Evaluation of Anti-Ulcer Activity of Tripotassium Dicitro Bismuthate (TDB) in Mice

Ghada A. Taqa
Department of Dental Basic Sciences
College of Dentistry
Mosul University

(Received 15 / 7 / 2009 ; Accepted 2/ 11 / 2009)

ABSTRACT

Bismuth compounds have been used in medicine for more than 200 years to treat gastrointestinal tract disorders. Therefore, the present study was designed to investigate the gastroprotective effects of Tripotassium Dicitro Bismuthate (TDB) against HCl-ethanol induced ulcer in mice. The drug was administered to mice at 50 and 100 mg/kg doses orally before one hour of receiving 0.2ml of HCl-ethanol mixture to induce gastric ulcer. Sucralfate (100 mg/kg, orally) was used as standard drug. The severity of gastromucosal damage induced by HCl-ethanol was analyzed in term of ulcer index value. Pretreatment with TDB (50, 100 mg/kg) produced a significant decrease in ulcer index value and increased protection against gastric ulcer when compared to saline treated group. Sucralfate (100 mg/kg, orally) also produced a significant decrease in ulcer index when compared with the saline treated group. There was no significant difference between TDB and Sucralfate in degree of protection against ulcer. Thus it was concluded that TDB has antiulcer activity in mice.

Keywords: anti-ulcer, gastroprotective, tripotassium dicitro bismuthate, TDB, Ulcer.