

INTISARI

Standar utama dalam perawatan poket infraboni adalah menggunakan *Open Flap* dan penambahan *bone graft*. *Open flap* dilakukan untuk mendukung visibilitas pembersihan jaringan granulasi yang lebih optimal, namun memiliki risiko terjadinya resesi gingiva, sehingga dikembangkan metode yang lebih minimal invasif dan menjaga keutuhan *papilla interdental* yang dikenal dengan *Minimally Invasive Surgical Technique (MIST)*. Saat ini dikembangkan bahan *bone graft* sintesis yang memiliki kemampuan osteokonduktif dan dapat diproduksi dalam jumlah besar salah satunya *Hydroxyapatite* dan *Beta Tricalcium Phosphate (HA+ β TCP)*. Tujuan dari penelitian ini adalah membandingkan efektivitas perawatan *Minimally Invasive Surgical Technique (MIST)* dan *Open Flap* pada perawatan poket infraboni yang dikaji dari *relative attachment level (RAL)*, *probing pocket depth (PPD)* dan tinggi tulang alveolar.

Enam puluh dua titik poket dengan kedalaman 5-8 mm yang didiagnosis periodontitis kronis dengan defek infraboni diinklusikan dalam penelitian ini. Sampel dibagi menjadi 2 kelompok (kelompok I *MIST+HA+ β TCP* sebanyak 32 titik poket dan kelompok II *Open Flap+HA+ β TCP* sebanyak 30 titik poket). Parameter klinis *RAL* dan *PPD* diukur pada hari ke-0, ke-30 dan ke-90; sedangkan pemeriksaan radiografis *Cone Beam Computed Topography (CBCT)* tinggi tulang alveolar diukur pada hari ke-0 dan ke-90. Data peningkatan *RAL* dan reduksi *PPD* pada hari ke-0 dan ke-90 dilakukan uji *U Mann-Whitney* dengan hasil signifikan ($p < 0,005$) sedangkan data tinggi tulang alveolar dilakukan uji *Independent t-test* dengan hasil signifikan $p = 0,001$.

Kesimpulan dari penelitian ini metode *MIST* lebih efektif dibandingkan *Open Flap* dengan penambahan *Hydroxyapatite* dan *Beta Tricalcium Phosphate* yang dikaji dari peningkatan *RAL*, penurunan *PPD* dan peningkatan tinggi tulang alveolar.

Kata kunci: Poket Infraboni, *Minimally Invasive Surgical Technique*, *Open Flap*, *Hydroxyapatite+Beta Tricalcium Phosphate*

ABSTRACT

The gold standard in infraboni pocket treatment is to use Open Flap and the addition of bone grafts. Open flap are carried out to support the visibility of more optimal granulated tissue removal, but have a risk of gingiva recession, so that a more minimally invasive method is developed and maintains the integrity of the interdental papilla known as Minimally Invasive Surgical Technique (MIST). Currently developed synthetic bone graft material that has osteoconductive ability and can be produced in large quantities, one of which is Hydroxyapatite and Beta Tricalcium Phosphate (HA+ β TCP) The purpose of this study is to compare the effectiveness of Minimally Invasive Surgical Technique (MIST) and Open Flap treatments in infraboni pocket treatments studied from relative attachment level (RAL), probing pocket depth (PPD) and alveolar bone defect.

Sixty-two pocket points with a depth of 5-8 mm were diagnosed with chronic periodontitis with infraboni defects included in this study. The sample was divided into 2 groups (group I MIST+HA+ β TCP as many as 32 pocket points and group II Open Flap+HA+ β TCP as many as 30 pocket points). Clinical parameters of RAL and PPD were measured on the 0th, 30th and 90th days; while radiographic examination of Cone Beam Computed Topography (CBCT) alveolar bone damage was measured on days 0 and 90. Relative Attachment Level gain and PPD reduction data on the 0th and 90th days were conducted U Mann-Whitney test with significant results ($p < 0.005$) while alveolar bone damage data conducted Independent t-test with significant results $p = 0.001$.

The conclusion of this research MIST method is more effective than Open Flap with the addition of Hydroxyapatite and Beta Tricalcium Phosphate which were studied from the addition of RAL, decreased PPD and addition alveolar bone damage.

Keywords: Infraboni pocket, Minimally Invasive Surgical Technique, Open Flap, Hydroxyapatite+Beta Tricalcium Phosphate