

Anti-nociceptive Effect of Hydro-alcoholic Extract of Cardamom Seed in Male Rat

Karamatollah RHMANIAN¹, Zhila RHMANIAN², Abdolreza Sotoodeh JAHROMI

Abstract

Purpose: Cardamom seeds are widely used for flavoring purposes in food and also as carminative. We aimed to assess the analgesic effect of cardamom seed extract in mice.

Methods: In this experimental study, we used hydro-alcoholic extract of cardamom. The effect of extract on acute pain was evaluated by formalin (early phase) and tail flick tests. The effect of extract on chronic pain was studied by formalin (second phase) test.

Significant findings: In the formalin test, intra peritoneal injection of cardamom at dose of 300 mg/kg showed significant analgesic effect on early phase (acute pain) in mice. Cardamom 200 and 300 mg/kg exhibited analgesic activity against second phase (chronic pain) of formalin test. Also, cardamom 200 and 300 mg/kg exhibited anti-nociceptive effect on tail flick test. Sodium salicylate (300 mg/kg) only affected on second phase of formalin test that its effect was better than that of cardamom 300 mg/kg.

Conclusion: According to our results, cardamom seeds have analgesic effect on acute and chronic pain that may be attributed to triphenols component in this plant.

Key words : Cardamom seed Sodium Salicylate Chronic pain Acute pain Analgesic Mouse