
LEVEL OF MAGNESIUM IN THE MATERNAL SERUM, THE UMBILICAL SERUM AND IN THE AMNIOTIC FLUID

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Objective: to explore the level of magnesium in the maternal serum, the umbilical serum and the amniotic fluid in the third trimester of pregnancy and during the C-section.

Method: the level of magnesium was measured with tintometer method, without deproteinisation, by means of the reagents (Olvex diagnosticum).

Results: 25 pregnant women at 26 weeks to 40 weeks gestation, aged from 18 to 40 years old, 13 suffered IDDM, 14 suffered H.P.O., 9 suffered placental insufficiency, 5 suffered urogenital infection, 1-suffered NIDDM, 1-suffered gestational diabetes. The concentration of magnesium in the umbilical serum and amniotic fluid in comparison with the concentration of magnesium of the maternal serum varies differently. Correlation gravida-fetus decreases in 31,5 % (0.69 ± 0.04 mmol/l), increases in 26.4 % (0.55 ± 0.04 mmol/l) $P < 0.06$ women. Correlation gravida-amniotic fluid decreases in 80 % (0.785 ± 0.03 mmol/l), increases in 15 % (0.573 ± 0.27 mmol/l) $P < 0.01$ women. Correlation fetus-amniotic fluid decreases in 64.2 % (0.76 ± 0.031 mmol/l), increases in 7.3 % (0.56 ± 0.035 mmol/l) $P < 0.001$ women.

Conclusions: the reliable decreasing of magnesium concentration in umbilical serum, and amniotic fluid was determined in comparison with the magnesium concentration of the maternal serum.

DIFFERENCES IN THE PATHOGENESIS OF THE UTERINE CERVIX CANCER

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Objective: The purpose of the research was the analysis of a number of factors, characteristic for an arrangement of the uterine cervix cancer in exocervix or endocervix for a substantiation of a hypothesis about pathogenetic heterogeneity of this disease.

Methods: The retrospective analysis comparing 505 patients with uterine cervix cancer (I-III clinical stage) treated in Prof. N.N.Petrov Institute of Oncology was performed. Women aged from 20 to 75 years old received surgical or combined treatment. The statistical analysis of endogenous (associated with endocrine-exchange pathology) and exogenous (the reproductive function intensity, smoking, background diseases of the uterine cervix) factors is carried out depending on localization of tumor in exocervix or endocervix.

Results: For localization of a tumor in endocervix (both for squamous cell and adenocarcinoma) the association with the factors connected to endocrine-exchange violations, such as myoma, ovarian stromal hyperplasia, genital endometriosis, hypertonia, fattens, diabetes is characteristic. The cancer of endocervix more often meets in patients of menopausal age. The cancer of exocervix is connected with young (reproductive) age of patients and exogenous factors, such as background diseases of the uterine cervix, smoking, intensive reproductive function, sexual activity.

Conclusion: The received data allow to put forward a hypothesis about pathogenetic heterogeneity of the uterine cervix cancer and various variants of its development in dependence on localization of the tumor.