

FAMOTIDINE IN ACUTE DUODENAL ULCER

Alamzeb Manan

ABSTRACT

This is a 8 week open study in which the effect and tolerance of Famotidine, in a dose of 40 mg nocte was tried for the treatment of duodenal ulcer in 22 patients. Assessment was made clinically, biochemically and endoscopically. The healing rate at the end of 8 weeks was 95.45%. The drug was well tolerated with no significant side effect. In conclusion, Famotidine is an effective and safe Duodenal ulcer healing drug, which is well tolerated and has minimal side effects.

INTRODUCTION

H2 receptor antagonists have been used successfully in the short term management of duodenal ulcer.¹ In lower doses at bed time they also reduce the incidence of relapses.² This is an open study to evaluate the efficacy and tolerance of famotidine in duodenal ulcer. A number of H2 receptor antagonists are available in the market. Famotidine is the relatively newer H2 receptor antagonist. Famotidine is 20-160 times more potent than cimetidine and 3-20 times more potent than ranitadine.³ Its activity lasts for 12 hours following a 40 mg nocturnal dose.⁴

The present study was designed to determine the efficacy of famotidine 40 mg nocte dose in promoting duodenal ulcer healing and decreasing the subjective symptoms. We also wanted to study its tolerability.

MATERIAL AND METHODS

All patients with persistent dyspeptic symptoms referred to our endoscopy unit were endoscoped. Those with acute duodenal ulcer above the age of 18 years, non-pregnant, non-lactating females and patients with non significant clinical and laboratory evidence of renal insufficiency or dysfunction were considered for therapy

30 patients were enrolled for the study, out of which 22 patients completed the trial, of these 8 were smokers, 2 took naswar (snuff) and the rest were non smokers. Famotidine 40 mg nocte was given for 8 weeks, during which the patients were symptomatically and endoscopically evaluated. Patients whose ulcers did not heal in 8 weeks were considered a treatment failure. Endoscopy was performed with an Olympus XQ 20 gastro-duodenoscope after spraying the throat with 4% xylocain and an intra-venous injection of diazepam. Consent was obtained from all the patients. For symptomatic relief gelusil and paracetamol tablets were used.

The patients symptoms were evaluated before the start of therapy and then the

From Ayub Medical College, Abbottabad.

ALAMZEB MANAN, MBBS, MRCP, Assistant Professor, Gastroenterology.

patients reviewed every week. Endoscopy was performed before starting therapy at 4, 6 and 8 weeks unless endoscopy done earlier revealed ulcer healing. At each visit, the patient frequency and severity of pain (day & night) and gastrointestinal symptoms during the week recorded along with any side effect.

Before starting therapy and at the end of therapy the following investigations were performed i.e. Haematology; full blood count and ESR, Urine pH, Protein, Glucose, Microscopy, Stools: occult blood. Blood Chemistry; Glucose, alkaline phosphatase, SGOT, SGPT, bilirubin, urea, creatinin.

RESULTS

Of the 30 patients, 22 completed the trial and treatment regemin (20 males and 2 females). The age of the patients ranged from 21-70 years with the mean age being 45.5 years.

Six patients failed to complete the trial. They were unwilling to undergo repeated endoscopy. Of the 22 patients, there was complete healing of the duodenal ulcer in 21. However, healing time was different - Table -1.

Table-1: ULCER HEALING TIME

No of patients	Healing rate in weeks
4	4
15	6
3	8

The overall healing rate was 95.45%. Their was improvement in symptoms in almost all within the first week, 8 were asymptomatic in the first week, 10 in the second week and 3 in the third week.

One showed some symptomatic relief but at endoscopy the ulcer had not healed. Regarding side effects, one patient complained of impotence otherwise their were no other side effects. The laboratory investigations i.e. haematology, urine, biochemistry within normal range.

DISCUSSION

Famotidine was found to be an effective and safe duodenal ulcer healing drug, with a cure rate of 95.45%. Similar results were also reported by Rashid and Khan⁶. Although it has not been noted to have antiandrogenic side effect.⁵ One of our patients complained of impotence.

REFERENCES

1. Bonnivie, O. Survival in peptic ulcer, *Gastroenterology* 1978; 75: 1055-60.
2. Gough K.R. Korman M.G. Bradham K.D. et al. Ranitidine and Cimetidine in prevention of duodenal ulcer. *Lancet* 1989, (No. 2): 659-62.
3. Smith, J.R., Gamal, M., Chremos., A.N. and Graham D.Y. Famotidine a new H2 receptor antagonist. Effect on parietal, non-parietal and pepsin secretion in man *Dig. dis. sci.* 1985; 30: 308.
4. Rayan, J.R., Cremus, A.N. and Vargas R. Inhibition of basal nocturnal and mean stimulated acid secretion by Famotidine *Gastroenterology* 1985; 88: 1564.
5. Liang, T. Absence of androgenic receptor affinity for MK-208, a new H2 receptor antagonist *Clin. Res.*, 18: 105.
6. Rashid P. and Khan M.A.
Treatment of acute duodenal ulcer with Famotidine and its comparison with other H2 receptor antagonists *JPMA* 1990; 136-7.