

Abstract

Autoimmunity is the process where auto-reactive T- lymphocytes or auto-antibodies produced by B-cells react against self antigens. The prevalence of autoimmune diseases has been estimated to be 3-5% which makes it one of the major health concerns.

A total of 120 samples were collected from Patients with different autoimmune diseases from hospitals and clinics throughout the West Bank and 82 from normal controls. The aims of this study were focusing on the presence of two point mutations on the CTLA4 gene; CT60 and AG49, and to associate between their presence and susceptibility to autoimmune diseases in the Palestinian population living in the West Bank, Palestine. Both mutations were tested using RFLP-PCR on all cases and control samples.

There was a significant difference in the AG49 point mutation between the controls (29.6%) and patients (60%) for the G allele ($P < 0.05$). Homozygous A allele was clearly much higher in controls (70.4%) as compared to patients (40%). For point mutation in the CT60 allele, there was no significant association between the sample tested and autoimmune diseases ($P > 0.05$). Results reflect that the G allele doesn't play a role in susceptibility to autoimmune diseases.