

The role of the placenta and placental bed of the uterus in the genesis of preterm pregnancy

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ABSTRACT

Premature births have remained stable for many years and amounts to 6-8% in the Russian Federation. Premature babies account for up to 50% of stillbirths, 60-70% of early neonatal mortality, and 65-75% of infant mortality. Premature babies are stillborn 8-13 times more often than full-term babies, and die in the first week of life 20-30 times more often. Perinatal mortality in premature births is 33 times higher than in full-term births. Modern ideas about the genesis of premature birth are based on the multifactorial nature of this pathology, the main role of which is occupied by placental insufficiency. Placental insufficiency is currently understood to be a syndrome that is "the result of a complex poly-causal reaction of the fetus and placenta that occurs in a variety of pathological conditions of the mother's body" which is based on a violation of the compensatory-adaptive mechanisms of the fetoplacental complex at the molecular, cellular, tissue, organ and organismal levels, realized in compensated, sub-compensated and decompensated forms closely associated with the placental bed and leading to a change in the vital functions of the fetus and newborn. The various methods of diagnostics of the specified syndrome (hormonal, ultrasound, biochemical, etc.) currently existing, Knowing the role of lysosomal enzymes in the development of pregnancy complications, it was possible to assume the possible influence of lysosomal activity of the endometrium on the production of gestation proteins and its participation in the genesis of premature birth. It is necessary to determine the interdependence of these initial phases of regulation of fetoplacental homeostasis with structural changes in the placenta and its bed, since the genesis of disturbances between the interconnected tissue and cellular levels of the placental bed of the uterus and placenta in preterm pregnancy has not been sufficiently studied to date. This study is devoted to the study of regulatory mechanisms of adaptive-homeostatic reactions of the fetoplacental system in preterm pregnancy.

Keywords: Placenta, Placental Bed, Preterm Pregnancy, Uterine Function, Pregnancy Complications

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