PWE-006

IS THEIR A ROLE FOR CAPSULE ENDOSCOPY IN PATIENTS WITH COELIAC DISEASE AND PERSISTING SYMPTOMS?

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Introduction Up to one third of patients with coeliac disease fail to have a symptomatic response to gluten-free diet (GFD), or relapse after initial response. Causes include inadvertent gluten exposure and complications of coeliac disease such as lymphoma. There are limited published data assessing the role of capsule endoscopy (CE) in patients with coeliac disease and persisting symptoms. For this reason we evaluated our experience of CE in this group of coeliac patients.

Methods Data from all patients with established, biopsy-proven coeliac disease and persisting symptoms despite 12 months GFD, who underwent CE between 2004 and 2010 in a tertiary gastroenterology department were analysed. Concurrently we performed serology (endomysial antibody (EMA) and tissue transglutaminase (tTG)), and a duodenal biopsy (Marsh grading, and where appropriate T cell clonality). At CE changes of coeliac disease such as scalloping, mosaic pattern and loss of folds were assessed including extent of disease (proximal or diffuse). Concordance between serology, histology and CE was assessed using Spearman's coefficient.

Results 58 patients (42 female, median age 56 years, range 22–78 years) were identified. 8/58 (13.8%) had significantly abnormal CE findings with either mass lesions, extensive disease or ulceration. In these 8 cases: 2 had enteropathy associated lymphoma (EATL), 4 Type 1 refractory disease, 1 fibroepithelial polyp, 1 complication of ulcerative jejunitis. Of the 4 (4/58, 6.9%) refractory Type 1 cases 2 were started on immunosuppressants, 1 died of unrelated causes and another was a tertiary referral case, in whom we do not currently have outcome data.

There was no correlation between the likelihood of having complicated coeliac disease and the serological titres (either a positive EMA or significantly raised tTG). However, there was a positive correlation between more extensive changes at CE (diffuse) and the level of tTG ($r=0.344$, $p<0.004$). A similar observation was made for the relationship between diffuse involvement at CE and EMA positivity ($r=0.377$, $p<0.002$). There was a strong correlation between the extent of disease observed at CE and histology ($r= 0.618$, $p<0.001$).

Conclusion There is a role for CE in coeliac disease patients with persisting symptoms. A significant proportion are found to have complicated or refractory coeliac disease. Extensive changes of coeliac disease seen on CE should prompt clinicians to investigate for refractory disease, request PCR on duodenal biopsy (for monoclonality) and consider immunosuppressive therapy.

Competing interests None.

Keywords capsule endoscopy, coeliac disease, refractory.

Table 1 PWE-006 Features of coeliac disease on CE and serology

	No features	Mild	Extensive
tTG 0–99	19 (p=0.031)	13	10
tTG100–299	0	1	5
tTG >300	2	1	7 (p=0.032)