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Anthropologist Special Issue No. 3: 367-372 (2007)

## Human Leukocyte Antigen Polymorphism and Association: A Review

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KEYWORDS Caste Groups. Tribal Groups. HLA Antigens. Disease Associations

**ABSTRACT** Indian population is well known for its genetic and anthropologic diversity. Among the numerous endogamous communities, which are restricted very much by anthropological characteristics, custom, marriage and occupation, a compiled analysis of 1742 individuals comprising of different caste and tribes from Western India has been studied for their HLA. The sympatrically isolated caste and tribal population of India with different origins, migration pattern and breeding habits differed significantly in their HLA and also in their HLA allele (Relative risk) prevalence for a number of disease associations. Further the analysis reveal that the caste groups of India cannot be considered as a single panmictic population with reference to genetic characteristics, which may have a clinical relevance in unrelated donor selection for allogenic Bone marrow transplantation and disease associations in India.