

LETTERS TO THE EDITOR

EDİTÖRE MEKTUP

Comparison of pantoprazole- vs. omeprazole- based triple therapy regimens in the treatment of *Helicobacter pylori* infection and duodenal ulcer healing in a Turkish population

Türk toplumunda *Helicobacter pylori* eradikasyonu ve ülser iyileşmesinde omeprazol ve pantoprazol temelli üçlü tedavilerin kıyaslanması

To the Editor,

H. pylori colonizes in the gastric mucosa and is accepted in the pathogenesis of antral gastritis, duodenal ulcer, maltoma and gastric cancer., Eradication of *H. pylori* improves duodenal ulcer healing and prevents relapse (1, 2). Recent clinical studies have indicated that a therapy using a proton pump inhibitor and two antibiotics has both high eradication rates and good tolerability (3, 7). We aimed to compare the efficacy and tolerability of omeprazole and pantoprazole combining dual antibiotics, in two-week regimens, in *H. pylori* eradication and duodenal ulcer healing.

The study was designed as a prospective and randomized trial. The study protocol was approved by the respective ethics committees. All patients gave verbal consent.

Patients were randomized into two parallel treatment groups. The first group (PAC) received pantoprazole 40 mg b.i.d., clarithromycin 500 mg b.i.d. and amoxicillin 1000 mg b.i.d. for 14 days. The second group (OAC) received omeprazole 20 mg b.i.d., clarithromycin 500 mg b.i.d. and amoxicillin 1000 mg b.i.d. for 14 days. Duodenal ulcer healing was examined endoscopically at the sixth week. Healing was defined as a complete re-epithelization of the ulcer crater or scarring. Eradication of *H. pylori* was evaluated histologically by endoscopic biopsies at the sixth week.

A total of 126 patients were enrolled into the study. Their demographic and anthropometric data are summarized in Table 1. There were no significant differences among the patients with the respect to demographic and clinical parameters at the time of enrollment. The patients were randomized such that 62 received the PAC therapy and 64 received OAC therapy for two weeks. For the analysis of *H. pylori* eradication and duodenal ulcer healing, the 62 patients in the PAC therapy group and 64 patients in the OAC therapy group were evaluated. Fifty-eight of 62 patients (93.5%) in the PAC group and 58 of 64 patients (90.6%) in the OAC group demonstrated eradication of *H. pylori*. There were no significant differences between the groups ($p>0.05$). After four weeks of

Table 1. Demographic and anthropometric data

Parameter/Protocol	PAC Therapy	OAC Therapy
Number of patients (n)	62	64
Median age (yr)	38.2 ± 12.4	36.4 ± 13.1
Range	18-60	18-60
Female	22 (35.4%)	24 (37.5%)
Male	40 (64.5%)	40 (62.5%)
No previous history of duodenal ulcer (%)	22 (35.4%)	23 (35.9%)
Duodenal ulcer relapse (%)	40 (64.5%)	40 (62.5%)
No previous diagnosis of <i>H. pylori</i> infection (%)	54 (87%)	52 (81.25%)
Smokers (%)	48 (77.4%)	52 (81.25%)

PAC: Pantoprazole, Amoxicillin, Clarithromycin, OAC: Omeprazole, Amoxicillin, Clarithromycin

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Manuscript received: 19.07.2005 Accepted: 26.07.2005

treatment, ulcer healing occurred in 60/62 (96.7%) patients in the PAC therapy group and in 60/64 (93.7%) patients in the OAC therapy group. For duodenal ulcer healing, the rates were not significantly different between the two groups ($p>0.05$). In the PAC therapy group, numbers and ratios of patients free from pain through the first, second and sixth week of the therapy were 48 of 62 patients (77%), 54 of 62 patients (87%), and 58 of 62 patients (93.5%), respectively. In the OAC therapy group, numbers and ratios of patients free from pain through the first, second and sixth week of the therapy were 48 of 64 patients (75%), 54 of 64 patients (84.3%), and 56 of 64 patients (87.5%), respectively. The differences between the groups were not significant statistically.

An ideal treatment for eradication of *H. pylori* includes high efficacy, tolerability, less adverse events, and good patient compliance. In this study, we found the rate of *H. pylori* eradication as 93.5% using the PAC therapy regimen and as 90.6% using OAC therapy regimen. Duodenal ulcer healing rates were found as 96.7% with PAC therapy and 93.7% with OAC therapy regimens. In conclusion, a two-week course of PAC therapy comprising a third generation proton-pump inhibitor (pantoprazole), amoxicillin and clarithromycin is a simple, well-tolerated, highly potent regimen for the eradication of *H. pylori* infection. However, triple therapy with omeprazole is equally effective.

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