Dyspepsia management in the millennium: to test and treat or not?

B C Delaney

Test and treat followed by endoscopy for non-responders was less cost effective than empiric proton pump inhibitor (PPI) treatment followed by endoscopy or with strategies of test and treat followed by empiric PPI (or vice versa).

Background: Several consensus statements have recommended *Helicobacter pylori* testing and eradication (test and treat) followed by endoscopy for non-responders for the management of simple uninvestigated dyspepsia, particularly in patients aged <45 years. However, recent trials have suggested that this may not be such a good strategy.

Question: For uninvestigated dyspepsia, how cost effective is test and treat with endoscopy for non-responders compared with empiric proton pump inhibitor (PPI) treatment followed by endoscopy or with strategies of test and treat followed by empiric PPI (or vice versa), with endoscopy reserved for persistently symptomatic patients?

Design and methods: Decision analysis evaluating the cost effectiveness of the four treatment strategies in a hypothetical cohort of patients younger than 45 years presenting in primary care for the first time with dyspepsia. Patients with alarm symptoms and those taking non-steroidal anti-inflammatory drugs were excluded, as were patients with predominant symptoms of gastro-oesophageal reflux. The model used serology for *H pylori* testing, 14 days of *H pylori* eradication (cost $304), six weeks of treatment with a PPI, and endoscopy for persistently symptomatic patients.

Results: Test and treat with endoscopy for non-responders was the most costly strategy and resulted in only 75% of patients being symptom free at one year. Test and treat followed by PPI and PPI followed by test and treat were equally effective (84% symptom free at one year) but performing test and treat first was cheaper and therefore slightly more cost effective. PPI followed by endoscopy for non-responders was the cheapest strategy but resulted in only 78% of patients being symptom free at one year. These results were sensitive to the costs of the PPI and to the prevalence of *H pylori* in the population and the relative costs of endoscopy, eradication therapy, and PPIs. 

Conclusions: Even when the baseline assumptions were varied, test and treat followed by endoscopy for non-responders was less cost effective than the three strategies incorporating a period of PPI treatment. Test and treat followed by PPI with endoscopy for non-responders cost $2500 less per additional symptomatic cure than the current guidelines recommending test and treat with endoscopy for non-responders.
(CUBE) which has just started aims to determine the cost effectiveness of initial "test and treat" compared with initial empirical acid suppression. Until there is more evidence, either approach is justifiable.

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REFERENCES
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