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Pharmacological Evaluation of Anti-ulcer Activity of *Caesalpinia crista* in Rats

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ABSTRACT

In present study, we evaluated the antiulcer activity of the herbal preparation of *Caesalpinia crista* in rat models. Experimental animals were divided into four groups. Rats of group I (disease control) treated with normal saline only, group II (standard group) treated with Omeprazole (2 mg/ kg; p.o.), group III and IV served as test groups and were treated with *Caesalpinia crista* extract (CE) in the dose of 250 mg/ kg and 500 mg/ kg orally respectively. Peptic ulcer was induced by ligating the pyloric portion of rat stomach and was done 45 min after the respective treatment. After 4 hour of pylorus ligation, rats were sacrificed. Parameters like ulcer index, percent ulcer protection, total and free acidity were estimated for evaluation of anti-ulcer activity. Histopathological evaluation was also performed. The aqueous extract of *Caesalpinia crista* seeds reduced the volume of gastric juice, free acidity, total acidity and ulcer index. It increased the pH of the gastric acid. Histopathology of the rat stomach revealed the presence of lesions and infiltration of inflammatory cells in control group. Moreover, animals treated with test drug and standard drug did not reveal any microscopic lesions. These findings suggest that *Caesalpinia crista* seeds may have anti-secretory and anti-ulcer activity and may be helpful for ulcer therapy.

KEYWORDS: Peptic ulcer; Pylorus ligation; Omeprazole; C Crista; Rat.