

## ABSTRAK

Kanker dengan radioterapi maupun kemoterapi dapat menyebabkan mukositis oral. Untuk mengobati mukositis oral, ekstrak daun pegagan adalah alternatif herbal dengan minim efek samping serta tidak mengganggu prosedur perawatan dari kemoterapi karena mengandung asam triterpenoid, asam asiaticoside, asam madecoside, dan saponin menstimulasi sintesis kolagen yang mempengaruhi epitelisasi.

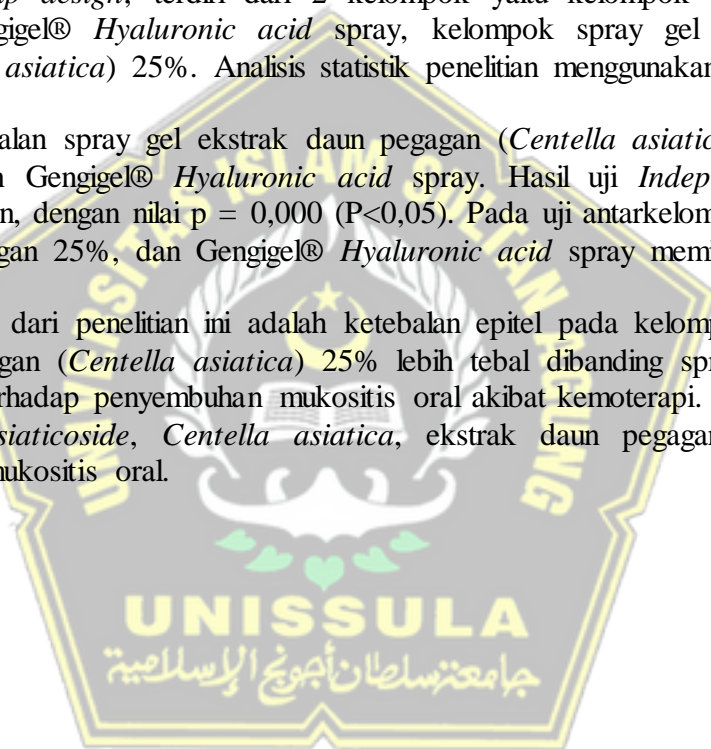
Tujuan penelitian ini ialah mengetahui perbedaan ketebalan epitel antara pemberian spray gel ekstrak daun pegagan (*Centella asiatica*) 25% dengan pemberian Gengigel® *Hyaluronic acid* spray terhadap proses penyembuhan mukositis oral pada tikus yang diinduksi kemoterapi.

Desain penelitian ini adalah eksperimental laboratorik dengan rancangan *post-test only control group design*, terdiri dari 2 kelompok yaitu kelompok kontrol positif menggunakan Gengigel® *Hyaluronic acid* spray, kelompok spray gel ekstrak daun pegagan (*Centella asiatica*) 25%. Analisis statistik penelitian menggunakan *Independent T-test*.

Hasil ketebalan spray gel ekstrak daun pegagan (*Centella asiatica*) 25% lebih besar dibandingkan Gengigel® *Hyaluronic acid* spray. Hasil uji *Independent T-test* didapatkan signifikan, dengan nilai  $p = 0,000$  ( $P < 0,05$ ). Pada uji antarkelompok spray gel ekstrak daun pegagan 25%, dan Gengigel® *Hyaluronic acid* spray memiliki perbedaan yang signifikan.

Kesimpulan dari penelitian ini adalah ketebalan epitel pada kelompok spray gel ekstrak daun pegagan (*Centella asiatica*) 25% lebih tebal dibanding spray Gengigel® *Hyaluronic acid* terhadap penyembuhan mukositis oral akibat kemoterapi.

**Kata Kunci** : *asiaticoside*, *Centella asiatica*, ekstrak daun pegagan, Gengigel®, *Hyaluronic acid*, mukositis oral.



## **ABSTRACT**

*Cancer treatment with radiotherapy or chemotherapy can cause oral mucositis. To treat oral mucositis, pegagan leaf extract is an herbal alternative with minimal side effects and doesn't interfere with treatment procedures from chemotherapy cause contains triterpenoid acid, asiaticoside acid, madecoside acid, and saponins that stimulate collagen synthesis which affects epithelialization.*

*The purpose of this study was to determine the difference in epithelial thickness between the administration of 25% pegagan leaf extract (*Centella asiatica*) spray gel and Gengigel® Hyaluronic acid spray to the healing process of oral mucositis in chemotherapy-induced rats.*

*The design of this study was an experimental laboratory with a post-test only control group design, consisting of 2 groups, namely a positive control group using Gengigel® Hyaluronic acid spray, a group of 25% pegagan leaf extract (*Centella asiatica*) gel spray. The statistical analysis of the study used the Independent T-test.*

*The results of the spray gel thickness of pegagan leaf extract (*Centella asiatica*) were 25% greater than Gengigel® Hyaluronic acid spray. The results of the Independent T-test were significant, with a value of  $p = 0.000$  ( $P < 0.05$ ). In the test between groups of pegagan leaf extract spray gel 25%, and Gengigel® Hyaluronic acid spray had a significant difference.*

*It can be concluded that there was differences in the increase of epithelial thickness in the application of 25% pegagan leaf extract (*Centella asiatica*) gel spray with Gengigel® Hyaluronic acid spray on the healing of oral mucositis due to chemotherapy.*

**Keywords:** *pegagan leaf extract, *Centella asiatica*, Gengigel®, Hyaluronic acid, oral mucositis, asiaticoside.*

