

Full Length Research Paper

Anti-ulcerogenic activity of *Gynura procumbens* leaf extract against experimentally-induced gastric lesions in rats

A. A. Mahmood^{1*}, Abdalbasit A. Mariod², Fouad Al-Bayat³ and Siddig Ibrahim Abdel-Wahab⁴

¹Department of Molecular Medicine, Faculty of Medicine, University of Malaya, 50603, Kuala Lumpur, Malaysia.

²Department of Food Science and Technology, College of Agricultural Studies, Sudan University of Science and Technology, P. O. Box 71, Khartoum, North Sudan.

³Department of Restorative Dentistry, Faculty of Dentistry, University Technology Mara, 40000, Shah Alam,

Selangor, Malaysia.
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Several plants are used in folk medicine to treat gastrointestinal disorders. *Gynura procumbens* is a medicinal plant commonly used in traditional treatment of many ailments. In this study, *G. procumbens* ethanolic leaf extract (GPELE) was used to investigate its gastroprotective effect in adult *Sprague dawley* rats which were divided into six groups. The rats were orally pre-treated with carboxymethyl cellulose (CMC) solution (ulcer control groups), omeprazole 20 mg/kg (reference group), 50, 100, 200 and 400 mg/kg of GPELE in CMC solution (experimental groups), one hour before oral administration of absolute ethanol to generate gastric mucosal injury. After an additional hour, the rats were sacrificed and the ulcer areas of the gastric walls were determined. The ulcer control group exhibited severe mucosal injury, whereas groups pre-treated with GPELE exhibited significant protection of gastric mucosal injury. These findings were also confirmed by histological studies. Acute toxicity study with a higher dose of 5 g/kg did not manifest any toxicological signs in rats. These results suggest that GPELE promotes ulcer protection as ascertained grossly by significant reduction of ulcer area, and histologically by comparatively decreases in ulcer areas, reduction or absence of edema and leucocytes infiltration of submucosal layer compared to ulcer control group.

Key words: *Gynura procumbens*, cytoprotection, gastric ulcer, histology, ethanolic extract.