Abstract

Background: Dermatitis herpetiformis (DH), a well-established gluten-sensitive skin disorder presenting variable degrees of enteropathy, constitutes a very useful model in order to assess the utility of the celiac disease (CD)-related serology in patients with mild intestinal damage. Objective: Our aim was to explore comparatively the performance of a panel of CD-related serologic tests in patients with DH. Methods: We assessed a series of 18 consecutive patients with skin biopsy proven DH presenting the overall spectrum of intestinal damage ranging from normal mucosa (n=6) to total villous atrophy (TVA) (n=6) through partial villous atrophy (PVA) (n=6). Sera were obtained from all patients while consuming a gluten containing diet. Serologic tests were antiendomysial, anti-tissue transglutaminase and antigliadin antibodies, and newly developed tests detecting both antibody isootypes (IgA and IgG) against deamidated synthetic gliadin-derived peptides (a-GDP). Results: Serologic tests had a variable behaviour depending on the degree of enteropathy. While the majority of tests detected patients with TVA, only 50% of those with normal histology had positive assays. Patients with PVA had discordant results. Classical CD-specific tests were positive in only some patients with mild damage while all of them were identified by a single assay detecting both antibody isootypes (IgA and IgG) against deamidated synthetic gliadin-derived peptides (a-GDP). Conclusion: The detection of a-GDP antibodies was the most reliable tool in order to identify gluten sensitivity in DH patients presenting a wide range of intestinal damage. Further studies should explore if these findings can be extrapolated to patients with CD having mild enteropathy.

Keywords

Celiac disease, dermatitis herpetiformis, serology, intestinal permeability, gluten sensitivity.