

## INTISARI

Periodontitis diabetika merupakan inflamasi jaringan periodontal pada penderita diabetes mellitus (DM). Kondisi pada penderita DM menimbulkan peningkatan keparahan periodontitis, manajemen terapi periodontitis diabetika diharapkan dapat mengoptimalkan kebersihan mulut, mencegah kehilangan gigi, memfasilitasi diet yang sehat, dan meningkatkan kontrol glukosa. Periodontitis diabetika dengan hasil pemeriksaan HbA1c 6,5% - 8% (resiko ringan-sedang) dapat dilakukan tindakan terapi periodontal dan aplikasi topikal gel kurkumin menjadi satu alternatif perawatan periodontitis diabetika karena sifat antiinflamasi, imunomodulator dan antibakteri. Penelitian ini bertujuan untuk mengetahui perbedaan hasil perawatan antara aplikasi gel kurkumin dan kuretase pasca *scaling root planing* (SRP) pada periodontitis diabetika.

Penelitian ini merupakan penelitian eksperimental semu. Sampel yang diambil dari subjek penelitian adalah poket dengan kedalaman 4-6 mm selanjutnya sampel dibagi menjadi 2 kelompok, yaitu: Kelompok I: dilakukan SRP dan kuretase, Kelompok II: dilakukan SRP dan aplikasi gel kurkumin 1%, masing-masing 10 sampel. Efektifitas dilihat dari parameter *Pocket depth* (PD), *relative attachment level* (RAL) dan *papillary bleeding index* (PBI) pada baseline, hari ke-30 dan hari ke-90. Data PD, PBI dan RAL dianalisis dengan tes *Kruskal Wallis* dan *Mann-Whitney*.

Hasil penelitian menunjukkan tidak ada perbedaan bermakna PD, RAL antar kelompok pada semua waktu pengamatan ( $p > 0,05$ ). Parameter PBI menunjukkan antar kelompok ada perbedaan bermakna pada hari ke 30 ( $p < 0,05$ ) dan tidak ada perbedaan bermakna pada hari 30-90, nilai  $p > 0,05$ , Kesimpulan dari penelitian ini adalah tidak ada perbedaan hasil perawatan antara aplikasi gel kurkumin dan kuretase pasca SRP sedangkan nilai PBI pada perawatan SRP+gel kurkumin 1% lebih baik dibanding SRP+kuretase periodontitis diabetika.

**Keywords:** *periodontitis diabetika, kurkumin, scaling root planing, kuretase*

### ABSTRACT

Diabetic periodontitis is an inflammation of periodontal tissue in patients with diabetes mellitus (DM). The condition in DM patients gives rise to increased severity of periodontitis, diabetic periodontitis therapy management is expected to optimize oral hygiene, prevent tooth loss, facilitate a healthy diet, and improve glucose control. Diabetic periodontitis with HbA1c examination results of 6.5% - 8% can be done periodontal therapy action and topical application of curcumin gel becomes an alternative treatment of diabetic periodontitis due to its anti-inflammatory, immunomodulatory and antibacterial properties. This study aim was to determine the treatment result difference between curcumin gel application and curettage posca scaling root planing (SRP) on diabetic periodontitis.

This research was a quasi-experimental study. Samples were taken from the study subjects were pockets with a depth of 4-6 mm and then the samples were divided into 2 groups, namely: Group I: SRP+curettage, Group II: SRP and application of 1% curcumin gel in each 10 samples. Effectiveness was seen from pocket depth (PD), papillary bleeding index (PBI) and relative attachment level (RAL) parameters on the baseline, day 30 and day 90. PD, PBI, RAL data were analyzed with by Kruscal-Wallis and Mann-Whitney test.

Results in PD, RAL showed there were no differences between groups at all observation times ( $p>0.05$ ). PBI parameters showed that there was significant difference at obseravation time in day 30, value  $p <0.05$  and there was no significant difference at obseravation time in day 90 ( $p>0.05$ ). The conclusion of this study is that there were no differences in treatment results of PD and RAL between the application of curcumin gel and curettage after SRP and the application of curcumin gel after SRP give reduction PBI better than curettage after SRP in diabetic periodontitis.

**Keywords:** *diabetic periodontitis; curcumin, scaling root planing, curettage*