hormone does not promote *in vivo* progression of intestinal tumors.

Claire Braybrook

Original article Aparicio T *et al.* (2005) Leptin stimulates the proliferation of human colon cancer cells *in vitro* but does not promote the growth of colon cancer xenografts in nude mice or intestinal tumorigenesis in $Apc^{Min/+}$ mice. *Gut* **54:** 1136–1145

Neurotransmitter antagonist effective in treating fatigue associated with chronic hepatitis C

Researchers in France have found that a drug that nullifies the action of the neurotransmitter serotonin reduces fatigue in patients with chronic hepatitis C (CHC). Previous studies have hinted that central dysfunction has a role in the pathogenesis of fatigue, but few, if any, randomized, placebo-controlled trials have been conducted until now.

CHC patients experience a high prevalence of fatigue, characterized by a lessened capacity for work and a feeling of weariness and irritability. Hepatologists are therefore seeking to understand the multiple factors behind this phenomenon and to develop effective therapies to improve quality of life.

Piche *et al.* focused on ondansetron, a serotonin antagonist. They used a specially designed questionnaire that enabled them to quantify fatigue in a sample of 36 patients with CHC using a measure known as the Fatigue Impact Scale (FIS). They found that 4 weeks of twice-daily treatment with ondansetron (4 mg orally) not only reduced fatigue by 37.8%, but also had a positive effect on the incidence of depression.

Despite these positive results, the researchers raise concerns that the drug might not be cleared effectively by the liver in patients with CHC, since its effect was still evident 30 days after the treatment was stopped. Larger multicenter trials are necessary to assess further the efficacy and safety of this treatment.

Rachael Williams

Original article Piche T *et al.* (2005) Effect of ondansetron, a 5-HT_3 receptor antagonist, on fatigue in chronic hepatitis C: a randomized, double blind, placebo controlled study. *Gut* **54:** 1169–1173

Effective biofeedback treatment in patients with slow-transit constipation?

Previous studies have suggested that using biofeedback to train pelvic floor muscle relaxation is effective in the treatment of slow-transit constipation and PELVIC FLOOR DYSSYNERGIA. Chiarioni and colleagues investigated the efficacy of biofeedback treatment in patients with slow-transit constipation, pelvic floor dyssynergia, or symptoms of both disorders.

In total, 52 patients were eligible for inclusion in the study (49 women and 3 men). Using anorectal manometry and balloon defecation tests, patients were classified as having slow-transit constipation only (STO), pelvic floor dyssynergia with slow transit (PFD), or as being mixed (slow-transit constipation plus one of the two criteria for PFD). A three-phase biofeedback training approach was then implemented in 5-weekly sessions of 30–45 min duration. Patients were trained to strain more effectively and, by means of an electromyographic anal plug, to relax the anal sphincter during straining. Lastly, defecation was practiced with an air-filled balloon.

On follow-up, the level of treatment satisfaction was significantly higher in patients with PFD than in those with STO, with 71% rating their satisfaction as fair or major in the PFD group compared with only 8% in the STO group. Greater symptom improvements in terms of stool frequency, straining, bloating and use of laxatives, as well as greater transit-time improvements, were also observed in PFD patients than in STO patients.

Chiarioni and colleagues conclude that this method of biofeedback is effective in the treatment of PFD but that, in contrast with previous reports, it is not suitable for STO.

Katy Cherry

Original article Chiarioni G *et al.* (2005) Biofeedback benefits only patients with outlet dysfunction, not patients with isolated slow transit constipation. *Gastroenterology* **129:** 86–97

GLOSSARY

PELVIC FLOOR DYSSYNERGIA
An abnormal increase in the activity of the pelvic floor muscles, or their failure to relax, on defecation

Endoscopic band ligation deemed unsafe in the small bowel and right colon

Endoscopic band ligation appears to be safe and effective for the control of variceal bleeding