ABSTRACT

Barbadensis miller and *Opuntia cochenillifera* grows on tropical countries like the Philippines and commonly applied in minor burns. There are different levels of burns; first degree, second degree and third degree burns. This study focused on treating second-degree thermal burns inflicted on *Rattus norvegicus*. Involving 20 male *Rattus norvegicus, which underwent acclimatization for one week and each each,* was inflicted second-degree burns. Five treatment group were prepared T_0 (Silver Sulfadiazine) which is the positive control, T_1 (25%:75% Prickly pear and Aloe vera ointment), T_2 (50%:50% Prickly pear and Aloe vera ointment), T_3 (75%:25% Prickly pear and Aloe vera ointment) and T_4 (100%:100% Prickly pear and Aloe vera ointment to determine its regenerative potential on second-degree burns. Redness and swelling, scab formation, scar formation, and regrowth of fur served as the parameters to be observed after infliction of second-degree burn. Application of ointment was done after infliction and applied every 12hour-interval of the day. Wound contractions were measured in centimeters and duration of appearance was calculated in days. With these treatments, each possessed a regenerative potential in second-degree burns. From the experimentation done, it can be concluded that all treatments have significant difference. This proves that the treatment group has a potential value on treating second-degree thermal burns on albino rats.

Keywords: *Rattus norvegicus, Opuntia cochenillifera, Barbadensis miller, Second-degree burn, Redness and swelling, Scab formation, Scar formation, Regrowth of Fur, regenerative potential.*