

ABSTRAK

Ekstraksi gigi merupakan tindakan pembedahan dengan tujuan mengambil gigi dari soketnya serta menimbulkan luka. Daun kirinyuh (*Chromolaena odorata*) mengandung flavonoid, saponin dan tannin yang mampu membantu proses penyembuhan luka pasca ekstraksi gigi. Tujuan dilakukan penelitian ini adalah untuk mengetahui pengaruh pemberian ekstrak etanol daun kirinyuh terhadap ketebalan epitel pada luka pasca ekstraksi gigi marmot.

Tiga puluh enam ekor marmot (*Cavia cobaya*) jantan berusia 9-10 minggu, berat badan 300-350 gram dibagi ke dalam tiga kelompok yaitu kelompok kontrol negatif, kontrol positif dan kelompok perlakuan sebanyak 12 ekor marmot pada masing masing kelompok. Ekstrak etanol daun kirinyuh konsentrasi 10% dibuat dalam sediaan topikal. Gigi insisivus kiri rahang bawah marmot diekstraksi lalu diaplikasikan sediaan secara topikal. Hewan uji dikorbankan dan dibuat preparat histologi pada hari ke-3, 7, 10, dan 14 dengan pewarnaan *hematoksilin eosin* dan ketebalan epitel diukur dengan menggunakan image raster (μm).

Hasil uji *two-way ANOVA* menunjukkan adanya perbedaan ketebalan epitel yang bermakna antar kelompok ($p < 0,05$). Uji *Post hoc Least Significant Difference* (LSD) menunjukkan perbedaan bermakna ($p < 0,05$) pada 3,7,10,14 hari pasca pencabutan antara kelompok perlakuan dibandingkan dengan kelompok kontrol. Kesimpulan dari penelitian ini adalah ekstrak etanol daun kirinyuh dapat meningkatkan ketebalan epitel pada luka pasca ekstraksi gigi.

Kata kunci: ekstraksi gigi, marmot, kirinyuh, re-epitelisasi

ABSTRACT

Tooth extraction is a surgical procedure to remove teeth from the socket, which then causes injury. Kirinyuh leaves (*Chromolaena odorata*) contain flavonoids, saponins and tannins that can help the wound healing process after tooth extraction. The purpose of this study was to determine the effect of ethanol extract of Kirinyuh leaves on epithelial thickness in post-extraction wounds of guinea pigs.

Thirty-six male guinea pigs (*Cavia cobaya*) aged 9-10 weeks, body weight 300-350 grams were divided into three groups: negative control, positive control and treatment groups. Each group consists of 12 guinea pigs. Kirinyuh leaf ethanol extract with a concentration of 10% is made in topical preparations. The guinea pig's left lower incisors were extracted and then the topical application was applied. Test animals were sacrificed. Then, histological preparations were made on days 3, 7, 10, and 14 with hematoxylin eosin staining. Furthermore, the thickness of the epithelium is measured using a raster image (μm).

Two-way ANOVA test results showed a significant difference in epithelial thickness between groups ($p < 0.05$). Post hoc Least Significant Difference (LSD) test showed a significant difference ($p < 0.05$) 3,7,10,14 days post-extraction between treatment groups compared with the control group. This study concludes that the ethanol extract of kirinyuh leaves could increase the thickness of the epithelium in post-extraction wounds of teeth.

Key words: tooth extraction, *Kirinyuh*, *re-epithelialization*