



PSORIASIS

ASSOCIATION BETWEEN SINGLE NUCLEOTIDE POLYMORPHISMS IL17A (RS2275913) AND IL17F (RS763780) AND PSORIASIS AND PSORIATIC ARTHRITIS IN CAUCASIANS OF EAST SIBERIA

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Introduction: Psoriasis is a prevalent chronic inflammatory disease which can affect any part of the body. Psoriatic arthritis is one of the most severe forms of psoriasis. Th17-lymphocytes, their gene polymorphism and their metabolites play the main role in the pathogenesis of psoriasis and psoriatic arthritis.

Objective: To study the frequency of distribution of allelic variants of IL17A (rs2275913), IL17F (rs763780) cytokine genes polymorphisms in psoriasis and psoriatic arthritis in Caucasians of Krasnoyarsk with the goal to reveal the markers of progression of psoriatic disease.

Materials and Methods: This study includes patients with psoriasis (n=77), psoriatic arthritis (n=99) and 102 healthy control. Venous blood served as a material for the study. DNA isolation was performed using the standard sorbent method. Determination of allelic variants of the genes IL17A (rs2275913), IL17F (rs763780), carried out by the method of restriction analysis of products (RFLP analysis) of specific regions of the genome. Differences in the frequency of genotypes in patient groups and control were carried out using χ^2 Pearson criterion.

Results: We found significant higher frequencies of genotypes AG and GG of IL17A (rs2275913) polymorphism in psoriasis compared to psoriatic arthritis. The genotypes AG and GG of IL17F (rs763780) polymorphism were significantly more frequent among psoriatic arthritis compared to control.

Conclusions: We showed that the frequency of genotypes AG and GG of polymorphism rs2275913 of the IL17A gene in psoriasis is statistically significantly higher compared to psoriatic arthritis, which indicates its association with the risk of psoriasis development. We identified the IL17F (rs763780) single nucleotide polymorphism as a risk factor for psoriatic arthritis in Caucasians of East Siberia.

