

Antiulcerogenic effects of *Brassica oleraceae* on ethanol-induced gastric ulcer in rats

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Purpose: Cytoprotective activity of *Brassica oleraceae* extract was studied against ethanol-induced gastric ulcers in rats.

Method: Four groups of rats each consists of 6 animals. All animals were fasted for 24 hours but allowed excess of water. Group 1 (control) animals received 5 ml kg⁻¹ distilled water by orogastric intubations. Treated animals, Group 2, Group 3 and Group 4, received honey alone, honey in combination with *B. oleraceae* extract or cimetidine by same route 5 ml kg⁻¹, respectively. Thirty minutes after their pretreatment, all the animals were gavaged with 5 ml kg⁻¹ absolute ethanol. They were sacrificed 15 minutes later by diethyl ether and their stomach rapidly removed.

Result: Macroscopically, oral administration of absolute ethanol to control rats significantly produced extensive hemorrhagic lesions of gastric mucosa, whereas animals pretreated with honey alone, honey in combination with plant extracts or cimetidine before administration of absolute alcohol significantly reduced the formation of gastric lesions compared to control rats. Animals pretreated with honey in combination with plant extract significantly reduced gastric damages compared to animals pretreated with honey alone or cimetidine. Microscopically, rats pretreated with honey alone, honey in combination with plant extract or cimetidine each markedly reduced gastric mucosal lesion, submucosal edema and leucocytes infiltration compared to control animals.

Conclusion: Rats pretreated with honey in combination with *Brassica oleraceae* significantly protect gastric mucosa compared to animals pretreated with honey alone or cimetidine.