

Modern Approaches To Diagnosis And Prevention Of Perinatal Outcomes In Pregnant Women With Pre-Term Birth

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Abstract: Preterm birth (PR) is the main problem of perinatology in the world. Premature births are not only a medical but also a social problem, which is primarily due to their consequences for children - perinatal morbidity and mortality in premature newborns is 35-40 times higher than in full-term ones. A number of pregnancy complications are associated with vitamin D deficiency: termination of pregnancy in the I and II trimesters, the development of placental insufficiency, preeclampsia, disorders of the contractile activity of the uterus, and an increased risk of caesarean section. Vitamin D is a fat-soluble vitamin. Receptors for it are found in many tissues, such as the intestines, muscles, cells of the pancreas, prostate and ovaries, which explains the variety of clinical manifestations of vitamin D deficiency. According to a number of studies, it has been found that vitamin D promotes chorion vascularization, controls the secretion of various placental hormones, participate in the formation of the teeth and bones of the baby. Vitamin D deficiency leads to impaired calcium-phosphorus metabolism during pregnancy and increases the risk of fractures. Deficiency also affects the adaptation of the newborn, its development. In children with a lack of vitamin D in the body, rickets develops as a result of a violation of the mineralization of bone tissue. It is one of the most common diseases in infants and young children, and it also occurs in many children under the age of one.

Keywords. Premature birth, vitamin D, reproductive age, calcium-phosphorus metabolism, premature baby.

Introduction

Target. Optimization of diagnostic and therapeutic measures to detect hypovitaminosis D and its drug correction in order to improve obstetric and perinatal outcomes in pregnant women with vaginal infections.

Materials and methods. 103 pregnant women were examined, 74 of them had vaginal infections, the comparison group consisted of 29 healthy pregnant women. The patients were divided into 2 groups: group I (34 patients) - took vitamin D preparations, starting from the II trimester, group II (40 patients) - did not take vitamin D preparations. 25-hydroxyvitamin D in blood serum, in cord blood. An assessment was made of the addition of gestational complications and perinatal outcomes.

Results. An analysis of the data obtained indicates a decrease in the level of vitamin D in

pregnant women with vaginal infections compared with healthy pregnant women and a dynamic decrease in the level of this vitamin in all examined pregnant women in the absence of vitamin D supplementation. An adequate level of vitamin D in the blood serum of pregnant women ensures a normal level of vitamin D in cord blood. When prescribing vitamin D preparations to pregnant women with vaginal infections in adequate dosages, depending on the initial level of 25-hydroxyvitamin D in the blood serum, the level of vitamin D remains normal until the time of delivery. Also, a relationship was found between the normal level of vitamin D in the blood serum of pregnant women with vaginal infections, infections and a reduced risk of gestational complications such as threatened miscarriage, FPI and polyhydramnios. In group I, where pregnant women took vitamin D preparations from the second trimester of gestation, there was a decrease in the frequency of preterm birth in pregnant women with a history of preterm birth by 7%. Revealed a decrease in the frequency of attachment of such gestational complications as FPI by 1.5 times and polyhydramnios by 2 times. The normal level of vitamin D before delivery had a beneficial effect on the condition of fetuses and newborns. In group I, where pregnant women took vitamin D preparations from the second trimester of gestation, all children were born in a satisfactory condition.

Conclusion. The obtained results indicate the need to prescribe therapeutic doses of vitamin D preparations to prevent the addition of a number of gestational complications and improve perinatal outcomes. Pregnant women with normal serum vitamin D levels should receive prophylactic doses worldwide, including among pregnant women. Normal vitamin D levels reduce the risk of most gestational complications. During pregnancy, vitamin D deficiency increases the incidence of preeclampsia, gestational diabetes mellitus, premature birth, bacterial vaginosis, and there are also negative consequences for fetuses and newborns, the most common vitamin D preparation. These drugs should be prescribed at the stage of preconception preparation, or at the beginning of the first trimester of pregnancy.

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