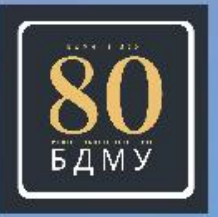




Garvasiuk Oleksandra Vasylivna, Namestiuk Svitlana Valeriivna

THE STUDY OF FREE RADICAL-INDUCED DAMAGE TO PLACENTAL STRUCTURES IN A GESTATIONAL CONTEXT



The study concerning limited proteolysis and oxidative modification of proteins in the cytoplasm of trophoblasts in placental villi using modern morphological techniques is fundamental to understanding the causes of preterm birth

- The extent of limited proteolysis in the cytoplasm of trophoblasts in placental villi was assessed using the ninhydrin-Schiff reaction for free amino groups in proteins, as described by A. Yasuma and T. Ichikava
- The level of oxidative modification of proteins in the cytoplasm of trophoblasts in placental villi was determined using computerised microspectrophotometry of histological samples stained with bromphenol blue (Mikel Calvo)

Limited proteolysis study:

Physiological pregnancy (n=22) – 0.167 ± 0.0014

Main group 1 (29-32 weeks gestation, n=19) – 0.245 ± 0.0018

Main group 2 (33-36 weeks gestation, n=20) – 0.243 ± 0.0020

Oxidative modification of proteins study:

Physiological pregnancy (n=22) – 1.02 ± 0.012

Main group 1 (29-32 weeks gestation, n=19) – 1.34 ± 0.016

Main group 2 (33-36 weeks gestation, n=20) – 1.38 ± 0.021

