Enteric dysmotility/acquired chronic intestinal pseudoobstruction (ED/CIPO): relationship between symptoms, small intestinal manometric abnormalities and neurohistopathological findings

doi:10.1136/gut.2011.239301.322

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Introduction Enteric dysmotility is an important clinical subgroup of the gastrointestinal neuromuscular disorders.1 Of a personal series of 130 patients recorded on our database 89 have undergone both 24 h ambulatory studies of small intestinal motility and laparoscopic full thickness jejuna biopsies. The aim of the present study was to examine the relationship between the manometric and neurohistopathological findings.

Methods Prospective qualitative analysis of small intestinal motility tracings and neurohistopathological analysis of the full thickness biopsies were performed as previously described.2 Patient symptoms were prospectively assessed using a modified Rome II questionnaire (n=52).

Results All the small intestinal motility studies were abnormal. Of the commonest symptoms, severe abdominal pain (93.2%) was significantly related to the presence of simultaneous non-propagated contractions (p< 0.04) and nausea (88%) to lack of fed pattern (p< 0.02). Abdominal fullness (86.3%) was significantly related to abnormalities of 7 parameters of phasic activity of the interdigestive migrating motor complex (MMC) (p< 0.04 or less) including abnormalities of the phase III MMC (p< 0.04), abdominal distension (84%) was related to abnormalities of 9 parameters (p< 0.05 or less). Early satiety (82.7%) was the only common symptoms that was not related to any of the motility abnormalities. Straining of stool (82.7%) and passage of hard lumpy stools (82.7%) were related to the presence of retrograde phase III MMC’s (p< 0.02, p<0.03).

Although 94 of 106 (88.6%) full thickness jejuna biopsies were abnormal, nocturnal abdominal pain was the only symptom related to the neurohistopathological diagnosis (reduced numbers of ganglion cells in myenteric plexus (p<0.02).

Conclusion Our findings suggest that common symptoms in patients with ED/CIPO are caused by the abnormal motor activity of the small intestine. Symptoms however are poor predictors of the final neurohistopathological diagnosis with the exception that nocturnal abdominal pain is suggestive of an underlying enteric neuropathy.

Competing interests None.

REFERENCES