

TREATING DIABETIC GASTROPARESIS WITH GHRELIN

Delayed gastric emptying, often associated with evidence of autonomic neuropathy, can be an important problem in diabetes. Numerous treatments have been suggested but none are particularly effective. Ghrelin is a regulatory peptide produced by the enteroendocrine cells of the stomach. Ghrelin blood levels rise before eating and are known to stimulate migrating motor complexes, enhance appetite, and increase food intake in man. Decreased levels following gastrectomy may be responsible for fat depletion and anorexia. The authors of the present study infused ghrelin at a dose known to stimulate appetite. They showed accelerated gastric emptying as assessed by ultrasound. Ghrelin is likely to act on the vagus and myenteric plexus, which both express the growth hormone secretory receptor for which ghrelin is a ligand. The search is now on for orally active analogues of ghrelin, which could prove to be a novel class of prokinetics.

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MAINTAINED BENEFIT OF TEGASEROD IN CONSTIPATED IBS DURING RE-TREATMENT

Previous studies have shown that tegaserod, a 5-HT₄ partial agonist, improves symptoms in constipated IBS. However, symptoms in IBS fluctuate so that patients tend to use medication intermittently. It is therefore important to know if the initial benefit of tegaserod persists when treating relapses. This very large study of 660 patients involved an initial treatment phase of 4 weeks, following which all who experienced at least a partial response

were entered into a follow up and re-treatment phase. Relapse of symptoms during follow up was treated for a further 4 weeks. During both initial and re-treatment periods tegaserod showed a superiority over placebo of 9% and 15%, respectively. The only side effect more common with tegaserod than placebo was diarrhoea, which lead to discontinuation in <1%. Although the gains are modest, it is clear that the initial benefit of tegaserod persists and re-treatment of those who respond initially seems reasonable.

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OPTIMUM IMAGING MODALITIES FOR SMALL BOWEL CROHN'S DISEASE

While the traditional small bowel follow through contrast studies detect most cases of small bowel Crohn's disease (CD) the recently introduced techniques of capsule endoscopy (CE) and magnetic resonance imaging (MRI) could potentially provide greater detail. The capsule should detect more mucosal defects while the MRI can assess wall thickness and vascularity, parameters which are beyond barium contrast studies. However, whether this translates to any advantage in clinical practice is unknown. The current study compared MRI, CE, and small bowel enteroclysis (EC) in 27 patients with known and 25 patients with suspected CD. Known strictures were an exclusion for CE. CE was marginally superior, detecting two cases of mucosal ulceration missed by MR and enteroclysis. A significant number of patients refused EC mainly due to fear of the radiation involved. Overall, MRI and CE outperformed EC, being more sensitive and better tolerated, although obviously CE was restricted to those without apparent small bowel structuring. The authors conclude by recommending upper endoscopy and ileo-colonoscopy with mucosal biopsy as initial investigations for suspected CD. If further tests are indicated they recommend ultrasound followed by MRI to indicate both intestinal and extra-intestinal disease. CE is only indicated in the few remaining in whom knowledge of small bowel pathology would specifically alter treatment.

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PREDICTING METASTATIC POTENTIAL FROM MATRILYSIN EXPRESSION IN COLONIC CARCINOMAS

As screening programmes for colorectal cancer expand, gastroenterologists can expect to see many more stage one colorectal cancers. While endoscopic resection has obvious appeal, whether this will be adequate treatment depends on each tumour's metastatic potential. Recent articles in *Gut* have provided evidence that tumour expression of one of the matrix metalloproteinases, matrilysin, may provide a marker of this potential. The current study used cDNA array analysis to show that mRNA for matrilysin was more than fourfold increased in those with nodal metastases. Multiple logistic regression analysis showed tumours staining positive for matrilysin had a >10-fold increase in risk of metastasis. Using complex mathematical techniques they developed a causal model of metastasis. This suggested that matrilysin expression had twice the importance of lymphatic invasion in causing metastasis. Matrilysin is readily assayed in endoscopically resected specimens, so it is likely to prove useful in predicting who would benefit from further treatment, including laparotomy and lymph node dissection.

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