Gastroenterology Elsewhere

Cosnes J, Cellier C, Viola S, Colombel JF, Michaud L, Sarles J, *et al*; Groupe D'Etude et de Recherche Sur la Maladie Coeliaque. **Incidence of autoimmune diseases in celiac disease: protective effect of the gluten-free diet.** *Clin Gastroenterol Hepatol* 2008;6:753-8.

Almost 1% of world's population is expected to have celiac disease. Patients with an autoimmune disease have a higher likelihood of having another autoimmune disease in comparison to controls. Almost 10% patients with celiac disease have type 1 diabetes mellitus; 5-15% patients with IDDM have celiac disease. It is postulated that there may be a common abnormality which predisposes these patients to have more than one autoimmune disease.

The authors did a retrospective analysis, of 924 celiac patients from French gastroenterology centers, to determine the factors that modulate the risk of autoimmune disease in those with celiac disease and the effect of gluten-free diet on subsequent occurrence of other autoimmune diseases. One or several autoimmune diseases had developed in 178 patients. The cumulative risk of autoimmune disease was 8.1(1.0)% at age 15, and 15.7 (1.5)% at age 30. Factors associated with an increased risk were family history of autoimmunity (hazard ratio, 2.36; 95% CI, 1.71–3.31) and diagnosis of celiac disease before the age of 36 years (hazard ratio, 2.65; 95% CI, 1.79–3.85). After diagnosis of celiac disease, 55 of 788 patients developed an autoimmune disease. The cumulative risk of subsequent autoimmune disease was lower in patients compliant to a gluten-free diet versus noncompliant patients (at 10 years, 6 [2]% vs 15.6 [5.9]%, respectively; p=0.02). The incidence of autoimmune diseases was lower (5.4 per 1000 patient-years) during adherence to a gluten-free diet versus during non-adherence (11.3 per 1000 patient-years, p=0.002).

In short, patients with celiac disease have higher risk of another autoimmune disease. Gluten-free diet has a protective effect on further occurrence of autoimmune diseases.

Moon SH, Kim MH, Park DH, Hwang CY, Park SJ, Lee SS, *et al*. **Is a 2-week steroid trial after initial negative investigation for malignancy useful in differentiating autoimmune pancreatitis from pancreatic cancer? A prospective outcome study.** *Gut* 2008;57:1704-12.

The diagnosis of autoimmune pancreatitis (AIP) is made on the basis of a combination of clinical, radiographic and laboratory and/or histopathological findings. The pancreas in autoimmune pancreatitis is generally diffusely swollen due to infiltration of lymphocytes and plasma cells; in few patients the mass may be localized to one part of pancreas, and may resemble malignancy. In those situations, it may be difficult to differentiate between AIP and pancreatic cancer. AIP responds to steroids and the mass may decrease/disappear in response to steroids. The authors used this principle to test whether a 2-week steroid trial is a useful diagnostic tool to differentiate AIP from pancreatic cancer.

Twenty-two consecutive patients, who had atypical clinical imaging for AIP, and not meeting the criteria for pancreatic cancer, received 2 weeks of prednisolone 0.5 mg/kg orally per day. The response to therapy was defined as marked improvement in narrowing of the main pancreatic duct and a reduction of the pancreatic mass. Steroid therapy was continued in case of positive steroid responsiveness. Surgery was done in patients in whom there was no change in the mass; the final diagnosis was made at surgery. Fifteen patients responded to steroids and were diagnosed to have AIP. All seven patients who did not respond to steroid were confirmed to have pancreatic cancer at exploratory laparotomy and biopsy. Complete resection was possible in all, except one individual who refused surgery.

A two week trial of steroid and subsequent assessment of its response appears to be good strategy in those situations where differentiation between AIP and pancreatic cancer is inconclusive.

Arena U, Vizzutti F, Abraldes J G, Corti G, Stasi C, Moscarella S, *et al*. **Reliability of transient elastography for the diagnosis of advanced fibrosis in chronic hepatitis C.** *Gut* 2008;57:1288-93.

Liver fibrosis is traditionally assessed by liver biopsy. A number of non-invasive tests to assess fibrosis, including various indices, biochemical tests, have been devised recently; transient elastography (*Fibroscan*) has been devised for the assessment and progression of liver fibrosis. Fibroscan measures the 'stiffness' or 'elasticity' of the liver, using an ultrasound scan to create waves and measure their speed. The harder the liver tissue, the more rapidly will waves pass through it. Fibroscan is less sensitive in detecting mild or moderate liver damage. A score of >10kPa indicates higher likelihood of fibrosis (F3) and >17kPa indicates cirrhosis (F4 on the Metavir scale).

The authors assessed the accuracy of transient elastography in identifying fibrosis in patients with chronic hepatitis C using a multilevel likelihood ratios (LR) analysis. 150 consecutive adult patients with chronic hepatitis C underwent liver biopsy and transient elastography on the same day. Calculation of multilevel likelihood ratios showed that values of transient elastography <6 or $\geq$12 pKa, <9 or $\geq$12 pKa, and <12 or $\geq$18 pKa, clearly indicated the absence or presence of significant fibrosis, advanced fibrosis, and cirrhosis, respectively. The areas under the curve for the prediction of significant fibrosis (F2), advanced fibrosis (F3) or cirrhosis (F4) were 0.91, 0.99 and 0.98, respectively. The presence of inflammation significantly affected transient elastographic measurements in patients who did not have cirrhosis (p<0.0001), even after adjusting for the stage of fibrosis.

Transient elastography is more suitable for the identification of patients with advanced fibrosis than those with cirrhosis or significant fibrosis.

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