

COMPARISON OF RANITIDINE AND HIGH-DOSE ANTACID IN THE HEALING OF DUODENAL ULCER

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SUMMARY: The aim of the study was to compare the effectiveness of ranitidine in a dose of 150 mg twice daily and antacid in a high dose on duodenal ulcer healing at 6 weeks. The proportion of patients with ulcer healing by endoscopy were; ranitidine, 64 of 80 (80%) and antacids, 52 of 67 (77.6 %). These proportions did not differ significantly. There were no untoward effects of ranitidine or antacid in treated patients.

Key Words: Ranitidine, antacid, duodenal ulcer.

INTRODUCTION

Controlled clinical trials have indicated that medical therapy with the H₂-receptor antagonist, ranitidine, or with high dose of antacid produces duodenal ulcer healing within 4-6 weeks in most patients. In these trials, antacids with high buffering capacity provided healing of the - duodenal ulcer as effectively as H₂ receptor antagonists (1,3-6,10-12).

The aim of this study was to compare the effect of ranitidine and antacid therapy on the healing of duodenal ulcer.

METHODS

178 consecutive patients with endoscopically diagnosed duodenal ulcer were randomly treated with ranitidine 150 mg twice daily, or aluminium magnesium antacid suspension, 15 ml 1 and 3 hr after the three meals and the last dose for the night (that is 105 ml antacid/day, with acid neutralizing capacity of 1218 mEq/1).

Repeat endoscopy was carried out at the end of 6 weeks. Ulcer healing was defined as the bulb free of ulcers and erosions.

The statistical methods used were fisher's exact test, the chi-square test with Yates modification.

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RESULTS

31 patients were excluded from the study because of there did not come to repeat endoscopy at the scheduled time. Thus, 80 patients in the ranitidine group and 67 in the antacid group completed the study and serve as the basis for this report.

Complete ulcer healing was found after 6 weeks treatment in 64 of the 80 patients in the ranitidine group and in 52 of the 67 patients in the antacid group (p>0.05). There were no side effects associated with ranitidine or antacid use. The results were shown in Table 1.

Table 1: The healing rates of duodenal ulcer with ranitidine or antacid therapy of 6 weeks.

| | Ranitidine 150 mg/bd | Antacid 105 ml/day | Test for difference |
|------------|-------------------------|-----------------------|------------------------|
| Healed | 64 (80.0)% | 52 (77.6) % | p>0.05 |
| Not healed | 16 (20.0)% | 15 (22.4) % | p>0.05 |
| Total | 80 | 67 | |

DISCUSSION

There are only a few reports in the literature in which compares the healing rates of duodenal ulcers treated with ranitidine and antacids (7-9).

Lauritsen *et al.* reported a similar study in duodenal ulcer patients in which 100 % of patients on ranitidine and

96% of those on antacid were healed after 6 weeks of the therapy (9).

In the placebo-controlled studies the healing rates of duodenal ulcer were found after 6 weeks of treatment 100% in the ranitidine and 31% in the placebo group (2). On the other hand, in trials comparing antacids and placebo, the mean healing rates of duodenal ulcer for antacids and placebo were 85% and 29% respectively (8).

Our healing rates of duodenal ulcer for both in the ranitidine and antacid groups were lower than previous studies. But our study confirmed that there occurs no significant difference in the healing rates of duodenal ulcer between ranitidine and antacid treatments.

In summary, ranitidine, 150 mg twice daily and antacid, 15 ml 1 hr and 3hr after meals and at night, appear equally effective in healing of duodenal ulcer at 6 weeks.

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