

October 10/07: Detection of Celiac Disease

Celiac disease (CD) is one of the most common lifelong disorders with possible significant morbidity consequences in untreated patients. However, most cases remain undiagnosed due to poor awareness by primary care physicians. General population screening is not yet considered justifiable ethically or financially but in the following study, a North American clinical research group created an active case-finding strategy in order to increase the frequency of CD diagnosis and to determine the most common clinical presentations of the condition.

Catassi C, Kryszak D, Louis-Jacques O, Duerksen DR, Hill I, Crowe SE, Brown AR, Procaccini NJ, Wonderly BA, Hartley P, Moreci J, Bennett N, Horvath K, Burk M, Fasano A

Detection of Celiac Disease in Primary Care: A Multicenter Case-Finding Study in North America
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In this multicenter, prospective study, any individual over the age of 18 yrs seeking care from their physician was informed of the study by the practice reception staff. Those willing to participate completed a questionnaire. 976 individuals were considered at risk for CD and therefore eligible for the study because they indicated the presence of one or more of the 11 CD-suggestive conditions listed in the questionnaire such as family history of CD, chronic fatigue, infertility, bloating and others.

All participants were tested for IgA anti-tTG antibodies and those with elevated anti-tTG were subsequently tested for serum IgA antiendomysial antibodies. All subjects who were positive for EMA were advised to undergo an intestinal biopsy and HLA typing for definitive diagnosis of CD. In individuals (103 patients) with very low values of IgA anti-tTG (<0.5 arbitrary units) total serum IgA level was determined, but was found to be normal in all 103 cases.

In 976 patients tTG-IgA was performed. 30 had elevated titres (3.07%), 8 of those were EMA negative, all 22 EMA positive were diagnosed with CD. The most frequent conditions relevant to CD screening in these 22 cases were bloating (n=12), thyroid disease (11), irritable bowel syndrome (7), unexplained chronic diarrhoea (6), chronic fatigue (5), and constipation (4). The prevalence of CD was 2.25%. During the 12 months preceding this study, only 15 patients had been diagnosed with CD out of 54,988 individuals seen by the participating practices. During the study period, the diagnostic rate significantly increased from 0.27 to 8.6 cases per 1,000 visits.

These data indicate that CD is still largely under-diagnosed in North America at the primary care level. By applying simple and well-established criteria for CD case finding, a 32-fold increase in the diagnostic rate was able to be achieved. Many newly diagnosed cases of CD reported a long-standing history of symptoms (usually for years) that should have raised the suspicion of CD well before.

The authors recommend that all individuals with one or more of the large variety of clinical manifestations and conditions associated with CD should have serological testing and, if positive, should be referred for definitive diagnosis by means of an intestinal biopsy.

