HELICOBACTER PYLORI

14-day triple therapy may be the optimal empirical therapy for *Helicobacter pylori* eradication in Latin American populations

Meta-analyses from Europe and Asia indicate that four-drug treatment regimens are more effective than three-drug regimens for the eradication of *H. pylori* infection, and, with fewer antibiotic doses, are also cheaper. In a study in *The Lancet*, E. Robert



Greenberg *et al.* now report that triple therapy appears to be the optimal regimen in Latin American populations, where the burden of *H. pylori* infection is high.

Using a randomized, unblinded clinical trial, Greenberg *et al.* compared three antibiotic regimens: triple therapy (14 days lansoprazole, amoxicillin and clarithromycin), concomitant quadruple therapy (5 days lansoprazole, amoxicillin, clathromycin and metronidazole) and sequential quadruple therapy (5 days lansoprazole and amoxicillin; 5 days lansoprazole, clarithromycin and metronidazole). 1,463 participants with *H. pylori* infection from seven Latin American regions were included.

The unexpected principal finding was that "a higher proportion of participants had their infection eradicated with the standard three-drug, 14-day regimen than with either of the four-drug regimens" explains Greenberg. The probability of *H. pylori* eradication was 82.2% (401/488)

after triple therapy compared with 73.6% (360/489) and 76.5% (372/486) after concomitant and sequential quadruple therapies, respectively, in the intention-to-treat analysis. Furthermore, "neither quadruple regimen was significantly better than triple therapy in any of the seven regions".

"Our findings point out the need to be cautious about generalizing the results of *H. pylori* treatment trials to other populations," says Greenberg. He adds that further studies "would enable an informed judgement as to whether a mass campaign of *H. pylori* eradication should be undertaken among select Latin American populations".

Katherine Smith

Original article Greenberg, E. R. et al. 14-day triple, 5-day concomitant, and 10-day sequential therapies for *Helicobacter pylori* infection in seven Latin American sites: a randomised trial. *Lancet* **378**, 507-514 (2011)