

PWE-073

IS THERE AN ASSOCIATION BETWEEN DIARRHOEA PREDOMINANT IRRITABLE BOWEL SYNDROME AND SMALL BOWEL INJURY ON CAPSULE ENDOSCOPY?

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Introduction Diarrhoea predominant irritable bowel syndrome (D-IBS) represents a large outpatient gastroenterology workload. There are a subset of patients where their symptoms of D-IBS may overlap with suspected Crohn's disease. These patients may represent a cohort that may progress to occult Crohn's disease on long term follow-up. There is a paucity of data on this subject. Capsule endoscopy (CE) is a recognised tool to examine the small bowel. We hypothesised that a proportion of patients with D-IBS may have evidence of small bowel injury, which can be visualised on CE.

Methods Patients referred for CE for investigation of diarrhoea and abdominal pain with/without the presence of abnormal blood parameters were identified. Patients with a normal CE or those who fell short of CE criteria for Crohn's disease were selected for case note review. Data was collected for demographics, clinical symptoms, previous investigations, findings of CE and subsequent follow-up.

Results A total of 151 patients were identified. There were 103 females (68%) with a mean age of 39 years (range 17–80 years) and the mean follow-up period was 12 months. Six per cent (n=9) were on non-steroidal anti-inflammatory therapy (NSAID). Previous investigations included colonoscopy in 92% (n=139), small bowel meal in 54% (n=81) and computer tomography in 36% (n=55). The median small bowel transit (SBT) was within the normal range of 228 min (range 59–376). The small bowel was entirely normal in 70% (n=106) but abnormalities were found in 45 patients (30%). The abnormalities were located in the distal small bowel in 51% (n=23), proximal small bowel in 29% (n=13), mid small bowel in 7% (n=3) and diffuse change was present in 13% (n=6). The changes were thought to be due to NSAID's in 4 patients. In the remaining

41 patients (who were not on NSAID's), CE showed evidence of erosions or petechiae and ulcers. These patients did not fulfil the criteria for Crohn's disease on CE. Apart from diarrhoea and the presence of abdominal pain, 12% of these patients (n=5) had a low B12 and 22 patients (49%) had evidence of raised inflammatory markers (erythrocyte sedimentation rate or C-reactive protein). Hypoalbuminaemia was not a feature in these patients and only one patient had evidence of iron deficiency anaemia.

Conclusion In a proportion of patients with D-IBS, while the small bowel transit is within normal limits, small bowel injury is evident on CE. This may suggest an activation of the mucosal innate defence system toward a pro-inflammatory response in patients with D-IBS. This subset of patients may go on to develop occult Crohn's disease with longer term follow-up. Further studies are required to validate our results.

Competing interests None.

Keywords capsule endoscopy, Diarrhoea predominant Irritable bowel syndrome, Small bowel injury.