

Evaluation of the Benefit of Anti-Endomysial IgA and Anti-Tissue Transglutaminase IgA Antibodies for the Diagnosis of Coeliac Disease in a University Hospital, 2010-2016

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Abstract : Objective: Coeliac disease (CD) is a primary small intestine disorder caused by high sensitivity to gluten which is present in the crops, characterized by inflammation in the small intestine mucosa. The goal of this study was to determine and to compare the sensitivity and specificity values of anti-endomysial IgA (EMA IgA) (IFA) and anti-tissue transglutaminase IgA (anti-tTG IgA) (ELISA) antibodies in the diagnosis of patients suspected with the CD. Methods: One thousand two hundred seventy three patients, who have applied to gastroenterology and pediatric disease polyclinics of Afyon Kocatepe University ANS Research and Practice Hospital were included into the study between 23.09.2010 and 30.05.2016. Sera samples were investigated by immunofluorescence method for EMA positiveness (Euroimmun, Luebeck, Germany). In order to determine quantitative value of Anti-tTG IgA (EIA) (Orgentec Mainz, Germany) fully automated ELISA device (Alisei, Seac, Firenze, Italy) were used. Results: Out of 1273 patients, 160 were diagnosed with coeliac disease according to ESPGHAN 2012 diagnosis criteria. Out of 160 CD patients, 120 were female, 40 were male. The EMA specificity and sensitivity were calculated as 98% and 80% respectively. Specificity and sensitivity of Anti-tTG IgA were determined as 99% and 96% respectively. Conclusion: The specificity of EMA for CD was excellent because all EMA-positive patients (n = 144) were diagnosed with CD. The presence of human anti-tTG IgA was found as a reliable marker for diagnosis and follow-up the CD. Diagnosis of CD should be established on both the clinical and serologic profiles together.

Keywords : anti-endomysial antibody, anti-tTG IgA, coeliac disease, immunofluorescence assay (IFA)

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