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Case Report

The rarest cause of impaction of mandibular third molar – A case report

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ABSTRACT

Mandibular tooth impaction is a very common finding and is usually associated with so many local and systemic causes in which the pathway of tooth eruption is obstructed or misdirected. The local causes are either a local bony lesion or an abnormal position of the adjacent tooth. The case presented here is associated with a very rare cause of impaction, which is the hamartomatus growth of the first and second molars causing the obstruction and leading to the impaction of the adjacent third molar tooth.

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1. Introduction

Several causes of impaction of the mandibular third molar have been described in the literature. Most common causes of the impaction of mandibular third molar are the abnormal positioning of the tooth bud, lack of space in the dental arch, supernumerary tooth ankylosis of the deciduous or permanent tooth, nonresorbing bone due to local or systemic causes, etc.^{1,2} It is mainly due to bony obstruction in the pathway of eruption or the local adjacent tooth causes hindrance.³ The case reported here is associated with an exceptional cause of impaction of the mandibular third molar, in which an hamartomatus growth in the pathway of eruption of the mandibular third molar obstructed the path of eruption of the tooth leading to its impaction.

2. Case report

A young boy of 21 years reported to our Department of Oral and Maxillofacial Surgery as a routine outdoor patient with a complaint of some abnormal hard, intraoral, bony, palpable tooth-like structure in the left side lower jaw for the past few years. On an extraoral examination, the face was bilaterally symmetrical without any facial swelling or deformity (Fig. 1). The first and second mandibular molars were missing. Intraoral examination revealed a bulky tooth-like palpable stony structure was visible in the area of the left mandibular alveolar bone of missing molar teeth (Fig. 2). On palpation, the buccal and lingual cortical bones were slightly expanded. He was totally asymptomatic without any pain or paresthesia. The patient was sent for routine blood investigation and orthopantomogram.

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Fig. 1 – Extra oral photograph of patient.

Radiographical evaluation revealed that on the left side, the area of the first and second molar was occupied by a large mineralized structure lying over the occlusal surface of an impacted mandibular third molar. The third molar presented with a normal anatomic structure (Fig. 3).

3. Discussion

Impaction of mandibular third molar is commonly due to the lack of space in the dental arch in the area behind the second molar.⁴ Any pathological changes either in the bone or the adjacent tooth bud can cause obstruction in the pathway of the eruption of the third molar.⁵⁻⁸ The case reported here had a

Fig. 2 – Intra oral photograph.

Fig. 3 – OPG radiograph showing odontome and impacted tooth.

Fig. 4 – Odontome and tooth after removal.

very prominent obstruction in the pathway of the eruption of the third molar as an odontome which was formed due to the fusion of the mandibular first and the second molar. In this case, the impacted molar had complete root formation but the lack of sufficient space was the cause due to which the tooth was not able to erupt to its normal position. Patient was

Fig. 5 – Impacted tooth and odontome in anatomical position after removal.

planned for removal of the calcified mass and impacted molar (Figs. 4 and 5) and the specimen was sent for histopathological examination. The final report of the calcified mass showed it as an odontome.

Conflicts of interest

The authors have none to declare.

REFERENCES

1. Grimanis GA, Kyriakides AT, Spyropoulos ND. A survey on supernumerary molars. *Quintessence Int.* 1991;22:989–995.
2. Shafer WG, Hine MK, Levy BM. *A Textbook of Oral Pathology*. Philadelphia: Saunders; 1993.
3. Neville BW, Damm DD, Allen CM, Bouquot JE. *Oral and Maxillofacial Pathology*. Philadelphia: Saunders; 2002.
4. Richardson ME. The etiology and prediction of mandibular third molar impaction. *Angle Orthod.* 1977;47:165–172.
5. David M. *Atlas of Minor Oral Surgery*. 2nd ed. Oxon, U.K.: Taylor and Francis Ltd.; 1999:122–144.
6. Malik NA. *Text book of Oral and Maxillofacial Surgery*. 1st ed. Noida: Jaypee; 2003:114.
7. Antic S, Vukicevic AM, Milasinovic M, et al. Impact of the lower third molar presence and position on the fragility of mandibular angle and condyle: a three-dimensional finite element study. *J Cranio-Maxillofac Surg.* 2015;43(6): 870–878.
8. Tolstunov L. The quest for causes of inferior alveolar nerve injury after extraction of mandibular third molars. *J Oral Maxillofac Surg.* 2014;72(9):1644–1646.