

Comparative analysis of clinical and hormonal parameters in women with hyperandrogenemia adrenal and ovarian genesis

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Congenital adrenocortical dysfunction is one of the most common genetic disorders in a person with an autosomal recessive type of inheritance. More than 90% of all cases of this disease are caused by a decrease in the activity of the steroid_21_hydroxylase enzyme (P450c21). Because of the erasure and diversity of phenotypic manifestations, both diagnostics and differential diagnosis with polycystic ovary syndrome (PCOS) cause certain difficulties. This, in turn, served as a trigger for us to study this problem and determined the ultimate goal of our study.

Objective: The aim of the study is to perform a comparative analysis of clinical and hormonal parameters in women with congenital adrenal cortex dysfunction and ovarian polycystic ovary syndrome.

Methods: The study was conducted on the basis of the consultative polyclinic of the Republican Specialized Scientific and Practical Medical Center of Endocrinology under Ministry of Health of the Republic of Uzbekistan.

Patients: One hundred and five women aged 14-49 years with signs of clinical and biochemical hyperandrogenemia were selected. The control group consisted of 25 women with a normal menstrual cycle, who did not have clinical and biochemical signs of hyperandrogenemia. Patients with thyroid pathology, androgen-secreting tumors of the ovaries or adrenal glands, Cushing's syndrome, as well as with hyperprolactinemia from participation were excluded from the study.

Interventions: General clinical study of patients included: collection of anamnesis (complaints, gynecological anamnesis, presence of extragenital diseases); Gynecological examination; evaluation of anthropometric parameters (body mass index - BMI, waist circumference, hip circumference). Also the level of luteinizing hormone was checked (LH), as well as follicle stimulating hormone (FSH), prolactin (PRL), dehydroepiandrosterone sulfate (DHEAS), cortisol, progesterone (P), 17-hydroxyprogesterone (17-OH), thyroid stimulating hormone (TSH), insulin, total testosterone (T). All women surveyed conducted molecular genetic analysis for the presence of CYP21 gene mutations, in order to confirm the diagnosis of congenital adrenal hyperplasia.

Conclusions: Conducted studies have shown that the highest index of NOMA-IR was found in women with PCOS, obese. In 34.5% of women with CAH the level of 17-hydroxy-progesterone was above the control values. Genetic analysis showed that patients with CAH prevailed C1994T (65.2%) mutation of the gene CYP21.