## ANEMIA IN PREGNANTS WITH RECURRENT MISCARRIAGE

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**Objective:** to make a comparison of pregnancy course and terminations between pregnants with and without anemia Level of hemoglobin lower than  $110 \text{ g} \mid was$  a criterion of anemia. Retrospective analysis of archives files of 152 pregnants with recurrent miscarriage included character of clinic & somatic status, menstrual function, reproductive history, pregnancy course & termination, state of newborns.80 anemic pregnants treated with iron & vitamins formed the main group. The control group consisted of 72 pregnants without anemia.

**Results.** The main group differed from the control with age  $(p < 0,05) : 32,3\pm0,6$  and  $30,5\pm0,6$  years; number of pregnansies  $(p < 0,05): 5,3\pm0,2$  and  $4,6\pm0,2$ ; menstrual days  $(p < 0,01): 5,3\pm0,2$  and  $4,7\pm0,1$  correspondingly. It revealed that anemic pregnants twice more often had cardiovascular diseases, twice rare- hyperandrogenia. Placental pathology (10 & 4,4%), bleeding (9,6 & 0%), manual examination of postnatal uterus (15 & 3,7%) and premature labors twice more frequent were observed in the main group than in the control one. Apgar score was significantly lower (p < 0,01) in newborns from the anemic mothers:  $7,0\pm0,2 - 8,1\pm0,1$  and  $7,6\pm0,1 - 8,6\pm0,1)$ .

**Conclusions:** Anemia in spite of its treatment has influence on the pregnancy course and its termination. Probably, it is necessary to search new approaches for examination and treatment of anemic pregnants.

## N-3 POLYUNSATURATED FATTY ACIDS IN HIGH RISK PREGNANCY AND LIPID SPECTRUM CHANGES

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**Objective:** to study the changes in lipid levels in high-risk pregnant supplemented with n-3 polyunsaturated fatty acids (PUFA).

**Design:** Prospective, randomised, placebo-controlled trial. Picasol (2.7 g of n-3 PUFA/daily, N=31(Denmark) or placebo (olive oil, N=29) were administrated during II-III trimesters of pregnancy. Before administration of n-3 PUFA/placebo and in the end of III trimester serum concentration of the following parameters of lypid spectrum: total triglycerids, total cholesterol, cholesterol of high (HDL), low (LDL) and very low (VLDL) density lypoproteins had been measured. Clinical part of the study was partially performed in the framewarks of the Fish-oil Trial in Pregnancy (FOTIP).

**Results:** There were no significant differencies in lipids level between groups in baseline measurment. In the end of III trimester we found significant differencies between two groups in triglycerids and VLDL-cholesterol concentrations  $(1.7\pm0.4 \text{ mmol/L} \text{ and } 0.8\pm0.2 \text{ mmol/L}$  in Picasol group vs  $2.4\pm0.5 \text{ mmol/L}$  and  $1.1\pm0.2 \text{ mmol/L}$  in placebo group, respectively). We did not find significant differencies in blood pressure indices and hypertensive dysorders incidence between groups. In the same time, frequency of signs of placental insufficiency in placebo group was significantly higher, than in Picasol group.

**Conclusions:** We suggest that observed changes in triglycerids and VLDL-cholesterol concentrations in prophylactic administration of n-3 PUFA can be conditioned by preventive effect on endothelial dysfunction and by possible changes in expression of angiogenic growth factors in placental tissues. Further investigations of placental growth factors will allow to evaluate their role in the genesis of endothelial dysfunction and possible mechanisms of its correction.

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