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ARCHIVIST

Latent coeliac disease

Do all children with coeliac disease need to stay on a gluten-free diet for life? It's a question that has been asked ever since the connection between dietary gluten and coeliac disease was discovered and the conventional answer, of course, is yes. Now researchers in Paris (Tamara Matysiak-Budnik and colleagues. *Gut* 2007;**56**:1379–86) have found that 13 of 61 adults with coeliac disease diagnosed in childhood had ''latent'' coeliac disease (asymptomatic and no villous atrophy on biopsy) on a long-term normal diet. (At this centre some children were allowed to return to a normal diet after gluten challenge if they were symptom free even though they had abnormal mucosal histology.)

The patients were re-evaluated at a median age of 26 years (17–53 years). The diagnosis of coeliac disease had been made at a median age of 17 months (6–192 months) and at the time of re-evaluation the patients had been taking a normal diet for an average of 10 years (2–44 years). They had remained free of major symptoms, although around 50% had minor symptoms such as episodic abdominal pain and bloating insufficient to make them resume a gluten-free diet. On repeat duodenal biopsy, 48 had ''silent'' coeliac disease (asymptomatic but total or partial villous atrophy) and 13 latent coeliac disease. Osteopenia or osteoporosis, defined by measurements of bone mineral density, was present in 25/42 patients tested (1/9 with latent coeliac disease and 23/33 with silent coeliac disease). The two groups (latent and silent) did not differ significantly as regards symptoms, current gluten consumption or duration on normal diet. The mean BMI was similar in the two groups, but eight patients in the silent group were underweight. On comparing the group with latent coeliac disease with a group of seven patients who had remained on a gluten-free diet since diagnosis, there were no significant differences in haemoglobin and iron status, serum biochemistries or bone mineral density. Coeliac disease specific antibodies were present in 5/13 vs 1/7 patients. Repeated duodenal biopsy in some patients in the latent group indicated that mucosal recovery might occur several years after resuming a normal diet. On further follow-up after this study, two of four patients in the latent coeliac disease group had clinical and histological relapse 3 years after the diagnosis of latency.

The authors of this paper suggest that up to 10% of children with coeliac disease could eventually recover normal mucosal histology after several years on a gluten-free diet. Serological abnormalities and abnormalities of intraepithelial leukocytes may persist, however, and histological relapse may occur on further follow-up. The risk of intestinal malignancy is not addressed in this paper. Careful follow-up with repeated biopsies would be necessary for all patients with latent disease and some might consider it not worth the risk involved.