



Research Article

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Single Vertical Incision at the Corner of the Maxillary Tuberosity for Impacted Upper Third Molar Removal: Technical Note

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Abstract

Third molar surgery is one of the most common surgical procedures performed by the oral and maxillofacial surgeon. Many articles regarding surgical technique and flap design for impacted upper third molar removal are available, although technical notes for impacted upper third molar surgery are uncommon. Classically, two incisions and a periosteum stripping are suggested for impacted upper third molar visualization and removal. We propose a less traumatic technique for impacted upper third molar surgery based on a unique vertical incision distally to second molar. By the fact that this technique only requires a single incision and minimal periosteum stripping, we truly believe that this technique can provide minor post-operative edema and faster patient recovery.

Keywords

Upper Third Molar, Surgery, Maxilla, Surgical approach

Introduction

Third molar surgery is one of the most common surgical procedures performed by the oral surgeon. Skill, experience and a systematic removal strategy are key steps for a clean and atraumatic surgery that provide better outcome and post-operative recovery [1]. Many articles regarding surgical technique and flap design for lower third molar removal are available, although technical notes for impacted upper third molar surgery are scarce [2]. This fact can be attributed to less difficult surgery, whilst severe complications have been reported on literature [3-5]. Classically, two incisions and a periosteum stripping is suggested for impacted upper third molar visualization and removal [6,7].

We propose a less traumatic technique for impacted upper third molar surgery based on a unique vertical incision distally to second molar, covering the attached gingiva up to the vestibule mucosa, reflecting the soft tissue flap enough to position the root elevator between the distal of the second molar and mesial of the upper third molar (Figure 1 and Figure 2). By the fact that this technique only requires a single incision and minimal periosteum stripping, and in the case of little visual access is still possible to make a second incision.



Figure 1: Panoramic X-Ray, showing tooth 18 (FDI), impacted.

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Figure 2: Incision in the corner of the maxillary tuberosity. Note that the incision goes beyond the attached gingiva.



Figure 3: Clinical appearance after 3M removal.

Beyond that, in case of tuberosity fracture, bone maintenance might be possible due to periosteum vascular preservation, although more studies need to be done (Figure 3).

In conclusion, a single vertical incision can provide surgical access for most impacted upper third molar surgery. The suture is facilitated, because with one or two stitches the attached gingiva and free mucosa are closed (Figure 4). The fact that minimal periosteum stripping is required, a minor post-operative edema and faster patient recovery is expected.

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Figure 4: Suture in the attached gingiva closing the surgical cavity.

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Competing interests

No conflict of interest.

Ethical approval

No.

Patient consent

Patient consent has been obtained.

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