General practitioners' habits and knowledge in relation to the management of *H. pylori*-associated dyspepsia and their views about a locally available 13-carbon urea breath test

APRIL HEANEY

JOHN S A COLLINS

PETER R G WATSON

ROBERT M KALIN

SUMMARY

We report the results of general practitioners' views on Helicobacter pylori-associated dyspepsia and use of screening tests in the community. The use of office serology tests in screening is of concern as independent validation in specialist units has been disappointing.

Keywords: *H. pylori; dyspepsia; 13-carbon urea breath test.*

Introduction

Recent guidelines by the European *H. pylori* Study Group have examinaed current issues in dyspepsia management and particularly addressed the role of the general practitioner (GP). We report the results of a survey of fundholding GPs' current views in relation to *Helicobacter pylori*-associated dyspepsia and demand for a locally available 13-carbon urea breath test.[1]

Method

In April 1997, a postal questionnaire was sent to a random selection of GPs from each fundholding practice in Northern Ireland (n = 153). Fundholding GPs were targeted, as no funds had been identified for this test within the National Health Service in Northern Ireland. A single reminder was sent to non-responders after four weeks, and returned questionnaires were analysed after three months.

Results

A total of 115 (75%) questionnaires were returned. One questionnaire was incomplete and therefore not included in the analysis.

Twenty-one per cent of practitioners expressed a special interest in gastroenterology. All practitioners had previously prescribed *H. pylori* eradication therapy and 59% had at some point prescribed eradication therapy without knowledge of *H. pylori* status. Of these 59%, 70% cited history of peptic ulcer disease as a reason for doing so, 35% because no test was available, 34% did so at the patient's request, 9% because the patient declined to be tested, and 5% for other reasons.

Seventy-eight per cent of practitioners used screening tests for *H. pylori*. Of these practitioners, some used more than one test (one test, 73%; two tests, 23%; and three tests, 4%). Office serology; e.g. Helisal test, was the most commonly used (45%), followed by laboratory serology (44%), and urea breath test (11%). Thirty-two per cent of practitioners used office serology only. Table 1 shows the indications for use of these tests. When the tests were used in follow-up post eradication therapy (n = 31), seven practitioners had access to the urea breath test and 24 used serology (seven used office serology only).

The most common (88%) eradication regimen used was triple therapy; 12% used dual therapy only. Fifty-two per cent continued acid suppressant therapy post-eradication. Eighty-eight per cent of practitioners would use the breath test if available, 2% would not, and 10% were undecided.

Discussion

There are limitations in extrapolating the results of this survey to GPs as a whole, as quite a high proportion (21%) of practitioners expressed a special interest in gastroenterology and only fundholding practitioners were surveyed.

All practitioners surveyed had some knowledge of *H. pylori*, as they had previously prescribed eradication therapy. The commonest reason for prescribing eradication therapy without knowledge of *H. pylori* status was for a history of peptic ulcer disease (PUD) (diagnosed either by gastroscopy or barium meal), which is understandable as 90% to 95% of duodenal ulcers and 60% to 95% of gastric ulcers are associated with *H. pylori* infection.[2] The lack of facilities for testing was also an important factor in one-third of cases, as was the patient's wish to receive eradication therapy.

Seventy-eight per cent of practitioners used screening tests and 32% used office serology only. Our experience of this test has not proved satisfactory (sensitivity = 80% and specificity = 82%),[3] other centres have also had less satisfactory results.[4] The widespread use of the Helisal test in our community prior to independent validation is of concern and is probably related to sponsorship of this test by pharmaceutical companies. Use of office-based serological tests is not supported by the Maastricht guidelines.[5]

Approximately 68% of practitioners screened patients on maintenance antisecretory therapy without a history of PUD. This may be because they believe that eradication therapy improves symptoms of gastro-oesophageal reflux disease (GORD) or non-ulcer dyspepsia (NUD). While some patients with NUD may improve following eradication therapy,[6] there is no evidence that patients with GORD improve.[5] However, the Maastricht guidelines advise eradication of *H. pylori* in patients requiring long-term acid suppression for GORD as they may be at increased risk of developing gastric atrophy.[5]

Forty-nine per cent of practitioners screened young dyspeptic

A Heaney, MD, MRCP, research fellow; J S A Collins, MD, FRCP, consultant gastroenterologist, Day Procedure Unit; and P R G Watson, MD, FRCP, consultant gastroenterlogist, Department of Medicine, Royal Victoria Hospital, Belfast, Northern Ireland. R M. Kalin, PhD, director, Environmental Engineering Research Centre, Queen's University, Belfast, Northern Ireland.

