

Role of HLA Typing in Celiac Disease

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Abstract : Introduction: Celiac disease (CD) is a chronic immune-mediated enteropathy triggered by gluten found in wheat or oats or rye. Celiac disease is associated with the HLA-DQ2 and HLA-DQ8 susceptibility alleles. This association with the HLA DQ2/DQ8 molecules confirmed the responsibility of genetic factors that intervene in the triggering of the autoimmune process of this condition. Objective: To evaluate the results of HLA DQ2 and HLA DQ8 typing of 40 patients suspected of having CD by PCR-SSP (Polymerase Chain Reaction Sequence Specific Primers). Material and method : 40 patients suspected of celiac disease with IgA transglutaminase serology (-) and duodenal biopsy (+). HLADR/DQ PCR-SSP (fluogen-innotrain) typing was carried out. Results : The average age of adults was 40 years, children: 4 years, the sex ratio was 1M/3F. In our patients the HLA DQ2 allele is found with a frequency of 75%, the DQ8 with a frequency of 25%, 17.5% were HLA-DQ2 homozygous and 15% were HLADQ2/HLADQ8. In our series, HLADQ2, DQ8 are found in almost all patients with a frequency of 95%. 30% of patients in our study had associated positivity of HLA-DRB3, DRB4 or DRB5 alleles. Conclusion : A high prevalence of positivity of HLADQ2 alleles at the expense of HLA DQ8 was found, which is consistent with literature data. These molecules constitute an additional marker for screening and diagnosis of CD.

Keywords : HLA typing, coeliac disease, HLA DQ 2, HLA DQ8

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