

ABSTRAK

Permatasari, Silvia Desy. 2017. **Pengaruh Gel Campuran Ekstrak Etanol Daun Lidah Buaya (*Aloe barbadensis miller*) dan Lendir Bekicot (*Achatina fulica*) Terhadap Ketebalan Epitel pada Proses Penyembuhan Ulkus Traumatik Mukosa Labial Tikus Putih (*Rattus norvegicus*)**. Skripsi, Program Studi Sarjana Kedokteran Gigi Fakultas Kedokteran Universitas Brawijaya. Pembimbing: (1) drg. Nenny Prasetyaningrum, M.Ked (2) drg. Miftakhul Cahyati, Sp.PM.

Ulkus Traumatik merupakan lesi jaringan lunak rongga mulut yang sering dijumpai. *Triamcinolone acetonide* 0,1% *dental paste* merupakan kortikosteroid topikal yang digunakan untuk mengobati ulkus, tetapi pemakaian jangka panjang dapat menyebabkan hipersensitifitas. Gel campuran ekstrak etanol daun lidah buaya (*Aloe barbadensis miller*) dan lendir bekicot (*Achatina fulica*) mengandung *acemannan*, *glucomannan*, saponin, flavonoid dan *heparan sulfate* yang dapat mempercepat proses penyembuhan ulkus. Jenis penelitian yang digunakan adalah penelitian eksperimental menggunakan rancangan penelitian *Post Test Only Randomized Control Group Design* untuk mengetahui pengaruh gel campuran ekstrak etanol daun lidah buaya (*Aloe barbadensis miller*) dan lendir bekicot (*Achatina fulica*) terhadap ketebalan epitel pada proses penyembuhan ulkus traumatik mukosa labial tikus putih (*Rattus norvegicus*). Sampel dibagi menjadi 9 kelompok dengan 3 *time series*, yaitu kelompok tanpa perlakuan (K(-)), kelompok diaplikasikan *Triamcinolone acetonide* 0,1 % (K(+)), dan kelompok diaplikasikan gel campuran ekstrak etanol daun lidah buaya (*Aloe barbadensis miller*) dan lendir bekicot (*Achatina fulica*) (P). Sampel dipilih dengan tehnik *Simple Random Sampling*. Variabel yang diteliti adalah ketebalan epitel mukosa labial tikus putih (*Rattus norvegicus*) dari sediaan HPA dengan pengecatan HE. Uji *one way ANOVA* menunjukkan perbedaan yang signifikan ketebalan epitel antar kelompok. Hasil rerata menunjukkan kelompok perlakuan hari ke-7 memiliki ketebalan epitel tertinggi dibanding kelompok kontrol dan memiliki perbedaan yang signifikan dalam Uji *Post-Hoc Tukey* yaitu $p < 0,05$. Kesimpulan pada penelitian ini yaitu gel campuran ekstrak etanol daun lidah buaya (*Aloe barbadensis miller*) dan lendir bekicot (*Achatina fulica*) berpengaruh terhadap ketebalan epitel pada proses penyembuhan ulkus traumatik mukosa labial tikus putih (*Rattus norvegicus*).

Kata Kunci : Gel campuran ekstrak etanol daun lidah buaya (*Aloe barbadensis miller*) dan lendir bekicot (*Achatina fulica*), ketebalan epitel, proses penyembuhan ulkus

ABSTRACT

Permatasari, Silvia Desy. 2017. **The Effect of Mixture Gel of Ethanol Extract Leaves of Aloe Vera (*Aloe barbadensis miller*) and Snail Mucus (*Achatina fulica*) to The Epithelium Thickness In Traumatic Ulcer Healing Process of Labial Mucosal White Rat (*Rattus norvegicus*).** Essay, Dentistry, Medical Faculty of Brawijaya University. Supervisor: (1) drg. Nenny Prasetyaningrum, M.Ked (2) drg. Miftakhul Cahyati, Sp.PM.

Traumatic Ulcer is soft tissue lesion in oral cavity that often founded. *Triamcinolone acetonide* 0,1% dental paste is topical corticosteroid which usually used for treatment ulcer, but long-term use may cause hypersensitivity. Mixture gel of ethanol extract leaves of aloe vera (*Aloe barbadensis miller*) and mucus snail (*Achatina fulica*) contains *acemannan*, *glucomannan*, saponin, flavonoid and *heparan sulphate* that can improve accelerate ulcer healing process. The type of this study was experimental research and using Post Test Only Randomized Control Group Design in order to understanding the effect of mixture gel of ethanol extract leaves of aloe vera (*Aloe barbadensis miller*) and snail mucus (*Achatina fulica*) to the epithelial thickness in traumatic ulcer healing process of labial mucosal white rat (*Rattus norvegicus*). The samples were divided into 9 groups with 3 time series, which is the untreated group (K (-)), the group was applied *Triamcinolone acetonide* 0.1% (K (+)), and the group was applied the mixture gel of ethanol extract of leaves of aloe vera (*Aloe barbadensis miller*) and mucus snail (*Achatina fulica*) (P). Samples were selected using Simple Random Sampling Technique. Variable studied was epithelial thickness labial mucosal white rat (*Rattus norvegicus*) tissues from HPA preparation with HE staining. One way ANOVA test showed a significant differences of the epithelial thickness between groups. The result of the average showed treated group day 7 had the highest epithelial thickness than control groups and have a significant differences in Post-hoc Tukey test that is $p < 0,05$. Conclusion of this study was that mixture gel of ethanol extract leaves of aloe vera (*Aloe barbadensis miller*) and snail mucus (*Achatina fulica*) takes effect to the epithelial thickness in traumatic ulcer healing process of labial mucosal white rat (*Rattus norvegicus*).

Keywords: mixture gel ethanol extract leaves of aloe vera (*Aloe barbadensis miller*) and snail mucus (*Achatina fulica*), Epithelial Thickness, ulcer healing process