Assessment of Urtica pilulifera L. seed extracts effects on formalin-induced inflammation in rats

Introduction: Considering the side effects inflammation treatments, the new and effective medicines are needed. Urtica pilulifera L. is a plant which introduced in Traditional Iranian Medicine (TIM) for treatment of inflammation.

Method and Material: For this study formalin-induced hind paw edema test was used in rats. Sodium Salicylate (300 mg/kg, i.p., S.S) as a positive control, methanolic (20 mg/kg; i.p. MUP) and aqueous extract of U. pilulifera seeds (20, 40 and 80 mg/kg AUP; i.p.) and distilled water (6 mL/kg ; i.p.) groups was considered.

Result: In acute anti-inflammatory studies AUP in doses 40 and 80 mg/kg reduced paw edema significantly (P<0.05) and in chronic studies, MUP and all AUP doses had anti-inflammatory effects (P<0.05) which had no significant difference with the S.S.

Discussion: The results showed that AUP had significant effects on both acute and chronic anti-inflammatory studies whereas the MAP was effective in chronic one.

Conclusion: The results of this study approved the usage of U. pilulifera as anti-inflammatory medicine which mentioned in TIM literatures.

Keywords: Urtica pilulifera L., Inflammation, Formalin test, Traditional Iranian Medicine.