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FEATURES OF GLYCOPROTEINS DISTRIBUTION IN THE PANCREATIC STRUCTURES OF NEWBORN RATS AFTER PRENATAL ANTIGENIC INFLUENCE

ABSTRACT. Background. Abnormalities of digestion and absorption are the most common syndromes associated with the digestive system diseases in children. Pancreatic enzyme failure leads to violation of different metabolic processes, especially in neonates. Exocrine pancreas is sensitive to a variety of factors, including virus. It emphasizes the importance of investigation of pancreatic secretory activity in children who was born from mothers exposed to viral infection during pregnancy. **Objective.** The purpose is to determine the features of glycoproteins distribution in the pancreatic structures of newborn rats after prenatal antigenic influence. **Methods.** Animals were divided into four groups: the 1st – intact, the 2nd – intrafetal injection of the antigen, the 3rd – animals administered with antigen into the amniotic fluid, and the 4th group – control (intrafetal injection of a normal salt solution). As antigen we used Vaxigrip vaccine. **Results.** It was revealed that on the 14th day after birth antigen-exposed animals were characterized by the increase of glycoproteins (++) in a connective tissue capsule of pancreas and decreased content of glycoproteins in the cytoplasm of acinar cells and ducts comparing with the intact group (++/+). Taken together this data evidence the reduction of the synthetic activity of acinar cells after intrafetal administration of the antigen. This may cause a predisposition for the development of dyspepsia and food allergy. Further work is planned to investigate the dynamics of glycosaminoglycans redistribution in different parts of pancreas after prenatal antigenic administrations.

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