



## **PATHOMORPHOLOGICAL CHARACTERISTICS OF COVID-19**

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**Introduction.** It is known that the role of the placenta in physiological and pathological pregnancy is unique and connects the fetus and the mother's organism together. As a result of the placenta's inappropriate development during the period of pregnancy or, on the contrary, its function is disturbed under the influence of various factors, it leads to a significant change in the development of the fetus. In 85-90% of cases, infertility is caused by placental insufficiency, i.e. placental uterine blood circulation disorder. In addition, under the influence of viral diseases, special pathomorphological changes in the placenta are observed: lympho-plasmacytic infiltration in the stroma of the teats, hemocidrin bodies in the stroma of blood vessels and teats, necrosis of the teats, focal or diffuse villusitis and intervillusitis.

**For research purposes.** It is in the area of syncytotic trophoblasts in the terminal teats of the placenta of pregnant women infected with covid-19 that viruses are located in a fuchsinophil form. In addition, fibrin foci, mixed inflammatory infiltration in the subchorionic space, distundual arteropathy, and hypertrophy of the arteriolar wall are observed in the case of perivillitis. As a result of these pathomorphological changes, it causes chronic intrauterine hypoxia, so it seems that the study of pathomorphological changes in the placenta of pregnant women infected with covid-19 is considered urgent.

**Discussion.** Analysis of pathomorphological changes in the placenta of pregnant women infected with Covid-19.

**Material and methods.** A total of 70 placentas of pregnant women were selected for research, and the main group included 50 placentas of pregnant women infected with covid-19, while the control group included 20 placentas of women with physiological pregnancy. Macroscopic and microscopic (hematoxylin eosin, histochemical staining) studies were used in the study.

**Results:** against the background of covid 19, the duration of pregnancy is 50% (at 30-35 weeks), 30% (at 20-25 weeks), 20% (at 35-40 weeks). By age, 55% (25-35 years old), 30% (35-40 years old), 10% (40-45 years old), 5% (20-25 years old). The duration of pregnancy of pregnant women in the control group is 45% (at 30-35 weeks), 15% (at 20-25 weeks), 40% (at 35-40 weeks). By age, 65% (25-35 years old), 6% (35-40 years old), 4% (40-45 years old), 25% (20-25 years old). pathomorphological changes in the placenta of pregnant women infected with covid-19: perivillitis and foci of subchorial fibrin in the placenta (35%), vascularization of the teats with large foci (40-45%), infarction of the teats (10-15%), inflammatory infiltrate in the subchorial space, distundual arteropathy (25%), atherosclerosis and fibrinoid necrosis (30%), hypertrophy of the arteriolar wall (15-20%), immature interstitial papillae (55%). Changes in the placenta of pregnant women in the control group: perivillitis and subchorial fibrin foci in the placenta (60%), vascularization of the teats with large foci (20%), infarction of the teats (15%), inflammatory infiltrate in the subchorial space, decidual arteropathy (12%), atherosclerosis and fibrinoid necrosis (45%), hypertrophy of the arteriolar wall (5%), immature



nipples (10%). In the background of covid-19, the period of pregnancy in 70% of cases corresponded to the period of 30-40 weeks. the main pathomorphological changes in the placenta are manifested by the intermediate papillae, where the vascularization of papillae with a large focus has not been reached.

**Conclusion.** In pregnant women with covid-19, the average age of pregnancy at full term is 36+- 0.02, the main pathomorphological changes are manifested by the vascularization of the supporting suckers in the placenta.

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