Clinical Presentation of Adult Coeliac Disease

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Abstract
The mode of presentation of coeliac disease has been changing to more atypical or silent disease. Few studies described the clinical presentation of adult coeliac disease in Ireland in recent years. We retrospectively collected the clinical data for all patients who had a diagnosis of coeliac disease made in our centre between January 07 and December 08. Forty seven adults, predominantly females (n=30), had a confirmed diagnosis of coeliac disease made during the study period. In our patient cohort, the presenting symptom was diarrhoea in 19 (40%) patients, while 16 patients (34%) did not have any G.I. symptoms. 10 (21%) presented with anaemia. Females presented at a significantly younger age compared to males, with median ages at diagnosis of 44.5 and 57 years, respectively (p=0.04). Females also presented more commonly with non G.I. symptoms (p=0.07). The reasons behind this gender difference need further study.

Methods
All adults (age ≥ 18 years) who had a diagnosis of coeliac disease made in Beaumont Hospital, Dublin, Ireland, between January 07 and December 08 were evaluated for this study. The diagnosis was based on the combination of positive serological tests for continuous factors and Pearson's X2 tests for categorical factors. A p value < 0.05 was considered statistically significant.

Results
Forty seven adults, median age 48 years, had a confirmed diagnosis of coeliac disease made in our centre during the study period. Females represented 84% (n=30) of all patients and had a significantly lower median age at diagnosis compared to males (44.5 and 57 years, respectively, p=0.04). The average duration of symptoms prior to diagnosis was 9.1 months (range 2–48 months), with no significant difference in diagnosis delay between men and women (8.8 and 9.3 months, respectively, p=0.93) (Table1).

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The classical presentation with diarrhoea and weight loss occurred in just 6% (n=3) of all patients. In total, 16 patients (34%) did not have any G.I. symptoms, 10 (21%) presented with anaemia. The remaining 6 patients (one male and 5 females) presented with weight loss (n=2), dermatitis herpetiformis (n=1) or had screening because of low bone density (n=2) or family history of coeliac disease (n=1) (Figure 2).

Females presented more commonly with non-G.I. symptoms compared to males (p=0.07), with 27% (n=8) of females presenting with anaemia compared to 12% (n=2) of males. On the other hand, only 30% (n=9) of females presented with diarrhoea compared to 59% (n=10) of males (Figure 1). Diarrhoea was the main clinical presentation in 61% (n=19) of patients with G.I. symptoms, while dyspepsia and/or mouth ulcers were the presenting symptoms in the remaining 39% (n=12, 4 males and 8 females). Though 17% (n=8) of patients reported some degree of weight loss, this was the main presenting symptom in only two patients.

Only 23% of patients (n=11) had endoscopic features suggestive of coeliac disease; nine patients with reduced duodenal folds, one patient with scalloping of folds and one patient with mosaic appearance of mucosa. The majority of patients had epithelial lymphocytosis (96%, n=45) and/or partial villous atrophy (66%, n=31) on histologic examination. Crypt hyperplasia was present in only 17% (n=8) of patients, and total villous atrophy in 28% (n=13). Though the mode of presentation did not correlate with the serologic, endoscopic or histologic findings, the mean tTG IgA antibody levels showed positive correlation with histologic subtype as previously reported 19 (Figure 3).

Discussion

In our study, females represented 64% of all patients and had a significantly lower median age at diagnosis compared to males. This indicates that the demographic characteristics of adult coeliac patients in Ireland mirror those observed in The United States and Europe with a female predominance that decreases with age 12,21-23. The reason behind this female predominance is unknown, but could be explained by the fact that the prevalence of immune mediated diseases in general is higher in women than in men.

Although we did not find a correlation between low bone density and weight loss in patients with coeliac disease, this is probably a type II statistical error because of the relatively low number of patients (n=2) with weight loss as their main clinical presentation in our study population. The sensitivity of the endoscopic features of coeliac disease continues to be disappointing as previously reported 20. Though our very low rates could also be related to the unawareness of many endoscopists of the features suggestive of coeliac disease. In summary, about two thirds of patients presenting with adult coeliac disease in the Irish population are females. Females also have lower median age at presentation, and tend to present more commonly with non-G.I. symptoms, mainly anaemia, compared to males. The reasons behind this gender difference need further study.
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References

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