

## INTISARI

Pencabutan gigi dapat menimbulkan luka pada tulang alveolar dan mukosa rongga mulut. Buah manggis berpotensi dapat dikembangkan sebagai obat luka akibat pencabutan gigi.

Tujuan penelitian untuk mengetahui pengaruh efektifitas ekstrak kulit manggis (*Garcinia Mangostana L.*) terhadap jumlah sel epitel mukosa soket pasca pencabutan gigi pada marmut (*Guinea Pig*).

Penelitian eksperimental menggunakan rancangan *Randomized Post Test Only Control Group Design*, menggunakan 28 ekor marmut (*Guinea Pig*) yang dibagi 4 kelompok secara random. Ekstrak kulit Manggis (EKM) dalam penelitian ekstrak kulit manggis yang dibuat dengan metode maserasi menggunakan pelarut heksana. Sel epitel yang diteliti adalah jumlah sel epitel yang terdapat pada mukosa soket pasca pencabutan gigi. Uji one-way anova, *post hoc*, dan kolerasi pearson digunakan sebagai alat analisis data.

Rata-rata jumlah sel epitel mukosa soket pasca pencabutan gigi pada pemberian EKM 552mg/hr selama 4 dan 7 hari adalah 554,83 dan 420,83, sedangkan di kelompok kontrol pada hari ke-4 dan 7 adalah 361,50 dan 342,17. Uji *One Way Anova* menghasilkan  $p=0,020$  menunjukkan terdapat perbedaan jumlah sel epitel mukosa soket pasca pencabutan gigi pada keempat kelompok, perbedaan ditunjukkan oleh kelompok pemberian EKM 552 mg/hr 4 hari dengan kelompok kontrol 4 hari, dan 7 hari. Uji korelasi Pearson diperoleh  $p=0,178$ , tidak ada hubungan antara lama perlakuan dengan jumlah sel epitel mukosa soket pasca pencabutan gigi.

Ada pengaruh ekstrak kulit manggis terhadap jumlah sel epitel mukosa soket pasca pencabutan gigi.

**Kata kunci:** Ekstrak Kulit Manggis, Jumlah Sel Epitel Mukosa

## ABSTRACT

Extraction of teeth can cause injury to the alveolar bone and oral mucosa. Mangosteen fruit has the potential to be developed as a cure wounds caused by tooth extraction.

The purpose of this research is to determine effectiveness of mangosteen peel extract (*Garcinia Mangostana L.*) to the number of sockets mucosal epithelial cells after tooth extraction in guinea pigs.

The experimental used randomized post test only control group design, used 28 marmots (Guinea Pig) that were divided into 4 groups randomly. Mangosteen peel extract (MPE) in research mangosteen peel extract prepared by maceration method using hexane solvent. Epithelial cells studied were the number of cells contained in the sockets mucosal epithelium after tooth extraction. Test one-way ANOVA, post hoc, and Pearson correlation were used as data analysis tools.

The average number of mucosal epithelial cells after tooth extraction sockets on MPE giving 552mg/day for 4 and 7 days were 554.83 and 420.83, while in the control group on days 4 and 7 were 361.50 and 342.17. One Way Anova produce  $p = 0.020$  showed that there were differences in the amount of sockets mucosal epithelial cells after tooth extraction in all four groups, the difference was indicated within the administration MPE 552 mg/hr 4 days and the control group 4 days, and 7 days. Pearson correlation test was obtained  $p = 0.178$ , there was not any relations between duration of treatment and the amount of sockets mucosal epithelial cells after tooth extraction.

There was an effect of mangosteen peel extract in the number of sockets mucosal epithelial cells after tooth extraction.

**Keywords:** Skin Extract Mangosteen, Number of Mucosal Epithelial Cells