Impacted maxillary third molar: report of two cases

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ABSTRACT

The aim of this case report was to review two cases of patients with impacted maxillary third molars. Both were symptomatic and presence of pathology clinically and radiographically. Surgical extraction of these third molars with accessible positions requires a bone removal. Moreover, it contains a high risk of displacement of the third molars into the maxillary sinus. The postoperative period for both cases was without complications.

Keywords: Maxillary third molar, unilaterally inverted, upper impacted tooth

Introduction

Hashemipour MA, Tahmasbi-Arashlow M, Fahimi-Hanzaei F [1] evaluated 1020 orthopantomograms (OPG) of the patients who were referred to the radiology clinics from October 2007 to January 2011. Their study revealed that impacted third molars were 1.9 times more likely to occur in the mandible than in the maxilla. The most common angulation of impaction in the maxilla was the vertical (45.3%). Inversion of the impacted tooth is a rare condition. [²] Abu-Mostafa N [³] described case of bilateral impacted maxillary third molars, which were inverted and distally directed. Both were asymptomatic and pathology free clinically and radiographically. The crown of the right inverted third molar was very close to the maxillary sinus. On the left side, the upper second molar existed between the inverted third molar and the sinus. Alshamrani S [⁴] described two cases of inverted and impacted third molars. They were conservatively managed without surgery. The purpose of this article is to review two cases of impacted maxillary third molars in detail on the basis of available literature.

First Case

A 50-year-old male patient presented to the Department of Oral surgery, Dental Faculty, Medical University - Plovdiv complaining of pain and swelling in the left posterior maxillary region. Intraoral examination revealed unilateral missing upper posterior teeth. A dental peri-apical films showed upper third molar localized between the maxillary first and second molars (Fig. 1, 2).

Fig. 1 Unilateral maxillary third molar with vertical impaction

The most interesting aspect was the peri-apical radiolucencies on the upper third molar which
was vertically directed. The patient was informed about the presence of the impacted maxillary third molar. Final treatment plan was to create a buccal mucoperiosteal flap providing access to the removal of the tooth from the bone, and then the wound must be irrigated and the suture must be made. During the operation we observed liquid from left maxillary sinus. Postoperatively Amoxicillin/Clavulanic acid 500 mg/125 mg - oral, every 8 hours and Nimesulide 100 mg every 12 hours for 24 hours were prescribed.

Second Case
A 58 year old female patient presented to the Department of Oral surgery, Dental Faculty, Medical University - Plovdiv complaining of “missing maxillary posterior teeth”. Clinical examination showed missing maxillary left first, second and the third molars. The panoramic radiograph (Fig. 3) revealed inverted maxillary left third molar. For the second case, the treatment planning included extraction of the maxillary left third molar. Prosthodontic treatment was started following extraction.

Discussion
Only a few cases of inverted and impacted third molars have been reported in the literature. No definitive treatment protocols exist for the removal of impacted teeth. The safest protocol for impacted teeth close to maxillary sinus is conservative treatment in which the teeth are not extracted until they produce pathological signs. Chhabra S, Chhabra N, Dhillon G [5] suggest lateral transposition method for removal of inverted and impacted maxillary third molar. We describe two rare cases of impacted third molars which presented to us in the Department of Oral Surgery, Dental Faculty, Medical University - Plovdiv over a period of 7 years approximately. The first case is on the impacted left third molar localized between the maxillary first and second molars, the second case is on the inverted maxillary left third molar.

In this study, surgical treatment was the choice for the impacted upper third molars because they were with presence of pathology and covered by bone and mucosa. In both of our cases antibiotic amoxicillin was prescribed for 5 days. According to Martin MV, Kanatas AN, Hardy P [6] there was no justification for routine antibiotic prophylaxis for third molar surgery. Additionally, we considered the medical condition and age of the patient, as well as the anticipated local complications associated with removal of the teeth. Moreover, it contains a high risk of displacement of the third molars into the maxillary sinus. Thirumurugan K, Babu Munzanoor RR, Prasad GA, Sankar K. [7] reported a rare case of subconjunctival hemorrhage with maxillary tuberosity fracture after maxillary third molar extraction.

In conclusion on the basis of literature dates impaction with free pathology and asymptomatic cases can be treated conservatively. Treatment protocol for these rarely cases of impaction is surgical removal.

References


