

Iron metabolism of proteins during pregnancy

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The high prevalence of anaemia in pregnant women is an extremely urgent problem of medicine. Iron deficiency anaemia (IDA) is the most common form among pregnant anaemia and is about 90% [1]. IDA leads to adverse consequences for both the pregnant woman (an increase in the frequency of preterm birth, placental insufficiency; miscarriage; infectious complications, gestational depression) and for the fetus (fetal malnutrition). To study the pathogenesis of IDA in pregnant women is important for the developing of new principles of treatment. We study some indicators of iron metabolism in pregnant women in anaemia. The venous blood of 85 pregnant women with anaemia was examined. Serum iron, ferroportin, transferrin, serum ferritin and hepcidin were investigated. The comparison group consisted of 19 pregnant women without anaemia, as well as control group consisted of 15 non-pregnant practically healthy women. The haemoglobin concentration was measured by using "Mythic-18" haematological auto analyzer. The serum transferrin level

was established by using an immunoturbidimetry method with "Cormay" (Poland) reagent kits. The concentrations of hepcidin and ferroportin were determined by using "Cloud-Clone Corp." (USA), and ferritin concentrations were determined by using "Pishtaz teb" (Iran) reagents through enzyme-linked immunosorbent assay (ELISA) method. The study revealed a significant decrease in the level of LF, ferritin, hepcidin and a significant increase in ferroportin, transferrin level. A comprehensive definition of various indicators of iron metabolism provides important information not only for understanding the pathogenesis of iron deficiency anaemia in pregnancy but also for early diagnosis of the disease and the appointment of the correct treatment.

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