Abstract Book of Xth International Interdisciplinary Scientific Congress. - Kharkiv, 2017. – P.163-164

*Tykhanskyi D., Goryacheva Y.*

**INTERCONNECTION OF INHIBIN B LEVEL AND**

**HYPERANDROGENISM DURING THE POLYCYSTIC OVARIES**

**SYNDROME**

Kharkiv National Medical University

(Department of Obstetrics and Gynaecology№2)

Research advisor: prof. Gayvoronskaya S.

Kharkiv, Ukraine

**Introduction.** Polycystic ovaries syndrome (POS) – is polyendocrine pathology, accompanied with the disorder of the ovaries’ function (anovulation, increase of androgens’ secretion), pancreas (hyperinsulinemia), adrenal glands, pituitary gland and hypothalamus. Leading clinical symptoms during POS are menstrual disorders, infertility, different manifestations of hyperandrogenism (hirsutism, acne).

Inhibin B is biologically active glycoprotein, which is synthesized in the follicles of the ovaries and is a marker of the women’s reproductive function. Inasmuch as during the POS the disorder of reproductive function takes place, we can think about inhibin B role on this process and its interconnection with the level of androgens. Objective: to ascertain the influence of hyperandrogenism on the level of inhibin B within patients with POS.

**Materials and methods.**25 patients with POS (experimental group) and 10 somatically healthy women took a part in the investigation. All the women were of the same age (20 – 30 years). The life anamnesis, somatic, obstetric and gynecological histories analysis were made. POS was diagnosed according to hyperandrogenism, ovulatory disfunction and data of ultrasound examination. The hormonal state of all patients was examined (Follicle-stimulating hormone (FSH), estradiol (E), free testosterone (T) and inhibin B (IB) on 2-7 days of menstrual cycle.

**Results of research**. During the hormonal examination all women had a normal level of the FSH (1,9 ±0,3 mIU/ml at the rate 1,3-9,9 mIU/ml, р<0,05), increase of the E level (184,4±10,2 pg/ml at the rate 12,5-166,0 pg/ml, р<0,05) and of the T level (10,1±12,2 pg/ml at the rate 0,5 – 4,1 pg/ml, р<0,05). This data correlated with increase of the IB level (112,8 ±12,7 2 pg/ml at the rate 30,0-90,0 pg/ml, р<0,05) There were no abnormalities detected during such hormonal examination in the control group.

**Conclusions.** Based on the received data, we can consider that hyperandrogenism is one of the factors, that affects on the increase of the inhibin B level during POS, that results in the disorder of reproductive function. During the diagnosing of POS it’s necessary to take into account the level of inhibin B in the serum, as one of the phase of the pathogenic chain of the development of the POS.