Bilateral maxillary fourth and fifth molars: An unusual radiographic appearance

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ABSTRACT

Distomolars are supernumerary teeth present distal to third molars. Although many cases of bilateral fourth molars are reported, very few cases having bilateral fifth molars are described in literature. Here, we present a case having bilateral impacted maxillary fourth and fifth molars with the fifth molar on the left side having an unusually small appearance.

Key words: Distomolar, hyperdontia, supernumerary teeth

CASE REPORT

A 33-year-old female patient presented to our department with the chief complaint of bleeding gums around her fixed prosthesis for 3 months. Her medical history was not significant, and past dental history revealed extractions of the upper right and lower right and left first molars. She also had a history of multiple amalgam restorations as well as two fixed prostheses.

Her intraoral clinical examination revealed generalized bleeding of gums on provocation and pockets in all posterior teeth. The maxillary left lateral incisor was also missing, but the patient had no history of its removal. The panoramic radiograph [Figure 1] revealed missing teeth, two fixed prostheses, and five radiopaque restorations. Maxillary left third molar was impacted. There were fourth and fifth molars in the maxilla and all were impacted. The size of all four distomolars was smaller as compared to third molars, and all had molariform shape except for the fifth molar of left side which had an unusual rudimentary shape and was impacted in soft tissue. There was generalized mild periodontal bone loss. The stylohyoid ligaments were ossified bilaterally.

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The left maxillary intraoral periapical radiograph [Figure 2] revealed impacted third, fourth, and fifth molars. Here, the fourth and fifth molars were smaller in size, but the fifth molar had an unusually smaller and rudimentary appearance. The right maxillary intraoral radiograph [Figure 3] revealed impacted fourth and fifth molars which were smaller in size.

The patient was referred for oral prophylaxis as well as required periodontal therapy. She was explained about the complications of impacted ST. However, as she was asymptomatic and not willing for the treatment of impacted teeth, periodic follow-up was advised.

**DISCUSSION**

ST frequently coexist with other dental anomalies which confirm the importance of hereditary as well as environmental factors in their development.

They are more frequent in permanent dentition as compared to deciduous dentition and more common in maxilla than in mandible. Our case also had associated partial anodontia of maxillary left lateral incisor. All the four distomolars were in maxillary permanent dentition.

Several theories such as Atavism theory, Dichotomy theory, and dental lamina hyperactivity theory are suggested to explain the development of ST. They are more common in males as compared to females. The higher prevalence in males could be due to the association of ST with the autosomal recessive gene, which has greater penetration in males.

ST may have a normal eruption, be impacted vertically, inverted or transverse may have an ectopic position or abnormal path of eruption. They are generally asymptomatic and diagnosed clinically or radiographically. However, they can cause complications such as crowding, delayed or noneruption or displacement of adjacent teeth, and development of odontogenic cysts such as dentigerous cyst and sometimes resorption of neighboring teeth. All of the ST in our case were impacted and slightly tilted vertically. The maxillary left third molar was also impacted and the reason of its impaction can be attributed to impacted ST.

They can be classified according to their position in the dental arch as mesiodens, paramolars, and distomolars. Depending upon the shape, they can be further classified as conical, tuberculate, molariform, and supplemental. According to Primosch, they are classified as supplementary or rudimentary; supplementary or eumorphic having normal shape and size whereas rudimentary or dysmorphic having abnormal shape and size. Exce...
Mesiodens are the most common ST followed by maxillary distomolars, maxillary lateral incisors, mandibular fourth molars, and mandibular central incisors.\(^7\)

Most cases present with one supernumerary tooth. The presence of two ST is the second most common occurrence. Multiple ST are rare and represent <1% of cases and various studies have reported multiple ST not associated with any syndrome or systemic condition. Our case had four ST and all were impacted along with the left third molar.

The ST are more common in anterior region (89.6%), followed by canine and premolar (9%) and molar regions (0.5%). In the horizontal plane, most of them are seen palatally or lingually (82.5%) followed by mixed position (13.9%) and vestibular position (1%). The prevalence of supernumerary molars is found to be 0.33%.\(^8\)

Various two dimensional imaging modalities such as intraoral periapical, occlusal radiographs and panoramic radiographs provide basic information regarding the shape, size, and location of ST. The three dimensional imaging modalities such as computed tomography (CT) scans and cone beam CT can provide all the details of the ST for better management.\(^9\)

There are different opinions regarding management of ST. They can be extracted or repositioned in the dental arch. Another opinion is to keep the tooth under observation as long as it does not create any complication or interferes with esthetics or function.\(^4\) As our patient was completely asymptomatic, her ST were impacted and did not interfere with function, extraction was not done and the patient was advised periodic follow-up.

Multiple ST can be a feature of Gardner syndrome, cleidocranial dysplasia, Fabry–Anderson syndrome, and Ehlers–Danlos syndrome.\(^8\) Our case was not associated with any syndrome.

CONCLUSION

ST are usually asymptomatic and often diagnosed radiographically, and panoramic radiographs are the best radiographs for their diagnosis. They may have an uncommon appearance. The case presented by us is one of the rare cases having bilateral fourth and fifth molars with rudimentary appearance of maxillary left fifth molar.

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Conflicts of interest
There are no conflicts of interest.

REFERENCES

1. Garvey MT, Barry Hj, Blake M. Supernumerary teeth – An overview of classification, diagnosis and management. J Can Dent Assoc 1999;65:612-6.
2. Mahabob MN, Anbuselvan GJ, Kumar BS, Raja S, Kothari S. Prevalence rate of supernumerary teeth among non-syndromic South Indian population: An analysis. J Pharm Bioallied Sci 2012;4 Suppl 2:S373-5.
3. Ata-Ali F, Ata-Ali J, Peñarrocha-Oltra D, Peñarrocha-Diago M. Prevalence, etiology, diagnosis, treatment and complications of supernumerary teeth. J Clin Exp Dent 2014;6:e414-8.
4. Amaral D, Muthu MS. Supernumerary teeth: Review of literature and decision support system. Indian J Dent Res 2013;24:117-22.
5. Ozan F, Kara I, Ay S. Impacted mandibular permanent incisors associated with a supernumerary tooth: A case report. Eur J Dent 2009;3:324-8.
6. Primosch RE. Anterior supernumerary teeth – Assessment and surgical intervention in children. Pediatr Dent 1981;3:204-15.
7. Rajab LD, Hamdan MA. Supernumerary teeth: Review of the literature and a survey of 152 cases. Int J Paediatr Dent 2002;12:244-54.
8. Cassetta M, Altieri F, Giannanti M, Di-Giorgio R, Calasso S. Morphological and topographical characteristics of posterior supernumerary molar teeth: An epidemiological study on 25,186 subjects. Med Oral Patol Oral Cir Bucal 2014;19:e545-9.
9. Gurgel CV, Costa AL, Kobayashi TY, Rios D, Silva SM, Machado MA, et al. Cone beam computed tomography for diagnosis and treatment planning of supernumerary teeth. Gen Dent 2012;60:e131-5.