HLA antigens in East African Black patients with Burkitt's lymphoma or nasopharyngeal carcinoma and in controls: a pilot study.

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Abstract

A pilot study is reported of HLA-A, B, and C antigens in 141 East African Blacks comprising patients with Burkitt's lymphoma or nasopharyngeal carcinoma, either with active disease or in long-term remission, together with comparable controls. This study forms part of a wider program investigating host factors in these diseases. A protocol was selected for optimal testing of cells processed and cryopreserved between 1972 and 1976, largely under field conditions, which employed a two-color fluorochromasias typing procedure. Antigen distribution and computed haplotype frequencies in the total unrelated population are given. New findings include an approximately equal frequency of Aw23 and Aw24, a high (18%) incidence of Bw21, and the gametic associations of Aw36 with Bw44, and Aw30 with Bw45. Of the major group of B15-related antigens reported earlier, SV is the most common, and there are strong linkages of SV with Cw2 and Bu with Cw3. The possible presence of further variants at the A- and B-loci is reported. The proportion of B-locus antigen "blanks" in this study is 5.9%. Relationships have been sought between the HLA antigens and diseases studied: the antigen A29, possibly in linkage with Bw42, shows a correlation with disease susceptibility, and associations are suggested between Bw44 (in possible combination with Aw36) and resistance to both BL and NPC, and between Bw45 and long-term remission in NPC.