Results (1) Significant differences in BNP, hs-CRP and stress blood glucose were found between ACS group and SA group/normal group ($p<0.001$). No significant differences in BNP, hs-CRP and stress blood glucose were found between SA group and normal group ($p>0.05$). (2) Significant differences in BNP, hs-CRP and stress blood glucose were found among three ACS clinical types ($p<0.001$), BNP, hs-CRP and stress blood glucose were leveled up as the degree of severity of clinical types increased. (3) Significant differences in BNP, hs-CRP and stress blood glucose were found among three ACS subgroups ($p<0.001$). NO significant differences in stress blood glucose were found between mild group and normal group ($p>0.05$), and significant differences was found between others group and normal group ($p<0.001$). There is a positive correlation between levels of BNP, hs-CRP and stress blood glucose in ACS patients and Gensini score. The Spearman correlation coefficients were: $r=0.782$ ($p<0.05$), $r=0.741$ ($p<0.05$), $r=0.732$ ($p<0.05$).

Conclusions The levels of BNP, hs-CRP and stress blood glucose in patients of ACS were much higher than SA group/normal group. There is a correlation between levels of BNP, hs-CRP and stress blood glucose in ACS patients and different degrees of coronary artery lesions. Combined detection of BNP hs-CRP stress blood glucose can be helpful and effective for risk stratification of the hospitalised patients with ACS after admission.

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STUDY ON THE LEVELS OF BNP, HS-CRP AND STRESS BLOOD GLUCOSE IN ACS PATIENTS AND ITS RELATIONSHIP WITH THE EXTENT OF THE CORONARY ARTERY LESION

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Objective To study the diversity of levels of B-type natriuretic peptide (BNP), high sensitivity C-reactive protein (hs-CRP) and stress blood glucose in patients of acute coronary syndrome (ACS), meanwhile, to investigate the relationship between the three biochemical markers and different degrees of coronary artery lesions of ACS, and to assess the clinical value.

Methods A total of 105 patients of acute coronary syndrome (ACS) admitted were divided into three clinical types including 40 patients with STEMI, 34 patients with NSTEMI and 31 patients with UA. These patients were also evaluated by Gensini score for a decision of coronary angiography (CAG) after admission, and divided into three subgroups: mild, moderate and severe. 39 stable angina patients and 38 normal volunteers were designated as control groups. The venous blood samples were taken from the patient immediately after admission for detection of brain natriuretic peptide (BNP) and high-sensitivity C-reactive protein (hs-CRP). The blood samples of stress blood glucose were phlebotomised the next morning in fasting state. BNP were measured by fluorescence immunoassay, while hs-CRP was evaluated by chemiluminescence immunoassay. Stress blood glucose was assessed by hexokinase method.