

Distribution of HLA Antigens in Bhils and Pawars of Dhadgaon, Maharashtra, India

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ABSTRACT Fifty three unrelated blood samples from Bhils and 38 unrelated blood samples from Pawars, two endogamous tribes residing in Narmada valley, Maharashtra, Western India, were examined for HLA A and B antigen profiles. The Bhil group was characterized by high frequencies of HLA A1, A10, B5, B8, B15 and B27; the frequencies of HLA A11, A28, B7, B12, B35, B37 and B55 were found to be higher in Pawars. Both the tribal populations had higher frequencies of A2, A9, A19, B7, B40 and B53. Two locus haplotype analysis revealed that A10-B8 a common Indian haplotype and A9-B37 were observed in both the tribal populations in positive linkage disequilibrium. Haplotype A9-B35 and A3-B13 were observed only in Pawars. The haplotype A9-B37 was unique in these two tribal populations and was not reported in the other tribal populations hitherto studied in India. Thus HLA antigen frequencies and haplotype which are unique for each tribe investigated suggested a genetic isolation.