EXPRESSION OF VASPIN AND CHEMERIN IN CHINESE PREGNANT WOMEN WITH GESTATIONAL DIABETES MELLITUS

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Objective: To explore expressions in visceral omental adipose and serum levels of vaspin, chemerin in Chinese pregnant with GDM.

Methods: Thirty individuals with GDM and 22 control group were enrolled in this study. Expression in visceral adipose tissue was detected by western blot and levels of serum vaspin and chemerin were measured by ELISA. Insulin levels, total cholesterol(TC), triglyceride(TG) and c-reactive protein (CRP) were measured. Results: The serum levels of vaspin(31.15±11.41 ng/mL vs 24.23±12.63 ng/mL, P=0.044), chemerin(9126.22±710.23 pg/mL vs 8574.46±682.04 pg/mL, P=0.007) and CRP(6.81±4.47 vs 4.49±2.71, P=0.035) were significantly increased in pregnant with GDM compared with control group. Serum chemerin levels were significantly associated with that of TC(r=0.402, P=0.003) and CRP(r=0.325, P=0.019). Serum vaspin levels were significantly related with BMI (r=0.334, P=0.016) and with HDL(r=-0.335, P=0.015), FINS(r=0.290, P=0.037) and HOMA-IR(r=0.307, P=0.027). The expression of chemerin and vaspin in those whose BMI28kg/m² were significantly increased than that with BMI28kg/m².

Conclusions: Vaspin and chemerin may play an role in GDM development.

Key words Vaspin, chemerin, gestational diabetes mellitus