

Type 1 Diabetes and Coeliac Disease in Algeria

Meriche Hacene* and Gadiri S

Department of immunology, clinic st Therese, UHC Annaba, Algeria

Introduction: The co-occurrence of celiac disease and type 1 diabetes has been reported as 5-7 times more prevalent than celiac disease alone. The clinical presentation of celiac disease in patients with type 1 diabetes may vary considerably. Less than 10% of patients with type 1 diabetes and celiac disease show gastrointestinal symptoms. Celiac disease is more prevalent in type 1 diabetic patients than in the general population in Algeria country. As follows the ESPGHAN guidelines, diagnosis of celiac disease is based on the presence of villous atrophy and crypt hyperplasia by intestinal biopsy and the presence of antibodies against tissue transglutaminase.

Material and Methods: In a total of 420 diabetic adults were screened for coeliac disease by simultaneous detection of human IgA isotype antibodies directed against tissue transglutaminase, gliadin and deaminated peptide of gliadin by FIDIS Celiac DPG kits (Theradiag).

Resultants: Forty diabetic adults were positive for IgA class transglutaminase and a Deaminated Peptide of Gliadin antibody, all underwent biopsy of the small intestine. Twenty two cases of coeliac disease were found; all of these adults had characteristic biopsy establishing partial or total villousatrophy.

Conclusion: It was concluded that IgA class transglutaminase and deaminated peptide of gliadin antibody were a good marker of coeliac disease for screening tests of high risk populations. The prevalence of coeliac disease in Algerian diabetic population was 5.2% and we suggest that diabetic adults be screened routinely for antibody for coeliac disease at diagnosis of type 1 diabetes, every year in the first five years of follow-up.