

## Prevalence of Celiac Disease in Patients with Irritable Bowel Syndrome

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### ABSTRACT

**Background:** Celiac disease (CD) may be misdiagnosed as Irritable Bowel Syndrome (IBS) resulting in long delays in diagnosing CD. There are contradictory reports on the association of CD with IBS. Appropriateness of screening all patients with IBS for CD and how to screen them are still under question.

**Materials and Methods:** In a cross-sectional study, 328 IBS patients (Rome II) referred to the Poursina Hakim Gastroenterology Clinic were investigated for CD. Total serum anti-tissue transglutaminase IgA (anti-tTG IgA) concentration was measured in all patients. In IgA deficient cases, antigliadin antibody (AGA) IgG concentration was also measured. Moreover, in patients who underwent upper endoscopy (as their necessary workup) duodenal biopsies were taken.

**Results:** Fifty-eight patients were excluded. The remaining patients were 166 (61.5%) women and 104 (38.5%) men with the mean age of 35.3 years (SD = 11.8). No one had positive serological test of IgA anti-tTG antibody. Five patients were IgA deficient; none of them had positive IgG AGA. Duodenal biopsies were taken in 60 patients and pathologic evaluation showed 53 Marsh 0, three Marsh I, three Marsh II, and one Marsh IIIa. Only the patient with Marsh IIIa adhered to gluten-free diet (GFD) which led to decrease in severity of symptoms. In patients who did not adhere to GFD, no one had positive serological test after 12 months of follow-up.

**Conclusion:** Prevalence of CD in patients with IBS referred to outpatient gastroenterology clinic might be significant but serum anti-tTG IgA antibody is not helpful in detecting CD in these patients. Further studies are needed to clarify this issue.

**Keywords:** Celiac disease, Irritable bowel syndrome, Screening

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