

pected IBD, whether or not specific UGI symptoms are present.

**Original article** Castellaneta SP *et al.* (2004) Diagnostic role of upper gastrointestinal endoscopy in pediatric inflammatory bowel disease. *J Pediatr Gastroenterol Nutr* **39**: 257–261

## A novel immunological test for *H. pylori*

Nakata and colleagues have recently evaluated the immunological rapid urease test (IRUT), a novel method for the diagnosis of *Helicobacter pylori* infection. Unlike some other methods based on the high urease activity of *H. pylori*, the IRUT is designed to detect *H. pylori* urease only, so that the presence of urease from other bacteria does not interfere with results.

Gastric mucus samples were collected from 100 adult patients undergoing upper gastrointestinal endoscopy. The IRUT kit (HLS-2000, Olympus Optical) was then used to measure *H. pylori* urease in each sample. Briefly, the test involved a 15-minute incubation of the diluted sample with a solid-phase tip, which had been coated with a monoclonal antibody against *H. pylori* urease. An increase in pH in the urea solution inside the tip then indicated that urease had been adsorbed onto the tip and, therefore, that *H. pylori*-specific urease was present in the original sample. The efficacy of the test was compared with four established methods: culture, histology, RUT and UBT.

A total of 47 patients had a positive result for at least two of the conventional tests, and so were considered *H. pylori*-positive. The IRUT showed high sensitivity (91.5%) and specificity (98.1%) and its efficiency was comparable to that of the conventional methods. The authors note that the test can be performed rapidly (within 20 minutes) and is cheaper than the commonly used UBT.

**Original article** Nakata H *et al.* (2004) Immunological rapid urease test using monoclonal antibody for *Helicobacter pylori*. *J Gastroenterol Hepatol* **19**: 970–974

## Progress in HBeAg-negative chronic hepatitis B therapy

Responding to the high relapse rates associated with current therapies, Marcellin *et al.* have compared the efficacy and safety of peginterferon alfa-2a monotherapy, peginterferon alfa-2a plus lamivudine, and lamivudine monotherapy in the treatment of HBeAg-negative chronic hepatitis B.

This international, multicenter study included 537 patients who were randomized to peginterferon alfa-2a once weekly plus placebo once daily ( $n = 177$ ), peginterferon alfa-2a once weekly plus 100 mg of lamivudine once daily ( $n = 179$ ) or 100 mg lamivudine once daily ( $n = 181$ ) for 48 weeks. There was a follow-up period of 24 weeks after the end of treatment.

At the end of follow-up, normalization of alanine aminotransferase levels or suppression of serum HBV DNA levels below 20,000 copies per ml had been sustained in a significantly higher percentage of patients on peginterferon alfa-2a monotherapy (59% and 43%, respectively) or combination therapy (60% and 44%, respectively) than in those on lamivudine monotherapy (44% and 29%, respectively). Sustained suppression of HBV DNA to <400 copies per ml was also significantly more common in either of the peginterferon alfa-2a groups than in the lamivudine monotherapy group. Loss of HBSAG was noted in a total of 12 patients, all of whom were from the peginterferon alfa-2a groups.

The authors conclude that peginterferon alfa-2a showed significantly improved efficacy over lamivudine and that no additional benefit was seen on addition of lamivudine. This supports the use of peginterferon alfa-2a as a first-line therapy for HBeAg-negative chronic hepatitis B.

**Original article** Marcellin P *et al.* (2004) Peginterferon alfa-2a alone, lamivudine alone, and the two in combination in patients with HBeAg-negative chronic hepatitis B. *N Engl J Med* **351**: 1206–1217

### GLOSSARY

#### RUT

Rapid urease test

#### UBT

Urea breath test

#### HBeAg

Hepatitis B e antigen

#### HBV

Hepatitis B virus

#### HBSAg

Hepatitis B surface antigen