Background/Aims: It is still controversial which treatment of proton pump inhibitor or H2 receptor antagonist is more effective regimen for healing of iatrogenic ulcers. We prospectively compared the efficacy of famotidine with pantoprazole for healing of relatively larger ESD-induced ulcers and for prevention of delayed bleeding.

Methods: Following ESD, all patients were given intravenous infusion of pantoprazole 40 mg once daily for two consecutive days, starting from the day of ESD. From the third day after ESD, all patients were randomly allocated to famotidine (40 mg/day, group 1) or pantoprazole (40 mg/day, group 2) for 4 weeks and instructed not to take other antisecretory drugs or possible ulcerogenic drugs. At 4 weeks, all enrolled subjects underwent follow-up endoscopy.

Results: A total of 74 patients were randomized to each group according to the category of initial ulcer size. Finally, 30 patients in group 1 and 40 patients in group 2 were compared. Two groups were comparable in terms of baseline characteristics. There were no significant difference between two groups with respect to ulcer stages, ulcer related symptoms, and ulcer reduction ratios. In the subgroup analysis according to the category of initial ulcer size (<3 cm n=20, ≥3 cm to 4 cm n=31, ≥4 cm n=19), there were no significant difference with respect to ulcer stages, ulcer related symptoms and ulcer reduction ratios at 4 wks. No bleeding episode occurred in any of the seventy patients.

Conclusion: Our results demonstrate that the effectiveness between the famotidine and pantoprazole therapy on the healing of iatrogenic ulcer following ESD and the prevention of delayed bleeding are similar regardless of the initial ulcer size.

Key Words: Famotidine, Pantoprazole, Ulcer, Endoscopic submucosal dissection, Healing