

GLOSSARY

CROHN'S DISEASE ACTIVITY INDEX (CDAI)

An index composed of subjective and objective parameters: a CDAI score ≤ 150 indicates clinical remission; >150 indicates active disease; and >450 indicates extremely severe disease

WIRELESS CAPSULE ENDOSCOPY

Endoscopy performed using a disposable capsule that is self-illuminating and contains a camera that can transmit images via wireless radiotransmission to an external recording device

and responses to treatment. The researchers also took blood samples from participants and examined their DNA for polymorphisms in the CCK gene promoter and the genes encoding the CCK1 and CCK2 receptors, to investigate the influence of CCK receptor gene polymorphisms on the response to treatment and on gut transit in general.

Patients receiving dexloiglumide were reported to have a significant acceleration of gastric emptying ($P=0.004$) and a significant delay in ascending colon emptying ($P=0.01$) when compared with the placebo group, although there was no significant overall effect on bowel function or relief of IBS. An association was found between slower gastric emptying and the CCK1 intron 1 polymorphism 779T $> C$ ($P=0.04$), but the genotype of participants did not appear to affect their response to dexloiglumide in terms of gastric emptying.

This study suggests that dexloiglumide might hold therapeutic value for IBS patients with delayed gastric emptying or accelerated proximal colonic transit. Further studies are needed to assess the potential role of the single nucleotide polymorphism and the manifestations of IBS or its response to treatment.

Original article Cremonini F *et al.* (2005) Effect of CCK-1 antagonist, dexloiglumide, in female patients with irritable bowel syndrome: a pharmacodynamic and pharmacogenomic study. *Am J Gastroenterol* **100**: 652–663

New therapeutic approach for refractory Crohn's disease

Autologous hematopoietic stem cell transplantation (HSCT) is a safe and feasible approach for treating patients with refractory Crohn's disease, according to data from a small, phase I study published in *Gastroenterology*.

Crohn's disease is characterized by acute and chronic inflammation of the bowel, which is thought to be caused by dysregulation of type I T-helper cell-mediated immune responses. Although treatments for Crohn's disease are available, including anti-inflammatory and immunosuppressive drugs, a certain proportion of patients do not respond to these approaches, or respond initially but then develop recurrent disease.

Preliminary data indicate that autologous HSCT might lead to clinical improvement in

patients with Crohn's disease who are refractory to current treatment approaches. To investigate this further, Oyama *et al.* performed autologous HSCT in 12 patients who had failed to respond to conventional therapies (CROHN'S DISEASE ACTIVITY INDEX [CDAI] scores of ≥ 250). The procedure resulted in disease improvement in most patients and was well tolerated (apart from expected neutropenic or disease-related fevers). Neutrophil and platelet engraftment occurred at a median of 9.5 days (range 8–11) and 9 days (range 9–18), respectively. At a median follow-up time of 18.5 months only 1 patient had recurrent Crohn's disease and the remaining 11 patients remained in remission with CDAI scores of ≤ 150 .

In this study, the authors also tested a new grading system for monitoring Crohn's disease severity, the Craig Crohn's Severity Index, which they designed to overcome some of the limitations of the CDAI system. Similar results were obtained using the two systems.

Oyama *et al.* conclude that: "Although longer follow-up is needed, further investigation of autologous HSCT for Crohn's disease appears warranted".

Original article Oyama Y *et al.* (2005) Autologous hematopoietic stem cell transplantation in patients with refractory Crohn's disease. *Gastroenterology* **128**: 552–563

Wireless capsule endoscopy for the diagnosis of obscure small-bowel disorders in children

The diagnosis of small-bowel disorders is notoriously challenging, owing to the limitations of conventional imaging techniques. Conventional endoscopy is limited by the length of the small bowel, and radiologic techniques are insensitive for the detection of many types of lesion.

WIRELESS CAPSULE ENDOSCOPY is a recently developed technique that allows noninvasive imaging of the entire small bowel. The accuracy of this technique has been established in animal models and adult patients. In their prospective controlled study, Guilhon de Araujo Sant'Anna and colleagues investigated the diagnostic value and safety of capsule endoscopy for the diagnosis of obscure small-bowel disorders in children and adolescents.

The 30 patients, who were aged 10–18 years, were divided into three groups: those with