1 day quadruple therapy was not inferior to 7 day triple therapy for eradication of Helicobacter pylori infection in dyspepsia

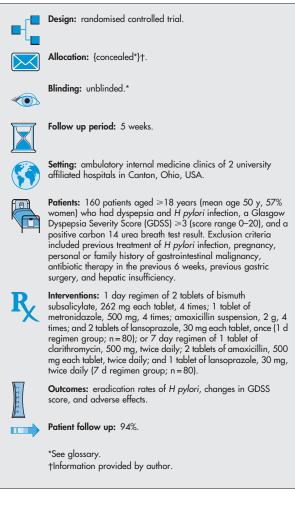
Lara LF, Cisneros G, Gurney M, et al. One-day quadruple therapy compared with 7-day triple therapy for Helicobacter pylori infection. Arch Intern Med 2003;163:2079-84.

Clinical impact ratings GP/FP/Primary care ***** IM/Ambulatory care ****** Gastroenterology ****** Infectious disease ****

In patients with dyspepsia, is 1 day quadruple therapy non-inferior to 7 day triple therapy for eradication of Helicobacter pylori infection?

METHODS

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MAIN RESULTS

All patients remained on their assigned treatment. 1 day therapy was not inferior to 7 day therapy for rates of eradication of *H pylori* (table). The mean baseline GDSS score was 11 (standard deviation [SD] 3.4) in the 1 day regimen group and 10 (SD 3.3) in the 7 day regimen group. The groups did not differ for mean change from baseline in GDSS scores (both groups had a mean decrease from baseline of 7.5). None of the patients in either group reported intolerance to their treatment, and rates of side effects did not differ between groups.

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CONCLUSION

In patients with dyspepsia, a 1 day quadruple therapy regimen was not inferior to a 7 day triple therapy regimen for eradication of Helicobacter pylori infection.

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yspepsia is endemic and chronic. Most patients who are evaluated are diagnosed with non-ulcer or functional dyspepsia. Systematic reviews support a modest benefit of H pylori eradication in such patients, with perhaps 1 cure for every 15 patients treated.¹ A Cochrane review concluded that the H pylori test and treat approach may be less expensive and just as effective as endoscopy based management in younger patients (<45 y) without alarm symptoms.² Lara *et al* showed similar efficacy of 1 day and standard 7 day

treatment in achieving H pylori eradication. Although dyspepsia symptoms improved, few patients had complete relief. If reproducible, a single day course would likely have great advantages in cost, convenience, and adverse effects. However, the 95% eradication rate in this study was much higher than that of previous studies, with rates ranging from 20–83%. 3

We offer a few words of caution about this study. Most patients were >45 years old and, under current guidelines, should have endoscopy to exclude cancer. Moreover, 1 day therapy may be insufficient to heal ulcers in the $10{-}15\%$ subset of patients with dyspepsia and underlying peptic ulcer disease. An important question remains the symptom recurrence rate over time. Longer follow up will be needed in future studies to address this.

The 1 day quadruple therapy, although intriguing, cannot be recommended based on current evidence. Until further studies are done with blinding to treatment allocation and longer follow up, we recommend a minimum 7 day course of H pylori treatment for patients with functional dyspepsia who choose the eradication option.

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1 day quadruple therapy v 7 day triple therapy for eradication of Helicobacter pylori infection in dyspepsia at 5 weeks*

Outcome	1 day therapy	7 day therapy	Difference (95% CI)
Eradication	95%	90%	5% (-4 to 14)†
*Abbreviations defined in glossary; CI calculated from data in article. †Not significant.			