ON THE QUESTION OF INTERRELATION BETWEEN THE VITAMIN D DEFICIENCY AND GESTATIONAL COMPLICATIONS

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Context. At present, there is no doubt the role of vitamin D deficiency in developing a number of gestational complications. Vitamin D is deposited in the subcutaneous tissue, after which it is biologically unavailable as those with obesity there is a chronic shortage of vitamin D, as a result, pregnant women with obesity include risk of developing gestational diabetes.

Objective. The aim was to identify relationships between body mass indexes, levels of vitamin D and the development of gestational diabetes.

Methods and patients. The study involved 30 pregnant women aged 21 to 38 years. According to body mass index (BMI) before pregnancy pregnant divided in three groups: BMI 20-26 kg/m² - rate, BMI 27-29 kg/m² - preobesity and BMI 29-35 kg/m² - obesity. Parameters studied complete blood count, coagulation, urinalysis, glucose levels and 25 (OH) D in the venous blood.

Results. Gestational diabetes was diagnosed in 20 % of surveyed pregnant women, including patients with normal BMI accounted for only 10%. Insufficiency (29-20 ng / ml) or deficit (less than 20 ng / ml) vitamin D was found in 80 % of examined patients, but among them pregnant women with a normal BMI before pregnancy accounted for only 8.3 % of patients. At the same time, 50 % of pregnant women with a BMI of 27-29 kg/m² had a deficiency of vitamin D, and 8.3% - pronounced deficit. With increasing BMI (29-35 kg/m²) saw an increase the number of patients with a deficiency of vitamin D, share amounted to 33.3%.

Conclusions. This study confirms the relationship between overweight, vitamin D deficiency and risk of gestational diabetes. Further study of metabolism of vitamin D in obese women, prevention and treatment of vitamin D deficiency in pregnant women will reduce the incidence of gestational complication.