

## ABSTRAK

Gingivektomi merupakan pemotongan dinding jaringan lunak poket untuk mengeliminasi poket gingiva. Paska gingivektomi diberikan *periodontal pack* untuk melindungi luka dan mengontrol perdarahan. Lidah buaya dapat dijadikan alternatif bahan dalam mempercepat penyembuhan luka karena mengandung enzim saponin, accemanan, vitamin C yang membantu mempercepat penyembuhan luka. Tujuan penelitian ini adalah mengetahui pengaruh pemberian gel ekstrak lidah buaya terhadap proses penyembuhan luka paska gingivektomi.

Penelitian laboratorium *true experimental* dengan rancangan *post-test only control group design* dilakukan pada 20 ekor tikus dan dibagi dua kelompok: kelompok *periodontal pack* dan kelompok *periodontal pack* ditambah gel ekstrak lidah buaya. Penyembuhan paska gingivektomi dilihat dari rerata jumlah fibroblas yang dianalisis dengan Uji *One-Way Anova* dan *Post-Hoc LSD*.

Hasil penelitian menunjukkan rerata jumlah fibroblas pada kelompok *periodontal pack* hari ke-5 dan hari ke-7 adalah 39,67 dan 47,75, selain itu dalam kelompok *periodontal pack* ditambah gel ekstrak daun pepaya hari ke-5 dan ke-7 adalah 54,34 dan 60,20. Uji *One-Way Anova* didapatkan hasil  $p=0.00$ , artinya terdapat pengaruh pemberian gel ekstrak lidah buaya terhadap proses penyembuhan pasca gingivektomi dan terdapat perbedaan rerata jumlah fibroblas yang signifikan antar kelompok penelitian.

Dari hasil penelitian dapat disimpulkan bahwa terdapat pengaruh pemberian gel ekstrak lidah buaya terhadap jumlah fibroblas pada proses penyembuhan pasca gingivektomi pada tikus galur wistar.

**Kata kunci:** Gel Ekstrak Lidah Buaya, Gingivektomi, Penyembuhan Luka, Fibroblas

## **ABSTRACT**

*Gingivectomy is an excision on the soft tissue wall pocket by cutting the gingival tissue to eliminate gingival pockets following gingivectomy. Periodontal pack was applied to protect wound and control bleeding. Papaya leaf can be used as an alternative ingredient to accelerated wound healing because it contains enzymes such as saponins, accemanan, vitamin C which enhance the healing process. The purpose of this study was to determine the effect of aloe vera extract gel for the process of wound healing following gingivectomy.*

*True experimental laboratory research with post-test only control group design was conducted on 20 male wistar rats and divided into two groups: the group of periodontal pack and periodontal pack plus aloe vera extract gel. The healing process can be seen from the average number of fibroblasts that were analyzed by One-Way ANOVA test and Post-Hoc LSD.*

*The results showed that the average number of fibroblasts in the group periodontal pack day 5 and day 7 were 47.36 and 55.52, besides in the group periodontal pack plus papaya leaf extract gel on day 5 and day 7 were 63.36 and 74,76. One-Way ANOVA showed that  $p=0,00$  ( $p<0.05$ ), it said that aloe vera extract gel influenced the healing process and there were differences between the mean number of fibroblasts significantly between the groups in this study.*

*It can concluded that aloe vera extract gel had an effect to enhance number of fibroblasts in wound healing process following gingivectomy in male wistar rats.*

**Keywords:** *Aloe Vera Extract Gel, Gingivectomy, Wound Healing, Fibroblasts*