Effect of pharmacological doses of garlic and omega 3 on gastric lesions induced by ethanol in mice

Abstract

Objective: This work was designed to investigate and compare the possible protective effect of pharmacological doses of garlic and omega 3 against gastric lesions induced by ethanol in mice. Methods: A total of 30 mice involved in the study were divided into five groups with 6 mice for each. Groups 1 (ulcer control) and 2 (normal control), Groups 3 (positive ulcer control treated with ranitidine 50 mg/kg), Groups 4 and 5 treated with garlic oil and omega 3 oil at doses 200 and 150 mg/kg, respectively. All groups treated orally by gastric gavage once daily for 14 days before starting gastric ulcer (GU) induction process by absolute ethanol administration. Results: A treatment with garlic and omega 3 ameliorated the severity of gastric ulceration evidenced by reduced ulcer index area, increase % gastroprotection, increase mucus content, reduced erosions, and necrosis. Conclusion: Oral administration of pharmacological doses of garlic oil and omega 3 oil shows significant gastroprotection against GU models induced by absolute ethanol confirmed by biochemical and histological data. © 2016, Innovare Academics Sciences Pvt. Ltd. All rights reserved.