

25 ml. Before surgery, eliminating tone in the gastroesophageal sphincter resulted in a significant reduction in GEJD ($P=0.03$); this effect was lost after LNF ($P=0.38$).

Although not specifically addressed in this study, the authors speculate that GEJD might have a role in the causation of post-LNF complications. If this were true, they suggest surgeons might be able to reduce the likelihood of postoperative complications by measuring GEJD intraoperatively and tailoring surgery to prevent its reduction.

Rebecca Doherty

Original article Blom D *et al.* (2005) Laparoscopic Nissen fundoplication decreases gastroesophageal junction distensibility in patients with gastroesophageal reflux disease. *J Gastrointest Surg* **9**: 1318–1325

Increasing US incidence of acute liver failure caused by paracetamol overdose

Paracetamol (acetaminophen) is the most commonly used analgesic in the US. Overdose is a well-recognized risk factor for acute liver failure (ALF); this prospective, multicenter, study aimed to test the hypothesis that patients with ALF caused by unintentional overdose would differ, clinically and demographically, from those who had overdosed intentionally.

Of 662 ALF cases treated at 22 US transplant centers, 42% were attributable to paracetamol overdose; this varied from 28% in 1998 to 51% in 2003. Most patients were female and white. Clinical history indicated that 44% ($n=122$) of patients with paracetamol-related ALF experienced definitely intentional and 48% ($n=131$) definitely unintentional overdose. Those who had overdosed unintentionally presented to hospital later, were more likely to have used multiple preparations containing paracetamol simultaneously, and had more severe hepatic encephalopathy on presentation. Chronic pain was considered a potential risk factor for unintentional overdose.

As patients in this study had evidence of hepatic encephalopathy and, by definition, had altered cognition, the clinical histories obtained might not have been entirely accurate. The authors comment, however, that their sample is biased towards those with severe disease being considered for transplant, and the real

incidence of paracetamol-related ALF might be higher. They suggest that legislative changes restricting paracetamol distribution might be necessary to halt the ever-increasing rate of paracetamol-related ALF. This study highlights the worrying contribution of unintentional overdose to ALF as well as the importance of education for both primary-care physicians and susceptible groups.

Rebecca Doherty

Original article Larson AM *et al.* (2005) Acetaminophen-induced acute liver failure: results of a United States multicenter, prospective study. *Hepatology* **42**: 1364–1372

A population-based study of diet and functional gastrointestinal disorders

Clinical studies have suggested that various food items, including wheat, lactose and caffeine, might have a role in the pathogenesis of functional gastrointestinal disorders (FGIDs) such as irritable bowel syndrome and dyspepsia. Saito and colleagues have carried out a population-based study comparing the diets of individuals with FGIDs with those of healthy controls.

In all, 99 patients with FGIDs and 119 control patients from Olmstead County (MN, US) were identified, who had responded by mail to a validated bowel disease questionnaire, and then completed the Harvard Food Frequency Questionnaire. 152 subjects participated in person and underwent a physician interview and physical examination (110 of whom also returned a 7-day diet diary), and the remainder participated by mail.

Similar amounts of foods containing lactose, wheat and fructose, and caffeine-containing or alcoholic drinks were consumed by the FGID cases and healthy controls. Differential consumption of bioactive substances naturally found in foods was also investigated, revealing no difference between the groups in the amount of foods containing serotonin or tryptophan consumed; however, FGID subjects reported a slightly higher intake of foods containing norepinephrine and epinephrine. Intakes of fiber, calories, calcium and vitamins were also similar between the groups.

These results do not concur with expectations based on previous studies, as differential consumption of foods implicated in the pathogenesis of FGIDs was not