HLA-B27 in Turkish patients with rheumatoid arthritis

Sir, Isomäki et al initially reported an increased prevalence of HLA-B27 in rheumatoid arthritis (RA) in Finland.\(^1\) Later, two studies from Turkey pointed out that this was also true for Turkish patients, but with a lower prevalence of B27 both among the patients and the healthy population.\(^2\,^3\)

In the study from our laboratory, of 50 consecutive, seropositive (by latex agglutination) patients with RA, the prevalence of HLA-B27 was 7/50 (14%), whereas the prevalence of the same allele was 8/268 (3%) among healthy controls \((\chi^2=9.06, p=0.002)\).\(^4\) The prevalence of the only other allele investigated in this study, HLA-B5, was 30% among the patients and 33% among controls.

Recently we had the opportunity to re-examine our findings. Thirty two Turkish patients with definite or classical RA\(^4\) were HLA typed in Leiden, Holland as part of a study with Dr J D Perry of London, to compare the severity of disease in English and Turkish patients.

The prevalence of HLA-B27 was 6/32 (19%) among patients and 3/50 (6%) among controls, confirming our earlier observation. This approached the conventional statistical significance level if it is accepted that the corrected \(p\) value is not used if a significant association has previously been shown\(^5\) \((RR=3.22, \chi^2=3.06, p=0.076)\). The prevalence of DR4 was 14/32 (44%) among patients, whereas it was 11/50 (22%) among controls \((RR=2.69, \chi^2=4.38, p=0.035)\).

The Ural-Altaic hypothesis\(^5\) claims that there are linguistic ties between the Turks and the Finns.\(^6\) The association of RA with HLA-B27 may be another link supporting this hypothesis.

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References