

Antinociceptive, anti-inflammatory and antipyretic properties of an aqueous extract of *Corchorus capsularis* leaves in experimental animal models.

Abstract

The present study was carried out to establish the antinociceptive, anti-inflammatory and antipyretic properties of an aqueous extract of jute plant leaves, *Corchorus capsularis* L. (Tiliaceae), in experimental animals. The antinociceptive activity was measured using the abdominal constriction, hot plate and formalin tests, while the anti-inflammatory and antipyretic activities were measured using the carrageenan-induced paw edema and brewer's yeast-induced pyrexia tests, respectively. The extract, obtained after 72 h soaking of the air-dried leaves in distilled water, freeze-drying for 72 h and then prepared in dosages of 11.57, 57.85, and 115.7 mg/kg, was administered subcutaneously (10 ml/kg) 30 min prior to subjection to the above mentioned assays. The extract was found to exhibit significant (antinociceptive, anti-inflammatory and anti-pyretic, activities in a dosage-independent manner. In conclusion, the aqueous extract of *C. capsularis* possesses antinociceptive and antipyretic activities and supports the previous claim of its traditional use to treat various ailments.

Keyword: Anti-inflammatory; Antinociceptive; Antipyretic; Aqueous extract; *Corchorus capsularis*; Dosage-independent