ABSTRACT

Background. *Odontectomy is one of the most common surgical procedure in oral and maxillofacial surgery. Flap design influences the post operative complications. Triangular flap is the most widely used flap design but it has many shortages such as dehiscence, alveolar osteitis, reactionary bleeding, and periodontal disruption distal of second molar. The aim of this study is to introduce an alternative flap design in the surgical removal of impacted mandibular third molars – reversed triangular flap – and to compare this flap design with the triangular flap in case of dehiscence, reactionary bleeding, dan clinical attachment loss.*

Methods. *This prospective, split-mouth study involved 15 patients with bilateral partially impacted mandibular third molars with similar impaction classification. One impacted tooth was removed using triangular flap and the other using reversed triangular flap. Post operative complications such as dehiscence, reactionary bleeding, and clinical attachment loss were recorded 1, 3, 7, 14, and 30 days post odontectomy.*

Results. *Chi square test result shows there were less incidence of dehiscence on seven days post surgery using reversed triangular flap (p=0.032). Mann Whitney-U test result shows that the reversed triangular flap exhibited less bleeding score on day 1 (p=0.002) and day 2 (p=0.035) post surgery. There were no statistically significant differences according to Mann Whitney-U test between the flap designs for the clinical attachment loss on distal of second molar on day 14 (p=0.512) and day 30 (p=0.902) post surgery.*

Conclusion. *The reversed triangular flap design is preferable to triangular flap for impacted third molar surgery, escpecially in terms of wound dehisence and reactionary bleeding.*

Key Words: *impacted third molar, triangular flap, reversed triangular flap*

INTISARI

Pendahuluan. Odontektomi adalah salah satu tindakan bedah yang paling sering dilakukan oleh ahli bedah mulut dan maksilofasial. Desain flap mempengaruhi komplikasi pasca odontektomi. Desain flap yang paling sering digunakan adalah desain flap triangular, namun masih banyak kekurangan seperti dehisensi, alveolar osteitis, perdarahan, dan kerusakan jaringan periodontal distal molar dua. Tujuan dari penelitian ini adalah memperkenalkan desain flap alternatif untuk odontektomi yakni desain flap *reversed triangular* dan membandingkannya dengan desain flap triangular dilihat dalam hal dehisensi, perdarahan dan *clinical attachment loss*.

Metode. Penelitian klinis prospektif dan *split-mouth* ini melibatkan 15 pasien yang memiliki dua gigi molar tiga impaksi sebagian kanan dan kiri dengan kelas impaksi yang sama. Satu gigi dilakukan odontektomi dengan flap triangular, satu gigi lainnya dengan flap *reversed triangular*. Pasca odontektomi dilakukan pengamatan dehisensi, perdarahan, dan *clinical attachment loss* pada H+1, H+3, H+7, H+14, dan H+30.

Hasil. Hasil uji *chi square* menunjukkan insidensi dehisensi lebih sedikit ditemukan pada desain flap *reversed triangular* pada H+7 pasca odontektomi (p=0.032). Hasil uji Mann Whitney-U menunjukkan skor perdarahan lebih rendah pada H+1 (p=0.002) dan H+2 (p=0.035) pada desain flap *reversed triangular*. Berdasarkan hasil uji Mann Whitney-U, tidak ditemukan perbedaan bermakna nilai *clinical attachment loss* pada H+14 (p=0.512) dan H+30 (p=0.902) antara kedua desain flap.

Kesimpulan. Desain flap *reversed triangular* lebih menguntungkan dibandingkan desain flap triangular terutama dalam mengurangi dehisensi dan perdarahan.

Kata Kunci: molar tiga impaksi, flap triangular, flap *reversed triangular*