Dyslipidemia and Its Related Factors in Chinese Children and Adolescents with Turner Syndrome

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【Objective】To analyze blood lipid and its related factors in Chinese children and adolescents with Turner syndrome.
【Methods】The untreated TS patients were divided into two groups according to age (<11 years old and 11~15 years old) and enrolled two groups of age-matched control girls, blood lipid and the incidence of dyslipidemia were compared between the four groups, the related factors of blood lipid were also analyzed. Moreover, TS patients were divided into two groups according to karyotype, including 45, XO karyotype (55 cases) and other karyotypes (53 cases), blood lipid and the incidence of dyslipidemia in two groups were compared.
【Result】 Compared to age-matched control girls, TS patients of age 11~15 years group had higher TG levels and higher incidence of hypertriglyceridemia and borderline-hypertriglyceridemia (P <0.05) and the incidence of borderline-hypercholesterolemia was also significantly higher (P <0.01). But there were no differences in blood lipid level, incidence of dyslipidemia and the incidence of borerline-dyslipidemia between TS patients who were less than 11 years old and age-matched control girls. Total cholesterol of TS patients was negatively related to bone age (P<0.05). Triglyceride of TS patients was positively related to waist circumference (P <0.01). TS patients of 45, XO karyotype had lower TG levels, higher HDL levels and lower incidence of low HDL, borderline-high non-HDL and borderline-hypertriglyceridemia compared with those of other karyotypes (P <0.05).
【Conclusions】Triglyceride in TS patients of age 11-15 years were higher than the control subjects, which may be related to estrogen deficiency and chromosome karyotype.

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