THE CONSEQUENCES OF POLYCYSTIC OVARY SYNDROME IN ADOLESCENT GIRLS

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Background:
Polycystic ovary syndrome (PCOS) represents one of the most common complaints for adolescent girls to present to endocrinologist. PCOS has the potential to affect the young person both metabolically, physically, psychologically and socially.

Objective:
To evaluate the metabolic and psychological consequences of PCOS in adolescent girls.

Method:
Adolescent girls (13-18 years old) admitted in the Endocrinology Department of Children Emergency Hospital, Timisoara, Romania a for a period of 4 years were studied. They were evaluated after a complex protocol including clinically (blood pressure), anthropometric (height, weight, BMI), hormonal (estrogen, progesterone, testosterone, LH, FSH, SHBG, FAL), metabolic (glucose, OGTT, insulin, HOMA and lipid profile), ultrasound (polycystic ovaries) and psychological.

Results:
Out of 51 adolescent girls (mean age 17.1 ± 1.8 year) diagnosed with PCOS according to Rotterdam criteria, 70.58% of them had the body mass index higher than 75% percentiles for age and 9.80% were obese. Clinically, hirsutism and acne were encountered in 72.54% of adolescents, while 37.52% had hypertension. 90.19% of the teenage girls were associated with irregular cycle and polycystic ovaries were found on ultrasound examination in 58.82% cases. The metabolic complications and psychological consequences encountered in this study are presented in figure no.1 and 2. Metformin was prescribed at adolescents diagnosed with insulin resistance (64.70%) and psychotherapy recommended in the majority of cases.

Figure no. 1 – Metabolic complications of PCOS

Figure no. 2 - Psychological consequences of patients with PCOS

Conclusion:
Successful management of adolescent girls with PCOS consisted in the challenges of making the diagnosis of PCOS, lifestyle change, metformin treatment and psychotherapy.