

Tingkat ekspresi periostin pasien periodontitis stage II grade a pascaterapi skeling dan penghalusan akar gigi = Periostin level of periodontitis stage II grade a patients after scaling and root planing therapy

Agustina Fortunata Karim, author

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20503667&lokasi=lokal>

Abstrak

Dinamika periostin, protein matriks ekstraseluler jaringan ikat yang berperan sebagai regulator homeostasis struktural dan fungsional, ditemukan dalam cairan krevikuler gingiva (CKG) saat kondisi inflamasi maupun sehat. Pada kasus borderline, pemeriksaan secara biomolekuler dapat membantu meminimalisasi keparahan penyakit, risiko dan kerugian pasien dalam perawatan. Penelitian ini bertujuan mendapatkan perbedaan tingkat periostin sebelum dan sesudah terapi skeling dan penghalusan akar gigi (SPA) pada pasien periodontitis stage II grade A, serta hubungan antara tingkat periostin dengan kedalaman poket periodontal - PPD dan perdarahan saat probing - BOP. Sampel CKG dari enam subjek sehat [BOP (-)] dan 25 pasien periodontitis stage II grade A [PPD 4 - 5 mm, BOP (+)] usia 26 - 55 tahun di RSKGM FKG UI, Jakarta, diambil saat baseline (D0), dan dilanjutkan untuk kelompok periodontitis saat satu minggu (D1), dua minggu (D2), dan empat minggu (D3) pascaterapi SPA menggunakan paper point. Dilakukan juga pengukuran PPD dan BOP saat D0 dan D3. Tingkat periostin diamati menggunakan metode RT-PCR kuantitatif dalam 45 siklus. Nilai $p < 0,05$ dinyatakan signifikan. Saat inflamasi, tingkat periostin ditemukan menurun, namun setelah terapi SPA, periostin meningkat dalam satu minggu ($p < 0,05$), dua minggu ($p < 0,05$), hingga empat minggu ($p < 0,05$), sejalan dengan temuan klinis perbaikan PPD dan BOP. Perubahan tingkat periostin mengkonfirmasi penyembuhan jaringan pascaterapi SPA pada kasus periodontitis stage II grade A.

.....The dynamics of periostin, a connective tissue extracellular matrix protein that acts as a regulator of structural and functional homeostasis, is detected in gingival crevicular fluid (GCF) during both inflammatory and healthy conditions. In borderline cases, biomolecular examinations can help minimize the severity of the disease, the risk, and the loss of patients in treatment. The aim of this study was to obtain differences in the levels of periostin before and after treatment of scaling and root planing (SRP) in patients with stage II grade A periodontitis, as well as its relationship with the depth of the periodontal pocket - PPD and bleeding on probing - BOP. Samples from GCF of six healthy subjects [BOP (-)] and 25 stage II grade A periodontitis patients [PPD 4-5 mm, BOP (+)] aged 26 - 55 years at RSKGM FKG UI, Jakarta, were taken at baseline (D0), and continued for the periodontitis group at one week (D1), two weeks (D2), and four weeks (D3) after SRP treatment by using paper points. PPD and BOP measurements were also taken at D0 and D3. Periostin levels were observed using qRT-PCR methods in 45 cycles. A value of $p < 0.05$ was stated as significant. During inflammation, the level of periostin was found to decrease, but after SRP therapy,

periostin increased in one week ($p < 0.05$), two weeks ($p < 0.05$), up to four weeks ($p < 0.05$), in line with the clinical finding improvement of PPD and BOP. Periostin level changes confirmed healing of periodontal tissue after SRP therapy in stage II grade A periodontitis cases.