

6th World Pharmacists and Clinical Pharmacy Annual Congress

May 22-23, 2017 Chicago, USA

The preventive effect of date palm (*Phoenix dactylifera*) seed and fruit hydroalcoholic extracts on carrageenan-induced inflammation in male rat's hind paw

Ehsan Zarringhalam

Background & Objective: The side effects of NSAIDS drugs have caused increasing interest of scientists in herbal medicines as alternative treatment. In this study, the anti-inflammatory effect of seed and fruit of date palm hydroalcoholic extracts due to having antioxidants was studied.

Materials & Methods: In this study, the extracts of date palm seed and fruit were prepared by maceration method in 70% alcohol. Eighty male Wistar rats were divided into 10 groups of 8 each. 4 groups received different doses (100, 200, 400 and 600 mg/kg) of seed extract and 4 other groups with different doses (100, 200, 400 and 600 mg/kg) of fruits extract of the palm and the positive control aspirin (300 mg/kg) and the negative control group saline (5 ml/kg) via injection intraperitoneally. Half an hour later all animals received 100 µl of 1% carrageenan into the rat's hind paw subcutaneous. The changes in rats paw edema was measured by Plethysmometer every hour for five hours.

Results: The effect of all of the doses of date palm seed extract on edema were less than aspirin ($P < 0.05$). But there was no significant difference between the group that received 400 and 600 mg/kg date palm fruit extract when compared with aspirin group. The dose 400 mg/kg of fruit extract showed most anti-inflammatory effect and it was assigned as the best dose.

Conclusion: It is likely that with further studies on different model of animals and also on human model the palm fruit extract could be used for pain treatment

e.zarringhalam@gmail.com