ASSESSMENT OF ANTI-INFLAMMATORY EFFECT OF CALCIUM CARBONATE AND DILTIAZEM AND THEIR COMBINATION WITH ASPIRIN IN ALBINO RATS

Abstract

In the present study, we aimed to assess the anti-inflammatory effect of calcium carbonate, diltiazem and their combination with aspirin as well as the possible underlying mechanism.

Calcium carbonate (10 and 50 mg/kg), diltiazem (4mg/kg) and aspirin (54 and 200 mg/kg) were administered orally in different groups of rats to study their effect on acute inflammation induced by yeast.

Two animal models of acute inflammation were used; rat paw edema and rat air pouch model. The effect of the aforementioned drugs on paw volume, total leucocytic count, and intereukin-6 (IL-6) level in air pouch exudates were studied.

We concluded that both calcium carbonate and diltiazem possess anti-inflammatory action that may be mediated via their ability to modulate oxidative stress. Also both of them can potentiate aspirin in its sub-antiinflammatory dose.