Obesity and hyperandrogenism in adolescents with polycystic ovary syndrome

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Objective: to compare the clinical characteristics between adolescent patients with polycystic ovary syndrome (PCOS) and healthy people, the insulin resistance (IR) and non-IR in the adolescent PCOS group. The study is intended to investigate the characteristics of adolescent PCOS with/without IR.

Methods: compare and contrast the clinical manifestation between healthy people (the control group, n=87) and adolescent patients with polycystic ovary syndrome (the adolescent PCOS group, n=88), the IR (n=40) and non-IR (n=48) in the adolescent PCOS group to show any differences and relationships with body mass index (BMI), homeostasis model of assessment for insulin resistance index (HOMA-IR) and so on.

Results: The morbidity of hirsutism, acne and obesity is significantly higher in the adolescent PCOS group than the control group (P<0.01), and is also higher in the IR group than the non-IR group (P=0.001). Almost all of the adolescent PCOS group have menstrual disorders, most of the dysmenorrhea manifests itself as oligomenorrhea.

Conclusion: The adolescent PCOS patients have higher incidence of obesity, and obesity has amplified the degree and effect of IR, so weight control is the first choice and the most basic treatment. We must pay attention to them and take early measures to prevent the resulting long-term complications.