

PATHOPHYSIOLOGICAL CHANGES IN PLASMA AND HEMOLISATE ERYTHROCYTE CALVES HYPOXIA

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Hemolysate of red blood cells, physiological state, lipid peroxidation, newborns.

The purpose of the study. study LPO neonatal hypoxic functionally active and calves.

Materials and methods. In the experiment studied the processes of lipid peroxidation (LPO) in the body calves according to their functional status after birth.

For the task selected 4 groups of calves to 3 heads: each group of functionally active newborn calves and three groups of calves born with signs of hypoxia (I - calves that g-Miran in a state of asphyxia or meconium present in the amniotic fluid, II - calves that were born after spontaneous breathing inadequate III - calves that were born after spontaneous adequate breathing movements).

Cows blood sampling was performed breast saphenous vein after calving.

Products of lipid peroxidation was determined in hemolysate erythrocytes and plasma using methodical recommendations "Research peroxide oxidation of lipids and antioxidant protection of the organism in clinical practice," Institute of Blood Pathology and Transfusion Medicine, Academy of Medical Sciences of Ukraine (m. Lviv, 2002).

Results of studies indicate that the hypoxic state of newborn calves accompanied by activation of lipid peroxidation, which predominate in hemolysate erythrocytes. Catalase activity, depending on the severity of hypoxic damage is reduced to an average of 1.69 times ($p < 0,01$), increased content of lipid hydroperoxides malondialdehyde. The relative content of hydroperoxides increases likely, the ratio of MDA / lipids increased at 2.10 times.