EFFECTS OF STOOL FORM ON ADEQUACY OF REBAMIPIDE IN THE PREVENTION OF ESOPHAGEAL STRicture FORMATION IN ADVANCED CORROSIVE ESOPHAGITIS: A PROSPECTIVE RANDOMISED CONTROL STUDY

Background Corrosive esophagitis causes significant morbidity with grades 2b and 3 esophagitis developing strictures in 70%–100% of cases. Currently, there’s no clear evidence in preventing esophageal stricture. However, animal studies show that suppressing inflammation can prevent stricture formation. Rebamipide, an anti-ulcer agent, has been shown to stimulate prostaglandin generation, increases epidermal growth factor expression, increases blood flow, and scavenges active oxygen radicals thereby reducing inflammation. This study aims to determine the effectiveness of rebamipide in preventing stricture formation in advanced corrosive esophagitis.

Methods We conducted a prospective, assessor-blinded, randomised control study. 37 adult patients with grades 2B-3B corrosive esophagitis admitted in our institution were included. Patients were randomly allocated to two groups. The first group (n=18) received conventional proton pump inhibitor (PPI) therapy with rebamipide (PPI+rebamipide group) while the second group (n=19) received only conventional PPI therapy (PPI group), both for 3 weeks duration. Endoscopists blinded to group allocations and damage severity before treatment performed upper endoscopy (EGD) on Days 21 and 60. Presence of dysphagia, number, length and stricture location were recorded. Descriptive statistics, Independent sample T-test, Mann-Whitney U test and Chi-square test were the analyses used.

Results 34 patients were included in the final analysis. Dysphagia and esophageal stricture at Day 60 were significantly greater with PPI group versus PPI+rebamipide group (47% vs 5.88%, p=0.017). The median length of esophageal stricture in the PPI group at Day 60 is significantly shorter (5 cm vs 8 cm; p=0.034) however there were still significantly more patients in stricture formation in the PPI group (8 vs 1; p=0.017). Presence of gastric stricture was similar between the two groups.

Conclusions PPI with rebamipide is effective in preventing dysphagia and stricture formation among patients with advanced corrosive esophagitis compared to PPI alone. However, this was not effective in preventing gastric stricture formation.