



POSTER PRESENTATION

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Lack of association between the HLA region RS7775055 polymorphism and JIA in patients from russia

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Introduction

Juvenile idiopathic arthritis (JIA) refers to a group of conditions involving joint inflammation that first appears before the age of 16. Juvenile idiopathic arthritis is thought to arise from a combination of genetic and environmental factors. Numerous associations between HLA polymorphisms and JIA subtypes have been reported in multiple populations. The HLA region SNP rs7775055 is a part of the *HLA-DRB1*0801-HLA-DQA1*0401-HLA-DQB1*0402* haplotype, which has been shown to increase risk of JIA in UK and non-Hispanic Caucasians US patients. The recent study of Hinks and co-authors also showed the strong evidence of association between rs7775055 and JIA (odds ratio (OR) = 6.01; $p=3.14 \times 10^{-174}$) in patients from across the US, UK and Germany.

Objectives

The goal of the study was to test the hypothesis that the HLA region SNP rs7775055 could underlie susceptibility to JIA or its subtypes in patients from Russia.

Methods

The HLA region SNP rs7775055 was studied in 204 children with JIA and 207 healthy individuals, citizens of the Bashkortostan, Russia using real-time PCR. Statistical analysis was performed using Statistica v.6.0 and SNPStats programs.

Results

The genotypes distribution was in Hardy-Weinberg equilibrium in both groups. The HLA region SNP

rs7775055 did not show an association either with JIA or any of the JIA subtypes in our cohorts. We revealed a trend tendency towards an increase of CC genotype under a recessive model in persistent oligoarthritis cohort, but it was not statistically significant ($p=0,068$, OR=6.88 95%CI 0,71-67,02).

Conclusion

In summary, in this study we found no evidence of association between the HLA region SNP rs7775055 and JIA or its subtypes in patients from Russia.

Disclosure of interest

None declared.

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