

P248. Combined hyperproliferative processes of the reproductive organs and vitamin d deficiency

V Pyrohova (UA) [1], S Shurpyak (UA) [2]

Vitamin D deficiency is now associated with the development of polycystic ovary syndrome, endometriosis, infertility, the risk of developing diabetes, cardiovascular diseases, autoimmune diseases, metabolic syndrome and cancer. Preclinical studies have shown that active metabolites of vitamin D have antiproliferative effects, can activate apoptosis and inhibit angiogenesis. In addition, calcitriol potentiates the antitumor effects of many cytotoxic and antiproliferative anticancer agents.

RESEARCH to study prevalence of vitamin D deficiency in women of reproductive age with combined hyperproliferative processes of reproductive organs.

MATERIALS AND METHODS Examined of 120 women aged 24 to 40 years with a variety of menstrual disorders. 20 women of similar age without gynecological pathology constituted control group. At stage of specialized care examination included anthropometry, pelvic transvaginal ultrasonography, genetic examination. Hormonal study included determination of level of FSH, LH, Prolactin, TSH, estradiol, free testosterone, progesterone, thyroid peroxidase antibodies 25 (OH) D3 in venous blood serum.

RESULTS The average age of patients was $30,1 \pm 4,9$ years. BMI 26-29 kg/m² was recorded in 31.7% patients, with BMI of 30 to 34 kg/m² - 12.5%, and 7.5% - greater than 34 kg/m². Vitamin D insufficiency (level of 25 (OH) D 23.3 ± 1.7 ng/ml) was present in 28.3% women, with deficiency of 25 (OH) D 13.6 ± 1.4 ng/ml – 47.5%, marked deficiency in level of 25 (OH) D 7.9 ± 1.1 ng/ml - 17.5% women. The majority among patients with vitamin D deficiency were women with obesity. Levels of 25 (OH) D levels 33.2 ± 1.2 ng/ml was recorded in patients with combined hyperproliferative processes of the reproductive organs only in 6.7%. Moreover, among control group vitamin D insufficiency in level of 25 (OH) D 26.7 ± 1.8 ng/ml found in 25%.

CONCLUSION We have revealed the relationship of vitamin D deficiency in overweight women with combined hyperproliferative processes of the reproductive organs. The heterogeneity of the studied group of patients does not allow to draw definitive conclusions about the relationship of vitamin D deficiency and the development of hyperproliferative processes. Vitamin D deficiency in women with combined hyperproliferative processes of the reproductive organs and overweight should be considered in the context of pathogenesis due to the risk of malignant processes of reproductive system what requires further study.

[1] Lviv National Medical University named after Danylo Halitskyi, Lviv, [2] Lviv National Medical University named after Danylo Halitskyi, Lviv