SHORT REPORTS

HLA-B39 and the Axial Type of Psoriatic Arthritis

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The frequency distribution of HLA-B38 and HLA-B39 was studied in a group of 50 unrelated psoriatic arthritis patients. A high increase of HLA-B39 was noted in the subgroup with axial arthropathy. All B39 positive patients presented with spondylitis and/or sacroiliitis. The hypothesis is formulated that HLA-B39 may discriminate a genetic subset of psoriatic arthritis characterized by a particular susceptibility to develop axial involvement. *Key word: HLA-B38* (Received August 7, 1986.)

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Recently, we have found a strong association between HLA-B16 and psoriatic spondylitis in an Italien psoriatic population (1). On the other hand, we failed in that study to corroborate previous reports on HLA-B27 increased frequency in psoriatic spondylitis and/or sacroiliitis.

The present paper is a further contribution to that investigation. HLA-B16 has recently been split into at least two serologically distinct antigens B38 and B39. The role of these HLA alleles in psoriatic arthritis (PsA) as well as the implications for peripheral and axial involvement have been evaluated in this study.

MATERIAL AND METHODS

Fifty unrelated patients with PsA (28 males, 22 females) were investigated. The Noll and Wright criteria for PsA and the New York criteria for spondylitis were adopted as previously reported (1). Patients were categorized into one of the following two groups: 1) axial (spondylitis and/or sacroiliitis) with or without peripheral involvement (17 patients) 2) peripheral involvement only (33 patients).

HLA typing was performed by microlymphocytotoxicity test following N.I.H. technique (2). Three monospecific antisera for B38 (UCLA-Terasaki, Biotest, Fresenius) and two monospecific antisera for B39 (UCLA-Terasaki, Biotest) plus an additional B39-B16 duospecific serum (Behring-Werke) were used. Comparisons were made with 596 controls. Fisher's exact test was employed for statistical analysis.

Table I. *HLA-B38 and B39 in psoriatic arthritis with and without axial arthropathy; in each group comparison is made with controls*

	No.	(%)	*P*		No.	(%)	*P*
Total PsA (50)				*Axial PsA (17)*			
P38	4	(8)	NS	B38	2	(12)	NS
B39	5	(10)	$<5.2\times10^{-3}$	B39	5	(29)	$<3.2\times10^{-5}$
Peripheral only PsA (33)				*Controls (596)*			
B38	2	(6)	NS	B38	22	(4)	
B39	0		–	B39	11	(2)	

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RESULTS

HLA-B39 frequencies of the patients with PsA are shown in Table I. The most striking feature is the high prevalence of B39 in the group with axial arthritis.

DISCUSSION

Early reports stated that HLA-B38 was elevated in PsA (3, 4, 5). Further studies showed an increase in both B38 and B39 frequencies (6) as well as B39 alone (7).

In our study we have found that HLA-B39 was most strikingly associated with spondylitic and/or sacroiliitic lesions. It is remarkable that all B39 positive patients presented with axial involvement; none had peripheral arthropathy alone. These findings suggest that B39 is a strong indicator for axial involvement in PsA; it may discriminate a genetically distinct group of patients particularly prone to develop axial arthropathy.

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Hair Root Studies in Patients Suffering from Primary and Secondary Syphilis

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The hair root status (trichogram) was studied in eleven patients with primary and eight with secondary syphilis. Variables studied in addition to the hair roots were absence or presence of hair root sheaths, deformities and hair roots with angulations exceeding 20°. A decrease in the number of anagen hair roots and an increase in the number of catagen hair roots, dysplastic/dystrophic roots and anagen hair roots with sheaths and more than 20° angulation was observed in both groups of patients. No difference was demonstrable