

Anti-Ulcer Activity of Hydro Alcoholic Extract of Ficus bengalensis Linn Bark in Experimental Rats

Authors : Jagdish Baheti, Sampat Navale

Abstract : The present study was performed to evaluate the anti-ulcerogenic activity of hydro-alcoholic extract of Ficus bengalensis Linn. against ethanol-induced gastric mucosal injury in rats and pylorus ligation gastric secretion in rats. Five groups of adult wistar rats were orally pre-treated respectively with carboxy methyl cellulose (CMC) solution (ulcer control group), Omeprazole 20 mg/kg (reference group), and 100, 200 and 300 mg/kg F. bengalensis Linn. bark extract in CMC solution (experimental groups), one hour before oral administration of absolute ethanol to generate gastric mucosal injury. Rats were sacrificed and the ulcer index, gastric volume, gastric pH, free acidity, total acidity of the gastric content was determined. Grossly, the ulcer control group exhibited severe mucosal injury, whereas pre-treatment with F. bengalensis Linn. bark extract exhibited significant protection of gastric mucosal injury in both model. Histological studies revealed that ulcer control group exhibited severe damage of gastric mucosa, along with edema and leucocytes infiltration of submucosal layer compared to rats pre-treated with F. bengalensis Linn. bark extract which showed gastric mucosal protection, reduction or absence of edema and leucocytes infiltration of submucosal layer. Acute toxicity study did not manifest any toxicological signs in rats. The present finding suggests that F. bengalensis Linn. bark extract promotes ulcer protection as ascertained grossly and histologically compared to the ulcer control group.

Keywords : Ficus bengalensis Linn., gastric ulcer, hydroalcoholic, pylorus ligation

Conference Title : ICPT 2016 : International Conference on Pharmacology and Therapeutics

Conference Location : New York, United States

Conference Dates : October 10-11, 2016