POEM*

Test and eradicate is best for dyspepsia after six years

**Question** What is the best strategy for managing dyspepsia in the primary care setting?

**Synopsis** Although testing for *Helicobacter pylori* infection and treating patients who are positive has become a recommended approach to managing dyspepsia, many patients and doctors still opt for immediate endoscopy. In this Danish study, the authors identified 500 patients presenting to their primary care physician with epigastric pain with or without heartburn, regurgitation, nausea, vomiting, or bloating. Those recently treated with a proton pump inhibitor (PPI) or an H$_2$ receptor antagonist were excluded, as were those with any red flags (unintended weight loss, suspicion of upper gastrointestinal bleeding, anaemia, or jaundice). Patients were then randomised (allocation concealed) to undergo either *H pylori* testing with a breath test followed by eradication with a PPI, amoxicillin, and metronidazole for seven days, or prompt upper endoscopy. Patients in the test and eradicate group who were *H pylori* negative with reflex symptoms were given a PPI; those without reflux symptoms were simply reassured that they had functional dyspepsia. Those in the test and eradicate group who were *H pylori* negative and taking non-steroidal anti-inflammatory drugs underwent endoscopy. Patients in the prompt endoscopy group were treated according to the endoscopic findings in a manner consistent with usual practice, including the use of PPIs and/or the eradication of *H pylori*, as indicated. Similar percentages of patients in the test and eradicate and prompt endoscopy groups returned questionnaires (70.4% v 74.8%). Patients were followed up for a median of 6.7 years. Data regarding resource use were available for about 90% of the patients in each group (in effect, all of the patients still in the country). The results were fascinating: There was no difference between groups regarding any of the clinical outcomes, such as gastrointestinal symptoms, psychological well being, and a variety of individual symptoms. However, the test and eradicate group underwent fewer endoscopies (0.88 v 1.5; P < 0.001), used fewer daily doses of PPIs and H$_2$ receptor antagonists (271 v 373; P = 0.93), and had a similar number of outpatient visits and hospital days for gastrointestinal problems. Prompt endoscopy seemed to “medicalise” dyspepsia and lead to greater use of resources, but it made no difference in clinical outcomes.

**Bottom line** Prompt endoscopy for patients with dyspepsia who do not have any alarm symptoms increases costs, use of drugs, and procedures but does not improve outcomes. Testing for *H pylori* and treating if positive should remain the standard of care for these patients in the primary care setting.

**Level of evidence** 1b– (see www.cinopoems.com/levelkhtml). Individual randomised controlled trials (with a wide confidence interval).


Editor’s choice

Think mumps

Social historians will have a field day with recent vaccine scares. Evidence that a vaccine works and is safe should be universal, but antivaccine campaigns seem to take on a peculiarly local flavour. In the 1970s, concerns that whooping cough vaccine caused neurological damage were largely a British affair. In the 1990s, worries that hepatitis B vaccine caused multiple sclerosis mainly played out in France. The suggested link between MMR, autism, and inflammatory bowel disease echoed in the US but remained most potent in the UK (p 1120). Rather than illustrating cultural peculiarities, these episodes may show that mass vaccination programmes raise people’s awareness of potential risks—something governments must take into account when planning future schemes.

WHO’s highly successful global polio eradication programme is the latest victim of localised antivaccine activism. Two years ago, Nigerian Muslims boycotted polio vaccination after local imams claimed that the vaccine was part of a US plot to spread AIDS or infertility in the Islamic World. The boycott was followed by a large outbreak of polio in Nigeria and surrounding countries. Now there are reports of the same strain of polio causing paralysis in children in Yemen and Indonesia (p 1106).

A campaign linking autism to vaccines containing the mercury based preservative thiomersal is currently playing out in the US, and Michael Fitzpatrick (p 1154) is in no doubt as to who are its real victims. Firstly, the parent activists themselves, vulnerable to the machinations of legal and medical charlatans peddling hopes of substantial damages and miracle cures. Secondly, parents and doctors who are made to feel uncertain, guilty, and intimidated for vaccinating their own and other people’s children. And finally, most importantly, the children and adults suffering the consequences of what are entirely preventable diseases.

Ironically the current epidemic of mumps in the UK is proof, say Emma Savage and colleagues, of the success rather than the failure of the UK’s vaccination policy (p 1119). Most cases in 2004 were in 19-23 year olds—young adults who were not exposed to mumps as children (because of the dramatic fall in rates of natural infection after the MMR vaccine was introduced in 1988) and who for various reasons didn’t receive the recommended two doses of MMR vaccine.

As a result of the vaccine’s success, few UK doctors who qualified in the past 15 years will ever have seen a case of mumps. With nearly 5000 cases reported in January this year alone, this could be about to change, so the clinical review by Gupta and colleagues (p 1132) may prove useful. Its take home messages are that mumps should now be part of the differential diagnosis for a range of conditions, clinical diagnosis is not always possible, specific IgM antibody in saliva is a good diagnostic test, there is no antiviral treatment or post-exposure prophylaxis, infected people should be isolated and susceptible people vaccinated, and all children and young adults should have had two doses of MMR vaccine.

Fiona Godlee editor (fgodlee@bmj.com)