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Poster

Inducible nitric oxide synthase in the placenta of pregnant women with preeclampsia

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Abstract

Introduction. During pregnancy, changes in blood pressure is a major cause of maternal and fetal death worldwide, 12% of all pregnancies develop preeclampsia (PEC). The oxide nitric synthase endothelial enzyme (eNOS) generates nitric oxide continuously, producing vasodilation. The inducible isoform (iNOS) is found in macrophages, smooth muscle cells and endothelial cells, and other locations as platelets, hepatocytes, tumor cells and lymphocytes. The main objective of this work was to detect iNOS by fluorescein in placental tissue.

Methodology. Childbirth after were performed 1X1X0.5cm cuts on the surface of the cotyledons, were placed in 10% formalin were embedded in paraffin for microtome cuts and fix them on lamella. Were subsequently washed with buffer solution, oxygenated water with methanol, using also pig serum 10% (Rockland®, D305, lot # 421), solution-RabbitpAb antiiNOS (Calbioquem®482728), streptavidin-fluorescein (Calbioquem®, Cat. No.189734). Fluorescence microscope Carl Zeiss brand was used, and the Image-Pro Plus, 7.0 software.

Results. Nineteen placentas of pregnant women with PEC were collected and 19 without the pathology. It find increased uptake of fluorescein in erythrocytes in the maternal placentas no PEC, the patients who developed PEC was remarkable decreased catchment of fluorescein by state of gravity.

Conclusions. There is an obvious decrease in activity of iNOS during preeclampsia, which is a possible explanatory factor on the process of vasoconstriction during pregnancy, manifested by elevated blood pressure.

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