RESEARCH ON HEREDITARY FACTORS OF MULTIPLE SCLEROSIS SUSCEPTIBILITY AND PECULIARITIES OF ITS COURSE IN RUSSIAN ETHNIC GROUP

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Multiple sclerosis (MS) is a polygenic disease; significance of separate genes is unequal in different populations. There are not enough information about MS genetic features in Russian populations. Polymorphous locus selection was based on contribution of its products in pathogenesis of MS. An aim of the study was to examine the influence of polymorphous locus on MS susceptibility and clinical course subject to gender in Omsk and Omsk district. Material and methods: 265 patients with MS and 576 healthy controls were examined. Results: inheritance of G allele of the polymorphous locus rs1800629 (*TNFα*) increases the MS risk twofold, C allele of polymorphous locus rs6074022 (*CD40*) — in 1,5 times in Russian ethnic group. Therewith rs1800629 (*TNFα*) primary increases the risk of relapsing-remitting MS development and rs6074022 (*CD40*) — of secondary-progressive. Association between rs6074022 (*CD40*) and moderate rate of disease progression (OR = 1,49 (1,10−2,00), p = 0,0009) and a tendency to severe rate (OR = 1,46 (1,03−2,07), p = 0,03) was established. The tendency to association between rs1800629 (*TNFα*) and moderate (OR = 0,56 (0,34−0,92), p = 0,02) and severe rate (OR = 1,88 (1,04−3,39), p = 0,03) of disease progression was shown.

Key words: multiple sclerosis, *TNFα*, *KIF1b*, *CD40*, *TNFRSF1A*, *IL-18*.

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