MACE. After adjustment for potential confounders, the risk of MACE in poor-control diabetics (HbA1c > 7%) was 1.342 times of the risk in non-diabetic patients (adjusted HR - 1.342; IC 95%, 1.152-1.521; P < 0.05). The confounders included age, BMI, hypertension, LDL-C, stent length, stent number, SYNTAX score, LVEF, statin, ACEI/ARB. However, the risk of MACE in good-control diabetics (HbA1c < 7%) had no difference with that in non-diabetics.

CONCLUSIONS In postmenopausal women patients with acute coronary syndrome, high level of HbA1c is relative with severity of coronary lesions and cardiac function decline; high level of HbA1c in diabetics is also relative with major adverse; cardiovascular events (MACE) after PCI, most of which are TVR, before acute coronary syndrome happened, good glycemic control to obtain HbA1c<7% in diabetics is benefit in improvement of the clinical outcome.

GW26-e2966
An Analysis of Clinical Features of Coronary Collateral Circulation for the Patients with Acute Myocardial Infarction
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OBJECTIVES This study analyzes clinical data of the patients with acute myocardial infarction (AMI). Then it explores the factors of the formation of coronary collateral circulation.

METHODS Collected the cases of 142 patients who experienced the first AMI and then were treated in the Medical Department of Taiyuan Central Hospital from January 2013 to June 2014. All patients received PCI within 1d after their first paroxysm of AMI, among which male subjects are 108 and female 34. Their ages are from 35 to 75, with the average age 58±12.6. According to the result of coronarography, the patients are divided into the group of good collateral circulation (good group: level 2 and level 3 in collateral circulation) and the group of poor collateral circulation (level 0 and level 1 in collateral circulation) in terms of Rentrop's collateral circulation grades. The study analyzes clinical data which might affect the establishment of collateral circulation in the two groups, including general data, the risk factors of coronary heart disease, blood biochemical examination, and coronary angiography. Then it compares the differences between the two groups.

RESULTS 1. The two groups have no significant difference (P > 0.05) in age, sex, the history of smoking, blood lipid level, the distribution of pathological change of blood vessel.

2. The morbidity of hypertension of the two groups is 60.4% VS 44.9% (P < 0.043), that of diabetes mellitus 32.1% VS 60.7% (P < 0.028), the rate of the course of angina before myocardial infarction 52.8% VS 34.8% (P < 0.035). So there is significant difference in these data. Observing the numbers of pathologic change in coronary artery lesion, the rate of single vessel disease with non-diabetic group is markedly lower than that in good group, while the rate of single vessel disease in good group is evidently higher than that in good group (Both are P < 0.05). The differences are significant in statistics.

3. Univariate analysis between the groups was statistically significant when factors affecting the formation of collateral circulation Multivariate regression analysis Logistic, find that diabetes mellitus (OR=0.22, P < 0.05), the course of angina before myocardial infarction, the number of coronary artery lesion are independent effect factors for the formation of collateral circulation. The latter two are favorable factors for the patients to form CCC, while diabetes mellitus is the adverse factor to form collateral circulation.

CONCLUSIONS 1. The age, sex, the history of smoking, blood lipid level, hypertension, and the distribution of pathological change of blood vessel have no significant influence on Coronary collateral circulation.

2. The course of angina before myocardial infarction and the number of coronary artery lesion are favorable factors for the patients to form good collateral circulation, while diabetes mellitus is the adverse factor for the formation of collateral circulation.

3. Triple vessel disease is much easier than double and single vessel disease to form good collateral circulation.

GW26-e4661
Analysis of effectiveness Primary Percutaneous Coronary Intervention (PPCI) assisted by ECMO in critical AMI patients
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OBJECTIVES To evaluate the effectiveness of ECMO (Extra-Corporeal Membrane Oxygenation) in PPCI in critical AMI patients.

METHODS We analyzed 19 AMI patients accompanied with cardiac shock, or sudden death underlying primary percutaneous interven- tion assisted by ECMO from April 2009 to November 2014 retrospectively. We record the basic data of all patients, and also the status when ECMO planted, coronary artery lesions, the strategy of PPCI, flow volume of ECMO, the duration of ECMO application and clinical outcome. According to the clinical outcome, we divided the patients into two groups: survival and dead, and compared the above data of the two groups.

RESULTS All PCI assisted by ECMO (V-A ECMO) is successful (100%), and the survival is 8 of 11 (72.7%). All the data of the two groups is comparable except the culprit vessel, compared with non-LAD, when culprit is LAD, the mortality rate is higher.

CONCLUSIONS PPCI assisted by ECMO is feasible in patients with AMI accompanied with cardiac shock or sudden death, according to our study, we found that culprit vessel is non- LAD is associated with a higher survival rate, suggesting that we should provide a more active therapy to these patients; perhaps we need more cases to prove other factors can affect mortality; perhaps the time delay of the implanta- tion of ECMO and the quality of basic life support is of valuable on improving clinical prognosis.

GW26-e0264
Microarray analysis of differential gene expression profile in the peripheral blood cells of the patients with myocardial infarction
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OBJECTIVES The polygenic nature of myocardial infarction and its dependence on environmental factors pose a challenge for biomedical research. We hypothesized that the analysis of gene expression profiles from peripheral blood cells would distinguish patients with myocardial infarction from healthy people. In order to investigate this a microarray analysis was accomplished, and the function of these differential genes in the process of the occurrence and development of myocardial infarction were discussed.

METHODS A total of 24 samples (n=24) were recruited in this study; 12 myocardial infarction and 12 healthy people. The total mRNA of the samples were extracted from leukocyte in the peripheral blood, and were reverse-transcribed to cDNA. For microarray studies, we con- structed 2 pools of 3 samples (3 myocardial infarction and 3 healthy people). The other samples were used for RT-PCR to confirm the microarray data. Randomly selected CYP4F3, IL13RA1, USP25 from the results of microarray for RT-PCR, which respectively acted as the representative of over expression group, normal expression group and low expression group. The results of RT-PCR was analyzed by 2-DDCt method.

RESULTS The results of microarray showed that there were 559 genes had different expression, among them 228 genes had over expression