

The Activity of Alcoholic Extract of Urtica Urens Against Staphylococcus Aureus and Oral Wound Heali

Abstract

This study was to evaluate the effect of the alcoholic extract of *Urtica urens* on wound healing and the antibacterial activity of this plant compared to fusidic acid ointment in experimental rabbit models. Male rabbits "6-7 months age" and "1.25-1.5" Kg body weight were included. The lower jaw of all rabbits were primed for surgery. Under general anesthesia, two full-thickness square longitudinal 1 cm wounds were incised in lower jaw for each animal, then each wound was infected by *Staphylococcus aureus* bacteria. These wounded animals were grouped according to the following: group 1: *Staphylococcus aureus* + no treatment, group 2: *Staphylococcus aureus* + Fusidic acid ointment 2%, group 3: *Staphylococcus aureus* + *Urtica Urens* alcoholic extract 20 %. The applications of treatments were recurring every day, and wounded areas were measured in first, 3ed, 7th, 9th days of the experiment. For evaluation of antimicrobial outcome of *Urtica urens* alcoholic extract against *Staphylococcus aureus*, swabs were taken from sites of wound incision at the first, third and seventh day, then the colony forming units(CFU)/ml of microorganisms were counted. All animals were sacrificed on day ten of the study and evaluated by histopathological examination. Study found complete wound healing at 9th in alcoholic extract of *Urtica urens* 20 % group in comparison to control and Fusidic acid ointment 2%. This study showed that *Urtica urens* plants extracts has positive effect on skin wound healing and has antibacterial activity against *Staphylococcus aureus*.