

Abstract

Autoimmune diseases are serious and sometimes life-threatening disorders that affect approximately 5 % of the world population and therefore represent a major socio-medical problem. The HLA complex is the best studied part of the human genome that encodes the HLA antigens, whose function is to present peptides to immune system (T-lymphocytes). During the study of the HLA complex it has been found that certain HLA antigens are strongly associated with the occurrence of autoimmune diseases, despite the great progress in clarifying disease etiopathogenesis the mechanism of these associations is, however, not fully explained. Sometimes the association of autoimmune disease with the HLA complex is very strong, such as in ankylosing spondylitis or celiac disease, while in other diseases the association is relatively weak, suggesting a role of other genetic and / or environmental factors. The aim of this work is to briefly explain the structure and function of the HLA complex and its association with some severe autoimmune diseases.