Bf Allotypes in Bullous Pemphigoid

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Key Words

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allotypes are now being identified [3]. B factor is controlled by the Bf locus which is situated on the short arm of chromosome 6, between HLA B and D [4]. These results point to the interest of the study of B polymorphism in different diseases, particularly in those classified as autoimmune: certain allotypes are found associated with various diseases so frequently that they represent true genetic markers [5].

Research on BP has mainly concentrated on class I and II HLA antigens: a statistically significant frequency of certain class I and II HLA antigens has been not demonstrated [6, 7], but a probable association between DR5 and BP was recently considered by Seignalet et al. [8]. In our study we found a distribution of B alleles comparable to that in a normal population. Thus, Bf cannot be considered a genetic marker for BP.

It is now widely accepted that the major histocompatibility complex plays an important role in susceptibility to certain diseases, particularly those characterized by impaired immunological function. The aim of this study was to look for an association between the major

histocompatibility complex and bullous pemphigoid (BP) through examination of complement B factor (BO phenotypes. Bf being closely linked to this genetic marker.

40 patients with BP (19 women and 21 men) with an age range of 60–92 years were studied.

Diagnosis was confirmed by anatomopathological examination of a bullous lesion and circulating and/or fixed antibodies: subepidermal detachment and antibodies against the basement membrane zone.

Bf allotyping was carried out on serum frozen at 70 °C using a modification of Alper and Johnson's [1] method: High-voltage agarose gel electrophoresis at constant temperature (2°C) followed by immunofixation with an anti-B factor serum (Atlantic. Scarborough. Mass.. USA).

The results were subsequently compared with reference sera. B phenotypes from healthy individuals from the same region were also studied.

Statistical analysis was carried out using the chi-square test.

Table I summarizes the results of Bf gene frequencies in BP compared with healthy controls.

There is no statistically significant difference between the frequency of the various B alleles in patients and in controls.

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Properdin B factor or C3 proactivator or glycine-rich beta glycoprotein is an important component of the alternate pathway of complement. Its polymorphism has been demonstrated by Alper et al. [2]: there are two main alleles F and S and two rare variants F1 and S07. Numerous other