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Abstract

Background:

Systemic Lupus Erythematosus (SLE) is a multisystem generalized chronic autoimmune disorder characterized by humoral autoimmunity. The etiology of SLE is thought to be multifactorial involving an interplay of environmental, humoral, and genetic factors. There is a strong association of the human leukocyte antigen (HLA) with SLE, however, the association is likely to be heterogeneous among different ethnic groups. The aim of this study was to determine the association of HLA-DRB1, HLA-DQA1 and HLA-DQB1 with SLE susceptibility and clinical manifestations in the western Indian population.

Methods:

A total of 250 SLE patients fulfilling the ACR criteria were recruited and an equal number of age sex and ethnically matched normal healthy controls were recruited for this study.

HLA types were determined by the polymerase chain reaction on a Luminex platform with sequence-specific oligonucleotide primers (PCR-SSOP) method in 250 patients and 250 control subjects.

Results:

The following HLA alleles were found to be positively associated with SLE: HLA-DRB1*04 (P=.00380), HLA DRB1*11 (P=0.0001), HLA-DQB1*03 (P=.0008), HLA DQB1*05(P=0.040) and DQA1*01(P=0.0018)

Conclusions: