

INTISARI

Kehilangan papila interdental mengakibatkan suatu keadaan yang dikenal sebagai *black triangle*. Perawatan *black triangle* dapat dilakukan dengan teknik bedah atau non-bedah. *Injectable platelet-rich fibrin (i-PRF)* merupakan perkembangan modifikasi dari PRF yang dihasilkan dalam bentuk cairan serta mempunyai kemampuan melepaskan konsentrasi sejumlah *growth factors* yang lebih tinggi dan memicu peningkatan migrasi fibroblas, pelepasan PDGF, TGF- β 1, dan kolagen. *Hyaluronic acid (HA)* merupakan komponen penting dari matriks ligamen periodontal dan berguna dalam adesi, pembentukan matriks ekstraseluler, migrasi dan diferensiasi sel sehingga dapat mendukung proses regenerasi jaringan lunak. Penelitian ini bertujuan untuk mengetahui perbedaan hasil terapi *black triangle* antara *injectable platelet-rich fibrin* dan asam hialuronat.

Sebanyak 14 *black triangle* dibagi menjadi dua kelompok injeksi yaitu kelompok *injectable platelet-rich fibrin (i-PRF)* dan kelompok *Hyaluronic Acid (HA)*, masing-masing 7 *black triangle*. Evaluasi klinis dilakukan pada *baseline*, 1 bulan, dan 3 bulan untuk parameter *Vertical component (VC)*, *Horizontal component (HC)*, *Area of Black Triangle (ABT)*, dan *Width of keratinized Gingiva (WKG)*. Uji beda 2 kelompok menggunakan uji *Two Way Anova* sedangkan untuk uji beda antar waktu digunakan uji *Post-Hoc* Parametrik *LSD*.

Penurunan nilai *VC*, *HC*, *ABT* serta kenaikan nilai *WKG* tidak ada perbedaan yang signifikan pada kelompok *i-PRF* maupun *HA*. Dapat disimpulkan bahwa *i-PRF* dan *HA* tidak memiliki perbedaan yang bermakna dalam perawatan *black triangle*.

Kata Kunci : Periodontitis, *Black Triangle*, Teknik Injeksi, *Injectable Platelet-Rich Fibrin*, *Hyaluronic Acid*.

ABSTRACT

The loss of interdental papilla is also known as black triangle. The black triangle can be managed/treated by surgical or non-surgical approach. Injectable platelet-rich fibrin (i-PRF) is the liquid form of PRF, which may stimulates the secretion of several growth factors and triggers fibroblast migration, PDGF, TGF- β 1, and the release of collagen. Hyaluronic acid (HA) is an important material in the periodontal ligament matrix. It promotes the cell adhesion, secretion of the extracellular matrix, the cell migration and differentiation, so it can increase the soft tissue regeneration. The purpose of this study was to know the effectivity between injectable-platelet rich fibrin and hyaluronic acid in the black triangle therapy.

A total of fourteen black triangles were divided into 2 groups of injection: 7 black triangles for i-PRF group dan 7 black triangles for HA group. The clinical evaluation was carried out on baseline, 1 month, and 3 month for Vertical component (VC), Horizontal component (HC), Area of Black Triangle (ABT), and Width of keratinized Gingiva (WKG). The data obtained was evaluated statistically by the Two Way Anova test to see if there is a significant difference between i-PRF group and HA group. The Post-Hoc LSD parametric was done to evaluate the significant difference between each time of the measurement.

There is no significant different between i-PRF and HA group based on Vertical component (VC), Horizontal component (HC), Area of Black Triangle (ABT), and Width of keratinized Gingiva (WKG). The Conclusion of this study is the i-PRF and HA has no significant difference for black triangle therapy.

Key words : Periodontitis, Black Triangle, Injection Technique, Injectable Platelet-Rich Fibrin, Hyaluronic Acid