

Childhood *H. pylori* treatment

Responding to a lack of data on *Helicobacter pylori* eradication in children, Oderda and colleagues have carried out a multicenter trial to compare the efficacy of two approaches.

Forty three children undergoing endoscopy for upper gastrointestinal dyspepsia with *H. pylori* gastritis were randomized to triple therapy (lansoprazole plus amoxicillin and tinidazole) or dual therapy (placebo plus amoxicillin and tinidazole) for 1 week. The children were assessed using ^{13}C -urea breath tests and 2-week symptom diary cards up to 6 months after treatment. A structured questionnaire was completed 1–2 years after the end of the trial for 36 of the children. The study aimed to compare the efficacy of the two treatments in terms of *H. pylori* eradication and, as a secondary endpoint, to examine the effect of treatment on long-term reduction of dyspeptic symptoms.

Six weeks after treatment, there was no significant difference between the rates of *H. pylori* eradication in the triple therapy group (68.2%) and the dual therapy group (71.4%). Similar rates were shown at 6 months. Dyspeptic symptoms had either disappeared or were reduced in most children at 6 weeks and 6 months, whether or not *H. pylori* had been eradicated. Longer term follow-up, however, revealed that epigastric pain had recurred in most of the *H. pylori*-positive children.

The authors suggest that tailoring the treatment according to the antibiotic resistance of the strain would help to increase eradication rates and this, in turn, should improve long-term resolution of symptoms.

Original article Oderda G *et al.* (2004) Dual vs triple therapy for childhood *Helicobacter pylori* gastritis: a double-blind randomized multicentre trial. *Helicobacter* **9**: 293–301

Early promise for esophageal cancer diagnosis

Esophageal cancer is usually advanced by the time symptoms appear, and at this stage the prognosis is generally poor. Since combined surgery and chemotherapy are effective in early disease, there is a pressing need for a

reliable screening test. A pilot study conducted at Addenbrooke's Hospital in the UK offers a promising new approach.

Williams *et al.* have previously demonstrated that dysregulation of minichromosome maintenance proteins is characteristic of early epithelial carcinogenesis, and they have used these biomarkers in diagnostic screening applications for cervical and genitourinary tract cancer. On the basis of this work, the authors have now devised an immunofluorometric assay to measure levels of minichromosome maintenance protein 5 (Mcm5) in gastric aspirates. Samples were analyzed from 40 patients with suspected or known esophageal carcinoma or symptoms of dyspepsia. Results were then compared to endoscopy and biopsy histology results.

Mcm5 levels in the samples from patients with esophageal cancer were shown to be significantly elevated. The test differentiated between patients with and without cancer with a high degree of sensitivity (85%, 95% confidence interval (CI) 62–97%) and specificity (85%, 95% CI 66–96%). Inflammatory conditions (including esophagitis and Barrett's metaplastic esophagus) did not yield false-positive results. Ulcerative lesions did generate higher signals than seen in other patients without malignancy, but these were significantly lower than for cancer patients.

The authors conclude that the level of Mcm5 is an important marker of esophageal cancer, and they suggest that their method could be applied widely in diagnosis and screening.

Original article Williams GH *et al.* (2004) Diagnosis of oesophageal cancer by detection of minichromosome maintenance 5 protein in gastric aspirates. *Br J Cancer* **91**: 714–719

Occult tumor cell detection in colorectal cancer

Tumor recurrence is common after surgery for colorectal cancer (CRC) and early detection of residual cancer may improve the success rate of adjuvant chemotherapy. Öberg and colleagues from Sweden have described novel assays for the early detection of disseminated tumor cells in the lymph nodes of CRC patients.