ABSTRACT

THE COMPARISON FUEL OF LEVEL WOUND HEALING LEVEL BETWEEN HONEY AND TOPICAL GENTAMICIN TREATMENT WHITE ON RATS (Rattus Norvegicus)

by

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Human skin is one of the most vulnerable organ damage. Damage to the skin, among others, can be caused by temperature. The extent of damage depends on the skin at specific temperature and contact time. Thought to act as an antibacterial honey. This study aims to compare the rate of healing of burns with honey and gentamicin topical administration. This study used a randomized controlled design.

In studies using 9 tails Sprague Dawley strain male rats used as subjects of research. Rats were divided into 3 groups at random are: K1 (control), K2 (honey 100%), K3 (Gentamicin Topical Gel 0.1% × 5gr) after 14 days of treatment was observed.
From the research on mice skin burns to average histopathological cure of skin in the treated group 1, 2 and 3 were 0.817±2.57, 0.774±4.23 and 0.691±4.27 with a P value = 0.001 in the Kruskal-Wallis test. On analysis Mann-Whitney test p values for each group are: between K1 and K2 p = 0.001, then K1 and K3 p = 0.001, test for K2 and K3 group p = 0.936. On the results of clinical trials gained an average 50.70 ± 15:28 on K1, 94.48 ± 6:07 in K2 and K3, 92.14 ± 6.85. In the ANOVA test obtained p = 0.039, resumed in the post hoc tests found significant differences in the K1 to the K2 and K3 with p = 0.001. And there were no significant differences between the groups K2 and K3 with p = 0.585.

Based on the comparative study of the rate of healing of burns and gentamicin topical honey treatment, it can be concluded that honey can be used as an alternative medicine to the burn instead of gentamicin topical antibiotics, especially in remote areas that are difficult to get a topical antibiotic gentamicin.

**Keywords:** Gentamicin Topical, burns, honey.