



Plasma chemerin level in metabolic syndrome

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ABSTRACT. To investigate the chemerin level in the Chinese Han population with metabolic syndrome and its relationship with each metabolic syndrome component [body mass index (BMI), blood pressure, blood lipids, and blood glucose], we selected 30 patients with metabolic syndrome and 30 healthy control subjects. The chemerin level was measured by enzyme immunoassay in these 2 groups. The subjects' weight, blood pressure, BMI, waist circumference, fasting blood glucose, fasting insulin, lipids, and glycated hemoglobin were simultaneously detected. The *t*-test, correlation analysis, and multiple regression analysis were used to perform statistical analysis. We found that plasma chemerin level was higher in the metabolic syndrome group than that in the control group (97.61 ± 6.49 vs 70.26 ± 6.97 , $t = 15.73$, $P < 0.05$). The plasma chemerin level was positively correlated with systolic blood pressure, waist circumference, BMI, waist-to-hip ratio, fasting blood glucose, fasting insulin, and glycated hemoglobin ($r = 0.548, 0.442, 0.359, 0.556, 0.613, 0.581, \text{ and } 0.572$, respectively; all $P < 0.05$). However, it was negatively correlated with high-density lipoprotein cholesterol ($r = -0.378$, $P < 0.05$). Therefore, we concluded that plasma chemerin level was correlated with obesity, blood pressure, and high-density lipoprotein cholesterol, suggesting that it may play a role in the

pathogenesis of metabolic syndrome.

Key words: Metabolic syndrome; Chemerin