Evaluation of anti-ulcer activity of Ardisia crispa Thunb. D.C.

ABSTRACT

Ardisia crispa Thunb D.C (Myrsinaceae), has long been used in treating various ailments among the local villagers. The objective of this study was to investigate experimentally the possible anti-ulcer activity of Ardisia crispa. The effect of hexane fraction of root of Ardisia crispa (ACRH) was evaluated in experimental ulcer models with necrotizing agents ie ethanol, NaCl, HCl, NaOH and also COX-1 inhibitor namely indomethacin as inducers. Four doses ie 10, 30, 100 and 300 mg/kg were selected for further study. Ulcer effects were determined by counting the total surface area of lesion in mm 2. Results showed that ACRH provided significant protection in various experimental models used. Pretreatment with ACRH at all doses (10,30,100 and 300 mg/kg) has produced significant inhibition of gastric mucosal damage induced by 80% EtOH and 25% NaCl, whilst at 30, 100 and 300 mg/kg, ACRH significantly reduced the lesion formation in ulcer induced by 0.6 M HCl, 0.2 M NaOH and 30 mg/kg indomethacin. The present study indicates that the hexane fraction of Ardisia crispa (ACRH) exhibits significant anti-ulcer effect.

Keyword: Ardisia crispa; Anti-ulcer; Ethanol-induced ulcer; Indomethacin-induced ulcer; Necrotizing agents.