Gastroprotective activity of Spirulina platensis in acetic acid and ethanol induced ulcers in rats

ABSTRACT

Objective: The effects of gastroprotective properties of Spirulina platensis was investigated in acetic acid and ethanol induced ulcers in rats. Methods: Administration of 2 and 4mg/kg Spirulina platensis extract for 7 days. After day 7, oral administration of either 80% (v/v) ethanol or 6% (v/v) acetic acid. Control rats received saline or anti-ulcer drug omeprazole (20 mg/kg) prior to ulcer induction. Results: The extract inhibited the mean lesion score of acetic acid, 4.333 to 3.000. Whereas, for ethanol induced ulcers, the extract reduced the lesion scoring from 2.833 to 1.677. However, this activity was statistically less potent than the anti-ulcer drug, omeprazole. Spirulina platensis alone did not induce any ulcers in rats. Conclusions: These results suggested that Spirulina platensis has gastroprotective activity against ulcers induced by acetic acid and ethanol.

Keyword: Gastroprotective; Spirulina platensis; Ethanol; Acetic acid; Gastric ulcers