RESEARCH LETTERS

Locus DR in primary Sjögren's syndrome

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Abstract

The primary Sjögren's syndrome (pSS) is an autoimmune exocrinopathy which is presenting with progressive dryness of the eyes and the mouth, changes in the parotid glands and not rarely with systemic (extraglandular) manifestations. The development of the immunogenetics proved that the course of the disease is genetically determined. HLA-antigens, associated with pSS differ in the separate races, populations and ethnic groups.

We compared the antigenic frequency of fifty patients with pSS, fulfilling the European Criteria for diagnosis (2) to the control group, included 170 healthy individuals. Fifty three antigens from locus DR were detected, using typifying anti HLA sera, manufactured by "One Lambda", USA.

Only the DR3 antigen showed statistically significant difference. The antigenic frequency: in the group with pSS was 56.0 % (n=28), while in the control group — 23.52 % (n=40). The antigenic frequency of DR4 antigen was respectively 38.0 % (n=19) and 18.82 % (n=32) for the two groups. The difference was not statistically significant. It was not established a significant difference for the rest DR antigens between the two groups.

Our study established a significant correlation with the DR3 antigen. A similar association with DR3 antigen is reported and by other authors (1, 4). Primary Sjögren's syndrome may be associated which other antigens from the DR locus: DR2, DR4, DR5, DR6 and DR8 (1), which is different for the separate races, populations and ethnic groups. The results showed and increased phenotypic frequency of DR4 antigens in the patients with pSS, compared to the controls, but the difference was not statistically significant. The increased frequency of DR4 is reported in other researches (1, 3, 4). It is well known that the DR4 antigen is also associated with the secondary SS in rheumatoid arthritis (RA) (5). The patients have been followed up for 6 years, but they did not fulfill the diagnostic criteria for RA.

Finally, we showed say that the phenotype of each nation is a results of migration and natural selection, which determine the varieties for the Bulgarian population.

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