

## **ABSTRACT**

*Gingivectomy is an excision on the soft tissue wall of the pocket by cutting the gingival tissue to eliminate gingival pockets. After gingivectomy, periodontal pack was applied to protect wound and control bleeding. Papaya leaf can be used as an alternative because it contains enzymes such as saponins, flavonoids, vitamin C which can help speed up the healing of wounds. The purpose of this study was to determine the effect of papaya leaf extract gel 5% for the process of wound healing after 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 papaya leaf extract gel 5%. Healing after gingivectomy 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  $p=0,00$  ( $p<0.05$ ), meaning that there was effect of papaya leaf extract gel 5% to the process of healing after gingivectomy and there were differences between the mean number of fibroblasts significantly between the groups in this study.*

*It can concluded that papaya leaf extract gel 5% has an effect to increase number of fibroblasts in the process of healing after gingivectomy in male wistar rats.*

**Keywords: Papaya Leaf Extract Gel, Gingivectomy, Wound Healing, Fibroblasts**

## ABSTRAK

Gingivektomi merupakan eksisi pada dinding jaringan lunak dari poket dengan cara memotong jaringan gingiva yang bertujuan untuk mengeliminasi poket gingiva. Pasca gingivektomi diberikan aplikasi *periodontal pack* yang bertujuan untuk melindungi luka, menjaga daerah luka agar tetap bersih, dan mengontrol perdarahan. Pemberian daun pepaya dapat dijadikan alternatif karena mengandung enzim saponin, flavonoid, vitamin C yang dapat membantu mempercepat penyembuhan luka. Tujuan penelitian ini adalah mengetahui pengaruh pemberian gel ekstrak daun pepaya 5% terhadap proses penyembuhan luka pasca gingivektomi.

Penelitian laboratorium *true experimental* dengan rancangan *post-test only control group design* dilakukan pada 20 ekor tikus galur wistar jantan dan dibagi dua kelompok: kelompok *periodontal pack* dan kelompok *periodontal pack* ditambah gel ekstrak daun pepaya 5%. Penyembuhan pasca 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 47,36 dan 55,52, selain itu dalam kelompok *periodontal pack* ditambah gel ekstrak daun pepaya hari ke-5 dan ke-7 adalah 63,36 dan 74,76. Uji *One-Way Anova* didapatkan hasil  $p=0.00$ , artinya terdapat pengaruh pemberian gel ekstrak daun pepaya 5% 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 daun pepaya 5% terhadap jumlah fibroblas pada proses penyembuhan pasca gingivektomi pada tikus galur wistar.

**Kata kunci: Gel Ekstrak Daun Pepaya, Gingivektomi, Penyembuhan Luka, Fibroblas**