

The Relation between Adult Coeliac Disease and Exocrine Pancreatic Insufficiency: 12 Month Follow Up and Intervention Data

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Introduction: Gluten exposure is the most common reason for continuing gastrointestinal (GI) symptoms in patients with coeliac disease (CD). However we have previously reported that a proportion of patients with CD who still have GI symptoms had underlying exocrine pancreatic insufficiency. This was assessed using faecal elastase-1 (Fel-1).

Aim: To assess whether there is long term symptomatic benefit in patients with CD who have pancreatic exocrine insufficiency identified.

Patients and Method: We recruited patients from the specialist coeliac clinic. Patients were assessed for the following factors: (1) duration of CD, (2) compliance to GFD (based on antibody status), and (3) the presence of continued GI symptoms. All patients attending were invited to produce a stool sample that was assayed for Fel-1 using ELISA. Those patients with Fel-1 <200 with significant diarrhoea were offered pancreatic supplementation: Creon (initially 10 000 units b.d).

Results: 209 patients were recruited into the study (55 males, median age 50.8 years) of which 31 patients had a Fel-1 <200 (14.8%).

The prevalence of exocrine pancreatic insufficiency was significantly greater in CD patients with ongoing symptoms when compared to the other groups (X^2 $p = 0.02$). At a minimum of 12 months follow up 18/20 of the patients treated with Creon significantly improved in terms of bowel habit but only 13/46 patients with Fel-1 >200 were improved (X^2 $p = <0.01$). Mean weight gain 0.9kg. Two patients found no symptomatic benefit in bowel habit but no patients had side effects with this therapy.

	n = 209	Fel-1 100 -200	Fel-1 <100
New CD (<6 months)	57	2	4 (7%)
Asymptomatic	86	2	3 (3.5%)
Ongoing GI symptoms	66	8	12(18.2%)

Conclusions: The overall prevalence of exocrine pancreatic insufficiency in CD is 14.8%. In CD patients with persistent GI symptoms, Fel-1 is of value for the assessment of exocrine pancreatic insufficiency. There is a clinical improvement for these individuals in terms of frequency of bowel habit and weight gain.

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