

## Editorial

# Management of young dyspeptic patients in the community

There is confusion regarding the optimal strategy for the initial management of patients under the age of 45 years presenting with dyspepsia in the community as there are many different strategies available. If patients present with sinister symptoms such as dysphagia, weight loss or vomiting, or if they are on nonsteroidal anti-inflammatory drugs or they are older, then initial endoscopy is recommended to avoid missing gastric cancer or peptic ulcer.<sup>1</sup> However, in the majority of young dyspeptic patients who do not have such risk factors, endoscopy is usually normal and the risk of gastric cancer is only about 1–2%.<sup>2</sup> To avoid unnecessary endoscopies which can increase waiting lists, various initial noninvasive strategies have been utilised. Empirical treatment with antisecretory therapy had been recommended as the initial treatment by both British and American gastroenterologists.<sup>3,4</sup> However, the discovery of *Helicobacter pylori* as a cause of peptic ulcers and the fact that cure of peptic ulcers can be achieved by eradicating *H pylori* has made the use of noninvasive testing for *H pylori* to select patients for endoscopy or initial empirical antimicrobial therapy seem attractive. The recent British Society of Gastroenterology guidelines<sup>3</sup> advise the initial use of *H pylori* serology in conjunction with empirical antisecretory therapy. If patients remain symptomatic following empirical antisecretory therapy and are *H pylori* seropositive, then they will proceed to endoscopy for further evaluation. These guidelines are based mainly on British studies and a careful use of limited endoscopic resources. Hence, the guidelines are not necessarily universally applicable, as endoscopic resources differ in different countries. In addition there have been very few prospective studies of the management of dyspepsia to guide us and decision analyses on the various strategies have conflicting findings.

Five initial noninvasive strategies for managing young dyspeptic patients are used in practice:

- 1 Empirical antisecretory therapy, eg, ranitidine for 4–8 weeks. If patients remain symptomatic or relapse, they undergo endoscopy.
- 2 Empirical antisecretory therapy and *H pylori* serology as recommended by the British Society of Gastroenterology.
- 3 *H pylori* serology – if patients are found to be seropositive, they undergo endoscopy.
- 4 *H pylori* serology – if patients are found to be seropositive, they are given *H pylori* eradication therapy.
- 5 Empirical *H pylori* eradication therapy, ie, treating all dyspeptics with eradication therapy without testing for *H pylori*.

In strategies (3) and (4), *H pylori* seronegative patients will be reassured and given symptomatic treatment.

The invasive strategy is to offer initial endoscopy for all dyspeptics. Initial endoscopy has been compared to empirical H2 receptor antagonist therapy in a prospective randomised study in Denmark.<sup>5</sup> The authors found that after a one-year follow-up, initial endoscopy was more cost

effective because of a lower number of lost work days and reduced ulcer medication use in this group. The majority of patients who had initial empirical therapy eventually required endoscopy (70%). A prospective study in the UK evaluated the use of *H pylori* serology where seropositive patients had endoscopy while seronegative patients had symptomatic treatment.<sup>6</sup> After a six-month follow-up, 36% of endoscopies were avoided. Only three of 70 seronegative patients eventually required endoscopy, which was normal. In the seronegative group there was a significant decrease in symptoms, reduced life-events interference and reduced medication use.

A decision analysis study from the UK compared 10-year cumulative costs of empirical antisecretory therapy with cimetidine versus screening for *H pylori*.<sup>7</sup> They found that eradication therapy was cheaper than maintenance cimetidine therapy for proven peptic ulcers. However, when the initial cost of identifying the appropriate patients for eradication therapy using *H pylori* serology was taken into account, then cost savings can take up to eight years to accrue. A US study evaluated the cost per ulcer cured and the cost per patient treated for the strategies of initial endoscopy plus biopsy for *H pylori*, initial endoscopy without biopsy, initial serology for *H pylori*, initial empirical antisecretory therapy, and initial empirical antisecretory therapy plus *H pylori* eradication therapy.<sup>8</sup> They found that although initial endoscopy was the most expensive strategy, it guided diagnosis and reduced the number of patients inappropriately treated. However, the safety and effectiveness of less expensive and less invasive strategies supported the initial noninvasive care of dyspeptic patients. Another US study evaluated the cost of direct medical care in the first year comparing initial endoscopy with empirical antisecretory therapy with or without *H pylori* serology.<sup>9</sup> They found that initial serology for *H pylori*, followed by endoscopy if seropositive, would be more expensive than initial endoscopy. In contrast, if *H pylori* seropositive patients received antimicrobial therapy for eradication instead, this would be cheaper than initial endoscopy.

In conclusion, how should young dyspeptic patients be managed initially? If they have sinister symptoms or are taking nonsteroidals, they should be endoscoped. For the remainder, the most effective strategy may depend on local circumstances. If endoscopy resources are unlimited, it may be more cost-effective to proceed to initial endoscopy rather than noninvasive strategies. However, if endoscopic resources are limited, then any of the noninvasive strategies to exclude those in whom initial endoscopy is not required appears to be effective.

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