

Empirical eradication therapy was better than endoscopy-based management for *Helicobacter pylori* infection and dyspepsia

Heaney A, Collins JS, Watson RG, et al. A prospective randomised trial of a "test and treat" policy versus endoscopy based management in young *Helicobacter pylori* positive patients with ulcer-like dyspepsia, referred to a hospital clinic. *Gut*. 1999 Aug;45:186-90.

QUESTION

In younger patients with *Helicobacter pylori* infection and dyspepsia, is empirical eradication therapy better than an endoscopy-based management strategy for reducing dyspepsia and improving quality of life?

DESIGN

Randomized (unclear allocation concealment*), unblinded,* controlled trial with 12-month follow-up.

SETTING

Gastroenterology clinics of 2 hospitals in Belfast, Northern Ireland, United Kingdom.

PATIENTS

104 patients who had ulcer-like dyspepsia and were ≤ 45 years of age (mean age 32 y, 57% men). Exclusion criteria were weight loss, dysphagia, symptoms of gastroesophageal reflux disease, history of gastrointestinal bleeding, regular use of nonsteroidal anti-inflammatory drugs, gallstone symptoms, pregnancy, and *H. pylori* eradication treatment in the previous 2 weeks. Follow-up was 96%.

INTERVENTION

After stratification for sex and tobacco and alcohol use, patients were allocated to empirical eradication therapy ($n = 52$) or esophagogastroduodenoscopy (EGD) ($n = 52$). In the EGD group, eradication therapy was given according to type of diagnosis. Empirical eradication therapy consisted of 1-week triple therapy: omeprazole, 20 mg twice daily; clarithromycin, 250 mg twice daily; and tinidazole, 500 mg twice daily.

MAIN OUTCOME MEASURES

Dyspepsia symptoms (Glasgow dyspepsia severity score) and quality of life (Short Form-36 health survey).

MAIN RESULTS

At 12 months, dyspepsia symptom scores ($P < 0.05$) and quality-of-life scores for

physical function ($P < 0.05$) were better in the empirical eradication group than in the EGD group (Table).

CONCLUSION

In younger patients with *Helicobacter pylori* infection and dyspepsia, empirical eradication therapy for 1 week was better than an endoscopy-based management strategy for reducing dyspeptic symptoms and improving physical function.

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*See Glossary.

Empirical eradication therapy (EE) vs esophagogastroduodenoscopy (EGD) for *Helicobacter pylori* infection and dyspepsia

Outcomes at 12 mo	Scale	Mean scores	
		EE	EGD
Dyspepsia symptoms	Glasgow dyspepsia severity score	3.37	5.08
Quality of life—physical function	Short Form-36 health survey	91.88	81.96

COMMENTARY

Several working groups have recommended a strategy of testing and treating *H. pylori* infection in younger patients who have dyspepsia without alarm symptoms (1, 2). The study by Heaney and colleagues provides more empiric support for testing and treating than for endoscopy. Both strategies were safe, but 43% of patients were symptom free and 76% did not require antisecretory therapy at 12 months in the test-and-treat arm compared with 30% and 63%, respectively, in the EGD group. Although these results can be best applied to secondary care, a recent study in primary care adds further support for the generalizability of the findings (3).

Why was empiric therapy superior to endoscopy in these patients? This finding probably does not reflect a substantial effect of eradication therapy on patients with nonulcer dyspepsia (4). Whether lack of blinding biased the outcome is uncertain. Notably, a high background rate of peptic ulcer existed in the evaluated patients (47% in the endoscopy group). It is conceivable that eradication therapy would be more successful in patients with a high background rate of peptic ulcer because patients in the EDG group with healed ulcers would have been misdiagnosed as having non-ulcer dyspepsia and would not have been offered eradication therapy.

Reassurance was not evaluated in this study. Others have observed that reassurance is greater in patients receiving endoscopy (5), but symptom improvement is likely to parallel satisfaction scores.

On the basis of available data, the standard of care for young, healthy persons with dyspepsia should be testing and treating. Long-term outcome data are still required, however, to better understand the effect of this strategy in practice.

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References

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