

ABSTRAK

Negara, Reza Fitra Kusuma, 2013. **Pengaruh Perawatan Luka Bakar Derajat II Menggunakan Ekstrak Etanol Daun Sirih (*Piper betle* Linn.) Terhadap Peningkatan Ketebalan Jaringan Granulasi Pada Tikus Putih (*Rattus Norvegicus* Galur *Wistar*) Jantan**. Tugas Akhir, Program Studi Ilmu Keperawatan, Fakultas Kedokteran, Universitas Brawijaya Malang. Pembimbing : (1) Dr. dr. Retty Ratnawati, M.Sc (2) Ns. Dina Dewi S. L. I. S.Kep, M.Kep

Luka bakar sering terjadi di rumah dan ditemukan terbanyak adalah luka bakar derajat II. Daun sirih (*Piper betle* Linn.) adalah bahan alam yang memiliki kandungan aktif seperti saponin, tannin, flavonoid, minyak atsiri dan diduga dapat membantu mempercepat proses penyembuhan luka, khususnya pembentukan jaringan granulasi. Jaringan granulasi merupakan pertumbuhan jaringan baru yang terjadi ketika luka mengalami proses penyembuhan dan pembentukannya merupakan salah satu komponen penting dalam penyembuhan luka. Tujuan penelitian ini adalah untuk mengetahui pengaruh perawatan luka bakar derajat II secara topikal menggunakan ekstrak daun sirih (*Piper betle* Linn.) terhadap peningkatan ketebalan jaringan granulasi pada tikus putih (*Rattus norvegicus* galur *Wistar*) jantan. Desain penelitian menggunakan *true-experiment post-test* dilakukan terhadap hewan coba tikus putih (*Rattus norvegicus* galur *Wistar*) jantan. Sampel diambil dengan teknik rancangan acak kelompok dan dibagi dalam empat kelompok yaitu 3 perlakuan ekstrak daun sirih: konsentrasi 15% (n=6), 30% (n=6), 45% (n=6), dan kelompok kontrol dengan NS (n=6). Data yang diukur adalah ketebalan jaringan granulasi pasca perawatan luka bakar selama 14 hari. Analisis data pada variabel menggunakan uji *One-Way ANOVA* dengan $p = 0,04$ ($p < 0,05$). Melalui uji *Post Hoc Test* dapat dilihat bahwa perlakuan yang paling signifikan ditunjukkan oleh konsentrasi daun sirih 45% dengan $p = 0,03$ ($p < 0,05$). Dari penelitian ini dapat disimpulkan bahwa perawatan luka bakar derajat II menggunakan ekstrak etanol daun sirih (*Piper betle* Linn) mempengaruhi peningkatan ketebalan jaringan granulasi.

Kata kunci : Ekstrak Daun Sirih (*Piper betle* Linn), Ketebalan Jaringan Granulasi, Luka Bakar Derajat II.

ABSTRACT

Negara, Reza Fitra Kusuma, 2013. **The Effect of Second Degree Burn Treatments Using Ethanol Extract of *Piper Betle* Leaves toward Increasing of Granulation Tissue Thickness in Male White Rats (*Rattus Norvegicus* of Wistar Strain)**. Final Assignment , Nursing department Medical faculty of Brawijaya University Malang. Advisors : (1) Dr. dr. Retty Ratnawati, M.Sc (2) Ns. Dina Dewi S. L. I. S.Kep, M.Kep

Burns most often occur at home and found that second degree burns is the highest prevalence. Sirih leaves (*Piper betle* Linn.) are natural materials that have active substances such as saponin, tannin, flavonoid, essential oil and supposedly can promote wound healing process, especially in granulation tissue formation. Granulation tissue is growth of new tissue that occurs when the process of wound healing in progress and its formation one of important component in wound healing. The aim of this study is to find out the effect of second degree burn topical treatment using the extract of sirih leaves (*Piper betle* Linn.) toward the granulation tissue thickness in male white rats (*Rattus norvegicus* strain *Wistar*). True-experimental post-test design was used and conducted to male white rats. Samples taken with a randomized block design and divided into four groups which 3 of them were treated using *Piper betle* Linn. extract with variety of concentrate: 15% (n=6), 30% (n=6), 45% (n=6), and NS 0,9% served as control. Granulation tissue thickness was measured after second degree burn treatment for 14 days. One-Way ANOVA test shows that there is a significant difference of granulation tissue thickness among each group with $p = 0,04$ ($p < 0,05$). Post Hoc Test demonstrated that 45% dose was the best concentrate to optimize granulation tissue formation with $p = 0,03$ ($p < 0,05$). From this study, it can be concluded that the second degree burn treatments using the ethanol extract of sirih leaves (*Piper betle* Linn.) affects the increasing of granulation tissue formation.

Keywords : Sirih extract (*Piper betle* Linn.), granulation tissue thickness, second degree burns.