Dig Dis Sci (2013) 58:1165–1166
DOI 10.1007/s10620-013-2651-8

EDITORIAL

Celiac Disease: Clinch the Diagnosis When It Is Just Around the Corner

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Published online: 28 March 2013

Although a considerable number of publications have reported that the prevalence of celiac disease is 1–2 %, fewer have reported the diagnostic accuracy of the screening tests used [1, 2]. Since the classic symptoms of steatorrhea and malabsorption constitute only a minor subgroup of the subjects with celiac disease, active case finding with suitable tests is needed to identify the disease widely.

Since celiac disease is treatable, and since treatment positively affects its natural history, testing is needed to narrow the diagnostic gap between existing and detected celiac disease [3, 4]. With a high index of suspicion, the liberal use of serologic screening tests in at-risk groups, and routine small intestinal biopsy during esophagogastroduodenoscopy (EGD), are feasible. Nevertheless, in this issue, Lebwohl et al. [5] describe 17 cases in whom the diagnosis of celiac disease was delayed because no small intestinal biopsy was available, or it was reported as normal, prolonging disease in many patients. Almost all of these patients were symptomatic with complaints often suggestive of the presence of celiac disease.

The Finnish national guidelines advocating serologic screening and routine small intestinal biopsy during diagnostic endoscopy in at-risk groups for celiac disease have been carried out in virtually every endoscopy unit, yielding a prevalence of diagnosed celiac disease of 0.7 % in adults [6]. We analyzed the diagnostic yield of routine small intestinal biopsy in primary health care, where open-access endoscopy was available. Of the 9,971 patients examined, 147 were diagnosed with celiac disease. In patients suffering from dyspepsia or gastroesophageal reflux disease, celiac disease was diagnosed in 0.77 and 0.61 %, respectively. In patients with anemia, weight loss, diarrhea, or other reason to suspect celiac disease (especially family history), the corresponding frequency was 5.33 % [7]. Lebwohl et al. [8] recently reported that among patients undergoing EGD for iron deficiency anemia, diarrhea, or weight loss, only 43 % had a small-bowel biopsy during this procedure. Even with subclinical iron deficiency (microcytic and hypochromic red cells), celiac disease should be excluded by serology or histology.

Lebwohl et al. [5] recommend considering small intestinal biopsy in individuals suffering from dyspepsia or reflux. Malabsorptive anemia, weight loss, and diarrhea are even more compelling indications. If small intestinal biopsy is taken in all the indications above, only few remain. We must keep in mind that patients undergoing diagnostic EGD are usually symptomatic, and it is also of value to know that the small intestinal histology is normal.

To make the issue even more complicated, the sensitivity of small-bowel biopsy is less than 100 %. Often specimens are of poor quality, not properly oriented, and are thus subject to misinterpretation [9]. This notwithstanding, a duodenal biopsy can always be re-interpreted or even the block recut if celiac suspicion appears later in life. Small intestinal mucosal atrophy develops gradually from mucosal inflammation to overt villous atrophy. Some patients with early stage celiac disease without evident atrophy may still suffer from symptoms that are alleviated while consuming a gluten-free diet [10, 11]. Thus, identifying early changes can be of therapeutic benefit. In the study by Lebwohl et al. [5], normal small intestinal mucosa

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was reported on the biopsy obtained during the initial endoscopy, but on a second look, inflammatory changes were reported especially in villous tips, a finding suggestive of early stage celiac disease [12, 13]. In borderline cases, celiac serology should always be investigated. We agree with Lebwohl et al. [5] that gross endoscopic mucosal alterations are not specific enough to determine when to take a small-bowel biopsy.

The major reason why celiac disease is not identified more frequently is not due to the aforementioned minor insensitivity of small intestinal biopsy, but rather that too many celiac patients remain undiagnosed even when they repeatedly seek help for suspicious complaints. We do not necessarily need more serologic screening studies. Instead, it is time to go on the hunt for this disease.

Acknowledgments The celiac disease study group is financially supported by the Competitive State Research Financing of the Expert Responsibility area of Tampere University Hospital.

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