

Activity Of Salam Leaf (*Syzygiumpolyanthum*) Gel As A Burns Healer In White Rats (*Rattusnorvegicus* Strain Wistar)

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Abstract

Burns are unique because they involve much dead tissue (eschar), which remain in place for an extended period. Salam leaves can be used for wound treatment by attaching them to the wound place. One of the ingredients of Salam leaves is an anti-bacterial which can kill and inhibit the growth of bacteria and antioxidants. This study aimed to determine the activity of Salam leaf extract gel as a healing grade 2 burns in white rats.

Posttest Only Control Group Design used experimental white mice (*Rattusnorvegicus* strain Wistar). The sampling technique was simple random sampling, consisting of 4 groups, namely 3 treatment groups giving salam leaf extract gel each 15%, 30 and 40 %, 1 negative control group with standard saline solution 0.9%. Microscopic observation of the thickness of the granulation tissue in the Hematoxylin-Eosin preparation was carried out. Data were analyzed using descriptive analysis, data normality test with Shapiro Wilk, Kruskal Wallis comparison test.

Average grade 2 burns healing using salam leaf extract gel (*Syzygiumpolyanthum*) in experimental animals with 15% gel was 3.3 days, 30% gel was 7.8 days, and 45% gel was 13 days, while with NaCl 0.9% is 12.7 days. The Kruskal-Wallis test results show the Asymp value. Sig <0.05 indicates a difference between the administration of salam leaf extract and the duration of healing burns. Histological examination in the bay leaf extract gel group's of 15% and 30% concentrations showed the thickest granulation tissue thickness compared to other treatment groups.

Giving salam leaf extract gel is effective in the healing process of grade 2 burns. Further research is needed regarding the treatment of burns grade 2 B or grade 3 and other various dosage forms and additional research on the standardization of active ingredients that can be used as complementary or an alternative in the treatment of grade 2 burns for multiple groups of people.

Abstract

Burns are unique in that they involve large amounts of dead tissue (eschars) that remain in place for long periods. Bay leaves can be used for wound treatment by attaching them to the wound. One of the contents of bay leaves is an anti-bacterial that can kill and inhibit the growth of bacteria and antioxidants. This study aimed to determine the activity of the extract gel bay leaf as a healer for grade 2 burns in white rats.

Method: True experimental research design with Posttest Only Control Group Design using experimental white rats (*Rattusnorvegicus* strain Wistar), the sampling technique is simple random sampling, consisting of 4 groups, namely 3 the