

PERBANDINGAN HASIL TERAPI ANTARA FOTODINAMIK DAN KURETASE PASCA SCALING ROOT PLANING PADA PERIODONTITIS PENDERITA HIPERTENSI TAHAP I

INTISARI

Tindakan bedah periodontal pada penderita hipertensi tahap I memiliki risiko terjadinya perdarahan, sehingga perlu adanya alternatif perawatan periodontal pada penderita hipertensi. Penelitian ini bertujuan untuk mengkaji perbedaan hasil terapi antara fotodinamik dan kuretase pasca SRP pada periodontitis penderita hipertensi tahap I.

Sampel yaitu tiga puluh titik poket diambil dari subjek penelitian, yaitu pasien yang didiagnosis periodontitis kronis, selanjutnya sampel dibagi menjadi 3 kelompok. Kelompok I (kontrol) yaitu penderita periodontitis non-hipertensi dilakukan terapi *scaling root planing* (SRP) dan kuretase, kelompok II yaitu penderita periodontitis hipertensi tahap I dilakukan terapi SRP dan kuretase dan Kelompok III yaitu penderita periodontitis hipertensi tahap I dilakukan terapi SRP dan fotodinamik dengan bahan fotosensitizer klorofil. Hasil terapi dilihat dari parameter *pocket depth* (PD), *relative attachment level* (RAL), *papillary bleeding index* (PBI) dan jumlah koloni bakteri anaerob pada *baseline*, hari ke-14 dan hari ke-21. Data PD, RAL, dan PBI dianalisis menggunakan *Kruskall Wallis* serta jumlah bakteri anaerob menggunakan ANAVA dua jalur dengan tingkat kepercayaan 95% ($\alpha=0,05$).

Hasil penelitian menunjukkan terdapat perbedaan bermakna hasil perbaikan PBI dan hasil penurunan jumlah bakteri anaerob antar kelompok ($p<0,05$), namun tidak ada perbedaan bermakna hasil perbaikan PD dan RAL antar kelompok ($p>0,05$). Kesimpulan penelitian ini adalah hasil terapi fotodinamik pasca SRP dengan bahan fotosensitizer klorofil lebih baik dalam perbaikan PBI dan penurunan jumlah bakteri anaerob, namun sama dalam perbaikan PD dan RAL dibandingkan dengan kuretase pasca SRP pada periodontitis penderita hipertensi tahap I.

Kata kunci: fotosensitizer klorofil, kuretase, penderita hipertensi tahap I, periodontitis kronis, terapi fotodinamik.

COMPARISON OF THERAPY RESULTS BETWEEN PHOTODYNAMIC AND CURETTAGE POST SCALING ROOT PLANING IN PERIODONTITIS OF HYPERTENCY STAGE I

ABSTRACT

Periodontal surgery in patients with hypertension stage I has a risk of bleeding, so there needs to be an alternative treatment for hypertension patients. This study aims to examine differences in the treatment outcomes between photodynamic therapy with chlorophyll photosensitizer and curettage therapy after scaling root planing in the treatment of periodontitis in patients with stage I hypertension.

Samples were taken from the pocket point of patients diagnosed with chronic periodontitis, then the samples were divided into 3 groups. Group I (control), were patients with periodontitis non-hypertensive did therapy scaling root planing (SRP) and curettage, group II was patient with periodontitis hypertension stage I did therapy SRP and curettage and group III patients with periodontitis hypertension stage I did therapy SRP and photodynamic substance chlorophyll photosensitizer. The treatment outcomes was seen from the parameters of the pocket depth (PD), relative attachment level (RAL), papillary bleeding index (PBI), and the number of anaerobic bacterial colonies at baseline, day 14, and day 21. The data of PD, RAL, and PBI were analyzed by using Kruskall Wallis, and the number of anaerobic bacterial colonies by using Two Way ANOVA with a confidence level of 95% ($\alpha=0.05$).

The results showed that there was a significant difference in the number of anaerobic bacteria between groups and in PBI ($p < 0.05$), but there was no significant difference in the results of PD and RAL between groups ($p > 0.05$). This study concluded that the results photodynamic therapy with chlorophyll photosensitizer after SRP are better in the improvement of PBI and reducing the number of anaerobic bacteria, but the same in the improvement of PD and RAL compared to curettage after SRP in the treatment of periodontitis in patients with stage I hypertension.

Keywords: chlorophyll photosensitizer, curettage, patients with stage I hypertension, chronic periodontitis, photodynamic therapy.