Submitted: 8 February 1999; final acceptance: 24 May 1999.

Table 1. Responses from GPs to the question: 'In which patients do you use H. pylori screening tests?'

Response	Percentage
Dyspeptic patients with a history of peptic ulcer disease (PUD)	89
Dyspeptic patients on maintenance antisecretory therapy without a history of PUD	68
Young patients who will receive empirical eradication without investigation	49
At patient's request	43
Young patients as a means of selection for further investigation	39
Follow-up post-eradication therapy	35
Patients with a family history of gastric cancer, irrespective of dyspepsia	22
Any dyspeptic	13
Other potential disease associations; e.g. heart disease	1

patients with a view to empirical eradication in line with recent guidelines.[5] Forty-three per cent tested patients for *H. pylori* at their request, which highlights increased public awareness of *H. pylori*. Twenty-two per cent of practitioners would eradicate *H. pylori* in patients with a family history of gastric cancer, which is supported by the Maastricht guidelines, although the evidence for this is equivocal.

The potential extra alimentary disease associations of *H. pylori* do not appear to influence management, and current evidence suggests that the benefit of treatment is uncertain.[5]

One-third of practitioners (n = 31) used the tests in follow-up post-eradication, and, of these, seven (23%) had access to office serology only. The breath test can determine success of eradication therapy four weeks after discontinuing treatment; laboratory serology takes at least six months to become negative.[2] Office-based tests have not been designed to determine the success of treatment, and little is known about how long they remain positive after eradication: it may be up to two years.

Encouragingly, 88% of practitioners used triple therapy in eradication. However, 52% continued acid suppressant therapy after eradication. This may have been as a matter of course or to treat symptoms of co-existing GORD. Continued antisecretory therapy following eradication therapy is now considered unnecessary in PUD.[5]

We anticipate piloting the breath test to GPs and advise its use in initial screening. The breath test costs £25; in contrast, gastroscopy costs £200. Our unit has recently shown that empirical eradication of the young dyspeptic patient referred to a hospital clinic saves 73% of gastroscopies in this group.[7]

References

1. Heaney A, Kalin RM, Collins JSA, *et al*. The breath test – a call for more regional use. *Eur J Gastroenterol Hepatol* 1997; **9:** 693-696.
2. Calam J. Disease associations and diagnosis of infection. In: Calam J.*Clinicians' guide to* Helicobacter pylori. London: Chapman & Hall, 1996; 39-116.
3. Heaney A, Collins JSA, Watson RGP, *et al*. Rapid serological diagnosis of *Helicobacter pylori*: a need for caution and re-evaluation. *Ir J Med Sci* 1998; **167:** 136-137.
4. Duggan A, Logan R. Conflicting results from the Helisal test. [Letter.] *BMJ* 1997; **314:** 1688-1689.
5. The European *Helicobacter pylori* Study Group (EHPSG). Current European concepts in the management of *Helicobacter pylori* infection. The Maastricht Consensus Report. *Gut* 1997; **41:** 8-13.
6. McColl K, Murray L, El-Omar E, *et al*. Symptomatic benefit from eradicating *Helicobacter pylori* infection in patients with non ulcer dyspepsia. *N Engl J Med* 1998; **339:** 1869-1874.
7. Heaney A, Collins JSA, Watson RGP, *et al.* A prospective randomised trial of a 'test and treat' policy versus endoscopy based management in young *H. pylori* positive dyspeptic patients with ulcer-like dyspepsia, referred to a hospital clinic. *Gut* 1999; 45: 186-190.

Address for correspondence

Dr April Heaney, Specialist Registrar, Care of the Elderly Unit, Ulster Hospital, Dundonald, Belfast BT16 ORH, Northern Ireland.