

Rare Occurrence of Inverted Maxillary Third Molar Impaction: A Case Report

Rafi Ahmad Togoo¹

¹Associate Professor. King Khalid University, College of Dentistry, Abha, Kingdom of Saudi Arabia.

ABSTRACT

Inverted third molar impaction is a rare occurrence. Very few cases have been reported in the literature till date. We report an interesting and a rare case of inverted maxillary third molar impaction in a 33 year old male patient. This case report would add to the academic literature and case series of inverted maxillary tooth impactions.

Key Words: maxillary, impaction, third molar, inverted.

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Address for Correspondence: Dr. Rafi Ahmad Togoo. P O Box 3263. Abha 61471. Saudi Arabia.
Phone: +966-7-2418046. Email: rafitogoo@gmail.com

Introduction

Tooth impaction is a frequent phenomenon¹⁻². An impacted tooth is one that is erupted, partially erupted, or un-erupted and will not eventually assume a normal arch relationship with the other teeth and tissues³. Local factors include crowding, ectopic position of the tooth germ, supernumerary teeth, and soft tissue or bony lesions contribute to tooth impaction. Mandibular and maxillary third molars are the most frequently impacted teeth, with slight predilection to the former³. Most of the theories related to tooth impaction stress on the discrepancy of jaw size to the tooth.

We report an unusual impaction of maxillary third molar in an inverted direction. To date, very few cases of inverted tooth impactions have been reported in the literature.

Case Report

A 33 year male patient reported to the dental clinics of King Khalid University College of

Dentistry, Abha, KSA with a chief complaint of multiple decayed teeth. Detailed oral examination revealed multiple decayed teeth with a poor oral hygiene. Orthopantomogram confirmed the oral findings of multiple badly decayed teeth which were beyond restoration or rehabilitation. The OPG also showed an inverted maxillary right molar impaction. As shown in figure 1, the crown of the impacted molar was facing towards the



Fig 1: OPG - Inverted Molar

maxillary sinus floor. Treatment was planned in terms of extraction of decayed teeth along with

surgical removal of inverted maxillary third molar impaction under local anesthesia. The patient refused to undergo even simple extractions even after repeated counseling and recall appointments. As such, we present this case without complete treatment of extractions and rehabilitation with denture.

Discussion

Any permanent tooth in the dental arch can be impacted, but the teeth most frequently involved in a descending order are the mandibular and maxillary third molar, the maxillary canines, the mandibular and maxillary second premolar, and maxillary central incisors⁴. The etiology of impaction is multifactorial. Impacted teeth may be associated with periodontal disease, dental caries, odontogenic cyst and tumors, pain of unexplained origin, jaw fracture, and resorption of root of the adjacent tooth⁵.

The many kinds of impaction include vertical, horizontal, buccal, lingual and even inverted impaction. Though ectopic eruption of third molar teeth have been reported in the literature, the incidence of inverted impaction of third molar teeth are very few to date. Gold J and Demby N in 1973 reported the first case of inverted maxillary third molar tooth impaction⁶. Yuvaraj and G D Agarwal reported another case of inverted maxillary third molar impaction in 2011⁷. According to them, only two cases of inverted maxillary third molar impacted teeth (Gold & Demby in 1973 and Held in 1979) have been reported in the literature. Similar such impaction's reported by AlShamrani SM⁸ in 2001, Pai V *et al*⁹, in 2008 and Held H.W¹⁰ in 1979 have probably not been taken into consideration by Yuvaraj and G D Agarwal. To the best of our literature review, seven cases of inverted maxillary third molar impaction have been reported and this is the eight such case till date since 1973.

Since an inverted impaction of third molar would have the crown facing in an upward direction (toward the floor of maxillary sinus), a greater amount of bone guttering needs to be done. This would lead to a socket size significantly larger than a normal post-impaction socket. Another concern while removal of such teeth is the greater chances of tooth displacement into adjoining spaces such as infra-temporal space. The risk of bleeding, displacement of tooth into maxillary sinus and alveolar fracture while elevation of tooth are some of the other factors that should be considered during removal of inverted maxillary third molar impactions.

Conclusion

Impaction of maxillary molar in inverted direction is a rare occurrence and till date only 7 cases of inverted maxillary molars have been reported in the literature. This case report would therefore add to the present academic literature available.

In our view, the risks of removal of such asymptomatic teeth should be carefully weighed with the benefits of retaining.

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