Correlation of serum high-sensitivity C-reactive protein and interleukin-6 in patients with acute coronary syndrome

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ABSTRACT. Serum high-sensitivity C-reactive protein (hs-CRP) is a sensitive indicator of inflammation, which is closely related with the progress of plaque formation. Interleukin-6 (IL-6) is one of the inflammatory markers of local coronary plaque and the peripheral blood cycle, promoting the occurrence of atherosclerosis development and plaque rupture. In this study, the correlation of hs-CRP and IL-6 was investigated in patients with acute coronary syndrome (ACS). Sixty cases of ACS, including 33 cases of acute myocardial infarction (AMI) and 27 cases of unstable angina pectoris (UAP), 45 cases of stable angina pectoris (SAP), and 45 healthy people (HG) were enrolled in study. The serum hs-CRP and serum IL-6 levels were tested by the immune turbidimetric method and enzyme-linked immunosorbent assay (ELISA), respectively. The differences among groups and their correlations were evaluated. Results showed that the serum hs-CRP and IL-6 concentrations of the AMI and UAP groups were significantly higher than those of the SAP and HG groups, respectively (P < 0.01), and those of the AMI group were significantly higher than those of the UAP group (P < 0.05). The serum hs-CRP and IL-6 levels of the ACS
group were positively correlated \( r = 0.836 \). The serum hs-CRP and IL-6 levels could be used to determine the stability of plaque, and have some relevance in the ACS process, showing great value in judgments of ACS prognosis.

**Key words:** Acute coronary syndrome; Interleukin-6; Correlation; High-sensitivity C-reactive protein