

the mortality of the patients treated with clinical pathway pattern was significantly lowered (4.4% vs 8.7%). Prognostic evaluation showed that the life quality of patient treated with clinical pathway pattern in a year scored an average of 0.09 points higher than that of patients without clinical pathway (21.4%), and health increased by 2.17 points (3.5%).

CONCLUSIONS The implementation of clinical pathway shortened the D2B time, promoted the efficacy of PCI in patients with STEMI, and improved the prognosis and quality of life for patients.

GW27-e0313

Investigation of correlation between Gensini score and TCM syndrome with unstable angina in coronary heart disease

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OBJECTIVES To observe the relationship between the TCM syndrome type and coronary Gensini integral of patients with coronary heart disease (CHD) instability angina for objective indicators of clinical syndrome differentiation type and to explore a new way to guide the clinical standard of syndrome differentiation.

METHODS 212 patients with coronary heart disease (CHD) instability angina were clinically investigated according to the CRF content, meanwhile the TCM syndrome type and coronary angiography results were processed. By using t test, descriptive statistics (frequency distribution) and Gensini integral calculation principles, the relationship between the TCM.

RESULTS 212 patients with unstable angina in this study were classified into three categories according to the actual situation of syndrome differentiation: the excess syndrome (106 cases), the deficiency syndrome (59 cases) and the mixed syndrome of deficiency and excess (47 cases). The severity of coronary lesions in different syndrome types was expressed in the form of Gensini integral. The research showed that the average Gensini integral of each groups' patients displayed a trend of excess syndrome (53.45 ± 50.3) > mixed syndrome (50.19 ± 50.76) > deficiency syndrome (47.44 ± 43.53). The 212 patients of TCM syndromes with unstable angina in coronary heart disease were divided into blood stasis (149 cases) and non blood stasis syndrome (63 cases). According to the principle of the Gensini integral, the coronary artery disease of two groups was expressed in the form of integral, respectively. The value of blood stasis integral is (52.82 ± 51.14) while for non blood stasis syndrome the value is (47.24 ± 41.26). The value of blood stasis syndrome group is higher than that of the non blood stasis syndrome group, but without significant difference.

CONCLUSIONS There is a certain correlation between TCM syndrome differentiation, blood stasis and coronary Gensini integral, Eight principal syndromes and blood stasis dialectical has certain guidelines on the judgment of coronary artery disease.

GW27-e0338

A Meta-Analysis of Randomized Controlled Trials of Bare Metal Stent Versus Cobalt-Chromium Everolimus Eluting Stents on Cardiovascular Events

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OBJECTIVES The aim of this study was to examine the outcomes of bare metal stents (BMS) versus cobalt-chromium everolimus eluting stents (EES) in patients with acute coronary syndrome (ACS).

METHODS 9 randomized, controlled trials (RCT) involving 2,876 patients were included. We evaluated cardiac mortality and myocardial infarction as primary endpoints. The rates of stent thrombosis, and target vessel revascularisation with ACS were secondary endpoints.

RESULTS In a comparison of BMS, the rates of cardiac mortality (hazard ratio [HR]: 0.48, 95% confidence interval 0.38 to 0.76, $p < 0.05$), stent thrombosis (0.39, 0.25 to 0.86, $p < 0.05$) and myocardial infarction (HR: 0.59, 95% CI: 0.48 to 0.77, $p < 0.05$) of EES for patients with ACS were significantly lower. There was no difference in all cause death (HR: 1.05; 95% CI: 0.80 to 1.58, $p > 0.05$) between BMS and EES groups.

CONCLUSIONS In patients with ACS, EES comparing with BMS reduced the risk of cardiac mortality, MI and stent thrombosis, improving global cardiovascular outcomes.

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Alteration in Metabolic Signature and Pathways in Patients with Unstable Angina Pectoris and complicated with Diabetes Mellitus

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OBJECTIVES Plasma metabolites has proved an indispensable regulators of physiological and pathological processes in coronary artery disease (CAD). However, the complex changes in metabolites that occur in CAD patients with different complications are incompletely understood. Diabetes mellitus (DM), one of the most common complications and independent risk factor in CAD, usually aggravate the deterioration of cardiac function. In this study, we performed ultra performance liquid chromatography and quadrupole time-of-flight mass spectrometry (UPLC-Q-TOF MS) based metabolic profiling in plasma of unstable angina (UA) complicated with DM patients, to detect potential metabolic biomarkers and pathways.

METHODS We performed metabolomics profiling to identify alterations in patients with UA and complicated with DM. From 2014 to 2015 in the Cardiovascular Department of Affiliated Teaching Hospital of Beijing University of Chinese Medicine, 20 patients with isolated UA were served as A group, 20 UA complicated with type 2 DM patients were served as B group, 20 healthy cases were served as C group. Global metabolomics profiling was applied to plasma metabolites from patients and age-, sex-, and body mass index-matched subjects using UPLC-Q-TOF MS and multivariate statistical analysis. The construction, interaction and pathway analysis of potential biomarkers were analyzed by Met PA (Metabolomics Pathway Analysis) and database sources, including the KEGG, the Human Metabolome database, and METLIN, were used to identify the related metabolic pathways.

RESULTS A multivariate analysis showed a clear separation between the patients with UA, complicated with DM patients and normal controls. Based on the comprehensive plasma metabolic candidates, we identified twenty-nine potential metabolic biomarkers, with Lysophosphatidylcholine (lysoPC) and lysophosphatidylethanolamine (lysoPE) species containing unsaturated fatty acids and free fatty acids, creatinine, palmitylacetate, L-Tryptophan showing the best classification performance. The underlying regulations of metabolic pathways are analyzed according to the identified metabolites, and seven metabolic pathways are identified using MetPA (impact score > 0.15). Metabolic pathways including energy metabolism, antioxidant defense systems and phospholipid metabolism were found to be disturbed. Additionally, we found strong positive correlation between tryptophan metabolism and compound related with insulin resistance in UA complicated with DM patients, which indicated further understanding of pathological mechanisms involved. Further study of these metabolites may also provide some references to identification of metabolic biomarkers for diagnosis and risk prediction of UA complicated with DM.

CONCLUSIONS It was concluded that the UPLC-Q-TOF MS based metabolomics approach combined with pattern recognition methods demonstrated good performance to identify metabolic plasma markers and provided new insights into biological mechanisms underlying UA complicated with DM.

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The decreased BDNF/TrkB signaling is involved in adolescent patients with myocardial infarction

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OBJECTIVES The aim of this study is to investigate the correlation between the BDNF/TrkB signaling and the patients with myocardial infarction among adolescent.

METHODS According to the results of coronary artery angiography, 225 participants were divided into four groups: control group (Normal coronary angiography, $n=58$); angina pectoris group I (AP I, No greater than 50% of lumen stenosis, $n=45$); angina pectoris group II (AP II, greater than 50% of lumen stenosis, $n=42$); myocardial infarction group (MI, including acute myocardial infarction, AMI, $n=38$ and old myocardial infarction, OMI, $n=42$). Clinical and biochemical