



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

Alireza Abbasi¹, Mohsen Naseri², Farvaneh Moksefi-Moghaddam³, Fatemeh Emadi^{2*}, Mohammad Kamalinejad⁴

1. Traditional Medicine School, Tehran University of Medical Sciences, Tehran, Iran.

2. Traditional Medicine Clinical Trial Research Center, Shahed University, Tehran, Iran

3. Department of physiology, school of medicine, Tehran University of medical sciences, Tehran, Iran.

4. School of Pharmacy, Shahid Beheshti University, Tehran, Iran.

*Corresponding author: Fatemeh Emadi, E-mail: F.emadi@shahed.ac.ir

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.