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## OXIDATIVE MODIFIED PROTEINS IN ERYTHROCYTES OF PREGNANT WOMEN WITH HYPOHEMOGLOBINEMIA AND HYPERHEMOGLOBINEMIA

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**Background & Aim:** Pregnancy is often accompanied by the development of anemia. In clinical practice pregnant women with hyperhemoglobinemia are also observed. It is known that hyperhemoglobinemia can lead to hypercoagulation, can cause pregnancy complications up to eclampsia. The main purpose was to assess membrane-bound hemoglobin and reactive carbonyl protein products concentrations in red blood cells (RBCs) of women with hypohemoglobinemia and hyperhemoglobinemia.

**Methods:** Study included total 68 pregnant women divided in three groups: in study groups there were 57 women with hypohemoglobinemia, 10 women with hyperhemoglobinemia. All patients underwent a detailed clinical examination. Informed consent was obtained from the subjects before they were recruited into the study. The concentration of membrane-bound hemoglobin in erythrocytes was measured following the protocol of Toktamysova ZS, Birzhanova RK (1990); the concentration of reactive carbonyl protein products was measured following the protocol of R. Levine et al. (1990).

**Results:** RBCs membrane-bound hemoglobin was lower in 1-st group patients (median 6,202, range 5,243-6,864), compared with 2-nd group patients (median 8,147, range 7,802-8,414), ( $p < 0.01$ ). RBCs reactive carbonyl protein products concentrations was higher in 1-st group patients (median 7,845, range 3,655-10,770), compared with 2-nd group patients (median 2,915, range 2,120-4,765), ( $p < 0.01$ ).

**Conclusions:** The consequences of alteration in the biochemical parameters measured in RBCs of pregnant women with hypohemoglobinemia and hyperhemoglobinemia are discussed

### Biography

D V Vazenmiller graduated from Karaganda State Medical University, Karaganda, Kazakhstan in 2006. Since 2006 he works at the Regional Obstetric Gynecological Center. He studies actual problems in obstetrics and gynecology, and has publications on the same. In 2014, he completed a Master's degree in Medicine.

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