

INTISARI

Latar belakang: Periodontitis diabetika merupakan salah satu komplikasi yang dialami oleh penderita Diabetes Melitus (DM). Administrasi topikal gel kurkumin menjadi salah satu alternatif perawatan periodontitis diabetika karena sifat antiinflamasi, imunomodulator, dan antibakteri. Tujuan penelitian ini adalah untuk mengetahui pengaruh aplikasi topikal gel kurkumin pasca kuretase terhadap penyembuhan jaringan periodontal dan HbA1c.

Metode Penelitian: Penelitian ini merupakan penelitian eksperimental semu yang dilakukan secara klinis di RSGM UGM Prof. Soedomo. 28 titik poket dengan kedalaman 3-5 mm dari 9 pasien DM menjadi sampel dalam penelitian ini. Sampel dibagi ke dalam kelompok kurkumin+kuretase (16 titik poket) dan kelompok kuretase (12 poket). Tindakan kuretase dilakukan pasca initial phase therapy. Gel kurkumin diadministrasikan intrapoket. Parameter Pocket Depth (PD), Clinical Attachment Level (CAL) dan Bleeding on Probing (BOP) diukur pada baseline, bulan ke-1, dan bulan ke-3. HbA1c diukur pada baseline dan bulan ke-3. Data PD, CAL, dan BOP dianalisis dengan Uji Mann-Whitney. Selisih HbA1c dianalisis dengan uji Independent Sample T-Test.

Hasil: Uji Mann-Whitney parameter PD, CAL, BOP menunjukkan tidak ada perbedaan antar grup pada semua interval waktu (semua nilai $p > 0,05$). Perbedaan intragroup terdapat pada PD dan CAL kelompok kuretase+kurkumin. Uji Independent Sample T Test selisih HbA1c menunjukkan hasil tidak signifikan dengan nilai $p = 0,694$ ($p > 0,05$).

Kesimpulan: Tidak ada perbedaan hasil terapi antara terapi kuretase dengan penambahan gel kurkumin dan tanpa penambahan gel kurkumin dalam hal *pocket depth*, *clinical attachment loss*, *bleeding on probing* dan evaluasi HbA1c

Kata kunci: gel kurkumin, Host Modulation Therapy (HMT), HbA1c, *Pocket Depth*.

ABSTRACT

Background: Diabetic periodontitis is one of the complications experienced by people with Diabetes Melitus (DM). Topical administration of curcumin gel is an alternative treatment for diabetic periodontitis because of its anti-inflammatory, immunomodulatory, and antibacterial properties. The aim of this study was to determine the effect of topical application of curcumin gel post-curettage on periodontal healing and HbA1c.

Research Methods: This research is a quasi-experimental study conducted clinically at Prof. Soedomo Dental Hospital. 28 pockets with a depth of 3-5 mm from 9 DM patients were divided into curcumin + curettage (16 pocket points) and the curettage group (12 pocket). The subgingival curettage was performed after initial phase therapy. Curcumin gel is administered subgingivally using blunt cannula. Pocket Depth (PD), Clinical Attachment Level (CAL) and Bleeding on Probing (BOP) were measured at baseline, 1st month, and 3rd month. HbA1c was measured at baseline and 3rd month. PD, CAL, and BOP data were analyzed by the Mann-Whitney Test. HbA1c reduction was analyzed by Independent Sample T-Test.

Results: Mann-Whitney test on PD, CAL, BOP showed no differences between groups at all time intervals (all values of $p > 0.05$). Independent Sample T Test of HbA1c reduction test showed insignificant results with a p value of 0.694 ($p > 0.05$).

Conclusion: There was no statistical difference in therapeutic results between curettage therapy with the addition of curcumin gel and without the addition of curcumin gel in terms of pocket depth, clinical attachment loss, bleeding on probing and HbA1c evaluation

Keywords: curcumin gel, Host Modulation Therapy (HMT), HbA1c, Pocket Depth