Association study of plasma NT-proBNP levels and severity of acute coronary syndrome

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ABSTRACT. The aim of this study was to investigate the N-terminal brain natriuretic peptide precursor (NT-proBNP) levels in the peripheral blood of patients with acute coronary syndrome (ACS) and to provide the basis for its application in the early diagnosis of ACS. A total of 440 patients admitted to the hospital for examination and treatment were enrolled, including 330 patients with ACS and 110 cases in the control group. Routine blood examination and determination of NT-proBNP in all subjects were conducted immediately at the time of admission to analyze the difference in plasma NT-proBNP between the two groups. The plasma NT-proBNP levels in ACS were significantly higher ($P < 0.01$) and were associated with the severity of coronary lesions. The present study indicated that the plasma NT-proBNP level in ACS patients is significantly increased and has a potential value in the early diagnosis of ACS.

Key words: Acute coronary syndrome; D-dimer; N-terminal pro-brain natriuretic peptide precursor