

COMPARISON ON INFECTED WOUND HEALING TIME, USING COFFEE POWDER AND HONEY IN WISTAR RAT

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ABSTRACT

Background: Wound infections are the most possible complication, if a wound is not treated properly. The most common microorganism that causes wound infections is, *Staphylococcus aureus*. Antimicrobial resistance is rising rapidly, but not balanced with the development of antibiotics, therefore an alternative choice for the treatment of wound infections is required. Coffee and honey have been studied and proved to have the ability, to quicken wound healing, but no study has been done to compare these two. This study aimed to discover the differences of infected wound healing using coffee powder and honey.

Methods: This experimental study was using 20 male Wistar rats as subjects, which were divided into four groups according to the treatment of wound infections (coffee powder, honey, positive control, and negative control). Every week within four weeks, assessment of infected wound healing was done according to three macroscopic indicators (wound was dry; the edge of the wound was not hyperemic, and normal leukocyte count). The result of this study was infected wound healing time in weeks and analyzed using survival analysis method.

Results: Mean of wound healing time in coffee powder group (2 weeks) was quicker than honey group (3.4 weeks) and statistically significant with p-value=0.03.

Conclusions: This study discover that there is a significant differences on infected wound healing using coffee powder compared with honey. Infected wound healing time using coffee powder is quicker than honey. Further study is required to find out the effective doses of coffee powder and honey.

KEYWORDS: Coffee Powder, Honey, Infected Wound Healing Time, Wistar Rats, Wound Infection