

G-GH-5

Three-Day Lansoprazole Quadruple Therapy for *Helicobacter pylori*-Positive Duodenal Ulcers: A Randomized Controlled Study

BCY Wong,¹ WH Wang,^{1,2} GKK Lau,¹ WM Wong,¹ FMY Fung,¹ NNS Kung,³ KM Chu,⁴ KC Lai,¹ WHC Hu,¹ FL Hu,² XG Liu,² CK Chan,¹ MF Yuen,¹ WM Hui,¹ SK Lam.¹

Departments of ¹Medicine and ⁴Surgery, The University of Hong Kong; ³Department of Medicine, United Christian Hospital, Hong Kong; ²Department of Internal Medicine, First Teaching Hospital, Beijing Medical University, PR China.

Aim: To compare the efficacy and tolerability of a 3-day quadruple therapy with a standard 1-week triple therapy in eradicating *Helicobacter pylori* infection and healing duodenal ulcers.

Methods: Patients with *H. pylori*-positive duodenal ulcers were randomized to receive either lansoprazole 30 mg, clarithromycin 500 mg, and metronidazole 400 mg twice daily for 7 days (LCM-7) or lansoprazole 30 mg, clarithromycin 500 mg, metronidazole 400 mg, and bismuth subcitrate 240 mg twice daily for 3 days (LCMB-3). Endoscopy was repeated at week 6.

Results: A total of 118 patients were recruited. Sixty patients in LCM-7 group and 53 patients in LCMB-3 group returned for endoscopy. Intention-to-treat eradication rates were 86.7% and 86.2% ($p=0.94$) and per-protocol eradication rates were 86.7% and 94.3% ($p=0.29$) in LCM-7 and LCMB-3 groups, respectively. Per-protocol and intention-to-treat ulcer healing rates were 98.3% and 98.3% in LCM-7 and 100% and 91.4% in LCMB-3 respectively. There were no significant differences in efficacy in relation to the initial metronidazole and clarithromycin susceptibility. Significant reduction in the duration of side effects was found in LCMB-3 group.

Conclusion: The 3-day quadruple therapy is highly effective, better tolerated and can be considered as a first-line therapy in duodenal ulcer management.

G-GH-6

Non-*H. pylori*, Non-NSAID Duodenal Ulcers: Clinical and Endoscopic Characteristics

HHX Xia, BCY Wong, KW Wong, SY Wong, WM Wong, KC Lai, Wayne HC Hu, CK Chan, SK Lam.

Department of Medicine, The University of Hong Kong, Queen Mary Hospital, Hong Kong.

Background: The proportion of duodenal ulcers not associated with *H. pylori* infection and use of non-steroidal anti-inflammatory drugs (non-*H. pylori*, non-NSAID duodenal ulcers) is increasing. The aim of this study was to identify clinical and endoscopic characteristics of non-*H. pylori*, non-NSAID duodenal ulcers.

Patients: Demographic information, major indication, symptom duration, NSAID use over the past 4 weeks, endoscopic findings and *H. pylori* status of consecutive patients who underwent an upper endoscopy from 1997 to 1999 were prospectively collected. Patients with active and/or healed ulcers were identified, and those with both active ulcers and known *H. pylori* status were further analysed.

Results: A total of 11717 upper endoscopies were performed on 8344 patients. Among these patients, 1188 (14%) had duodenal ulcers. Of 645 patients with active ulcers and known *H. pylori* status, 169 (26%) were *H. pylori* negative, and 534 (83%) were not on NSAIDs. NSAID users were fewer in *H. pylori* positive than in *H. pylori* negative patients (12% vs 33%, OR=0.28, 95%CI: 0.18-0.42, $P<0.001$). Overall, 18% of patients had non-*H. pylori*, non-NSAID ulcers. Patients with non-*H. pylori*, non-NSAID ulcers were significantly older (66 ± 18 vs 53 ± 17 years, $P<0.001$), and more likely to have bleeding (50% vs 24%, OR = 0.32, 95%CI: 0.21-0.49, $P<0.001$), but less likely to have epigastric pain (28 vs 60%, OR=3.84, 95%CI: 2.44-6.05, $P<0.001$) as the indication for endoscopy, compared with those with *H. pylori* associated ulcers. *H. pylori* negative patients not taking NSAIDs had more (1.5 vs 1.2, $P=0.02$) and deeper (2.1 mm vs 1.9 mm, $P=0.03$) duodenal ulcers, and were less likely to have the ulcers in the anterior part of the duodenum (41%, vs 54%, OR = 1.68, 95%CI: 1.09-2.59, $P=0.02$), compared with *H. pylori* positive patients.

Conclusions: The prevalence of duodenal ulcer disease is decreasing in Hong Kong, but the proportion of non-*H. pylori*, non-NSAID ulcers is increasing. Non-*H. pylori*, non-NSAID ulcers exhibit some demographic, clinical and endoscopic characteristics, distinguishing from *H. pylori* associated ulcers. However, its aetiopathophysiology remains to be clarified.