

## GLOSSARY

## NITAZOXANIDE

A thiazolide drug that has broad-spectrum activity against enteric pathogens, including protozoa, anaerobic bacteria, and viruses

half of this group rated their symptoms as 'no change' or 'worse' throughout the study. PEG laxatives also required continuous administration and were poorly tolerated when the dose was increased.

Chiarioni *et al.* randomly allocated 109 adults with severe, chronic constipation caused by pelvic floor dyssynergia to receive either biofeedback training or PEG laxatives (initial dose 14.6g daily, increased to 29.2g daily after 6 months). Patients kept symptom diaries, which revealed that compared with PEG-laxative-treated patients, biofeedback-treated patients had greater reductions in straining, sensations of incomplete evacuation and of blocked defecation, abdominal pain, and laxative use (patients assigned to PEG-laxative treatment used more nonstudy laxatives than those assigned to biofeedback training). Objective assessment measures demonstrated that 83% of patients who received biofeedback training successfully learned to relax their pelvic floor muscles.

Although laxatives are cheap and readily available, biofeedback training is far more effective, say the authors. They note, however, that biofeedback training might not benefit patients whose constipation is not caused by pelvic floor dyssynergia.

Caroline Barranco

**Original article** Chiarioni G *et al.* (2006) Biofeedback is superior to laxatives for normal transit constipation due to pelvic floor dyssynergia. *Gastroenterology* **130**: 657–664

## Itopride superior to placebo for the treatment of functional dyspepsia

Functional dyspepsia is a common problem, characterized by symptoms of upper abdominal pain and discomfort, which are thought to arise from disturbances in gastrointestinal motility and sensory function. Itopride, a dopamine D2 receptor antagonist, is frequently used to treat patients with functional dyspepsia in Japan; however, large trials of its efficacy and dose response are lacking.

Holtmann and colleagues carried out a multicenter, randomized trial of itopride in a population of patients with functional dyspepsia in Germany. In total, 554 patients were randomly assigned to receive itopride at a dose of 50 mg, 100 mg, or 200 mg, or placebo, three

times daily for 8 weeks, after which they were assessed in terms of symptom improvement.

Data were available for 523 participants, and showed that itopride was more effective in improving the symptoms of functional dyspepsia than placebo, and that the improvement seen with each of the three different doses of itopride was approximately 50% greater than that seen with placebo. In addition, no marked difference was observed in the rate of adverse events between the treatment and placebo groups.

The results of this trial suggest that itopride is superior to placebo in treating patients with functional dyspepsia; however, the mechanism by which the drug exerts its effects remains unknown. The authors highlight the need for further trials of itopride in this context that focus on the duration of treatment and its efficacy in different populations.

Katy Cherry

**Original article** Holtmann G *et al.* (2006) A placebo-controlled trial of itopride in functional dyspepsia. *N Engl J Med* **354**: 832–840

## Nitazoxanide is an effective treatment for cryptosporidiosis

*Cryptosporidium* is a protozoan that enters gastrointestinal epithelial cells, causing diarrhea and enteritis; infection can last for weeks or months. Once thought to infect only immunocompromised patients, *Cryptosporidium* infection is now known to be endemic in the US population. Despite this, cryptosporidiosis is still underdiagnosed, and effective treatments have only recently become available. NITAZOXANIDE has proven efficacy in treating cryptosporidiosis in immunocompetent children; Rossignol *et al.* have confirmed this result, and found that nitazoxanide is also an effective treatment for cryptosporidiosis in immunocompetent adults.

Their three-armed study compared 3 days of twice-daily treatment with either 500 mg nitazoxanide ( $n=28$ ) or placebo ( $n=27$ ) tablets (both double-blind) with 500 mg nitazoxanide given as an oral suspension ( $n=31$ ; not blinded). The patients were all from the Nile Delta region of Egypt, were aged 12–67 years, and had diarrhea of 4–100 days' duration that was microbiologically confirmed to be caused solely by *Cryptosporidium* infection.