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The study of the role of genetical combination rs6729809 and rs10769908 in the formation of hyperplastic processes

Irina V. Krivoshey [1] - Oksana B. Altuhova [2] - Evgeniy N. Krikun [3] - Mikhail I. Churnosov [4] - Roman F. Kapustin [5]

[1] Belgorod National Research University, Department Biomedical Sciences, Belgorod, Russia - Department Obstetrics and Gynecology, [2] Belgorod National Research University, Belgorod, Russia - Medical College, [3] Belgorod National Research University, Belgorod, Russia - Department Biomedical Sciences, [4] Belgorod National Research University, Belgorod, Russia - Department of Morphology and Physiology, [5] Belgorod State Agrarian University Named After V.J. Gorin, Maiskii, Russia

The aim of the research was to study the role of the combinations of the genes rs6729809 and rs10769908 in the formation of hyperplastic processes of uterus among the population of the Central Chernozem region of Russia. The group of the research was made of 1873 individuals: 908 patients with hyperplastic processes of uterus and 965 women of the control group. The sample of patients and controls were included women of Russian nationalities who are the natives of the Central Chernozem region and non-relative to each other. Material for the study is the venous blood in the amount of 6 ml taken from the cubital vein of a proband. The eduction of genomic DNA from peripheral blood was done by the method of phenol-chloroform extraction. Polymorphism study was carried out with the help of the method polymerase chain reaction with using appropriate primers and probes for thermocycler IQ5. Genotyping of the two molecular genetic markers was carried out: LHCGR483 (rs6729809) and STK33 (rs10769908). It was revealed that the combination of alleles C rs6729809 with C rs10769908 are recorded among the patients with hyperplastic processes of uterus (20.81%) was significantly less compared with the control group (27.78%, p=0.03, OR=0.68, 95%CI 0.55-0.85). Thus, it was found that among the women of the Central Chernozem region protective factor in the development of hyperplastic processes of the uterus is the combination of alleles C rs6729809 with C rs10769908 (OR=0.68).

Keywords

Hyperplastic processes of uterus; molecular genetic markers.