

CLINICAL IMAGES



Combined tooth crown - A case of dental quackery

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Abstract

The shape and morphology of deciduous teeth follow their permanent successors unlike the second deciduous molars which resemble the first permanent molar rather than the second premolar. In some cases, we find deciduous teeth retained in the oral cavity beyond the age of its exfoliation along with its permanent successor in adults. The etiology of over retained deciduous tooth is crown misalignment of the successional permanent tooth. If the arch has good alignment but the prognosis of the primary tooth is poor due to caries, root resorption, or inadequate esthetics, extraction and prosthetic replacement may be necessary. This article presents an unusual case of simultaneous presence of primary maxillary second molar and malaligned second premolar rehabilitated together with crown which was diagnosed with cone beam computed tomography.

Keywords: Crown, primary maxillary second molar, second premolar**Introduction**

The shape and morphology of deciduous teeth follow their permanent successors unlike the second deciduous molars which resemble the first permanent molar rather than the second premolar.^[1] In some cases, we find deciduous teeth retained in the oral cavity beyond the age of its exfoliation along with its permanent successor in adults. The etiology of over-retained primary tooth is crown misalignment of the successional permanent tooth.^[2] If the arch has good alignment but the prognosis of the primary tooth is poor due to caries, root resorption, or inadequate esthetics, extraction and prosthetic replacement may be necessary.^[3] This article presents an unusual case of simultaneous presence of primary maxillary second molar and malaligned second premolar rehabilitated together with crown which was diagnosed with cone beam computed tomography (CBCT).

Brief History

A 19-year-old female patient reported with dull pain in the upper left back tooth region of jaw. The patient gave history of undergoing dental treatment of prosthetic crown on the same tooth for space closure. Recently, the patient was biting on nuts during which she noticed cracking inside the crown and dull pain. The patient's medical history was unremarkable.

Case Discussion

Clinical examination revealed tenderness to percussion of prosthetic crown [Figure 1]. Pre-operative radiograph of the tooth revealed short roots with indistinct outline without any periapical changes [Figure 2]. The natural crown was not visible on the radiograph due to prosthetic crown which was sectioned and removed. After removal of the crown, the tooth was seen with deep cavity extending to floor of pulp chamber. An interesting finding was that the second premolar was missing and the tooth had the shape of permanent maxillary first molar [Figure 3]. The buccal side of the tooth had a vertical fracture and was tender. The distal side of maxillary first premolar might have been sliced during past dental treatment to create space for the prosthetic crown. CBCT (Carestream, Rochester, New York, USA) was taken to check the anatomy of the tooth and root. Axial section of cervical third of crown revealed the presence of two teeth, primary maxillary second molar and lingually placed second premolar which are closely placed [Figure 4]. Axial section of coronal third of root revealed resorbed roots of primary maxillary second molar [Figure 5]. This led to the interpretation that when the patient visited dentist earlier for space closure, primary maxillary second molar and lingually placed second premolar were present in the oral cavity. To get an immediate esthetic outcome, the two teeth were bonded together with tooth-colored restoration, and prosthetic crown was placed over them without explaining correct



Figure 1: Pre-operative photograph

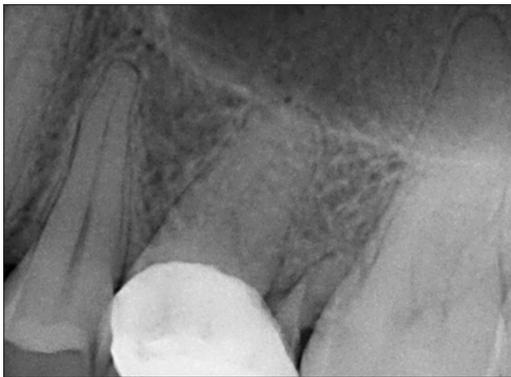


Figure 2: Pre-operative radiograph

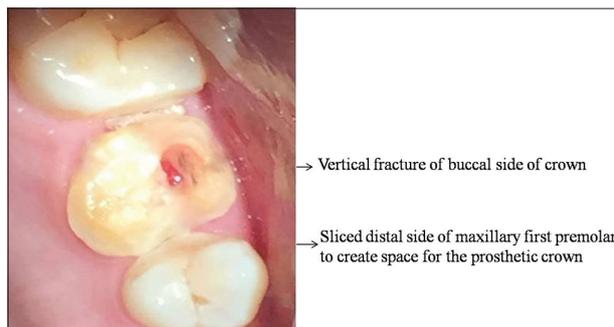


Figure 3: Second premolar missing and the tooth resembling shape of permanent maxillary first molar

treatment to the patient. The patient was explained about the quackery treatment which she had undergone earlier and advised treatment of extraction of deciduous teeth and orthodontic correction of lingually placed premolar.

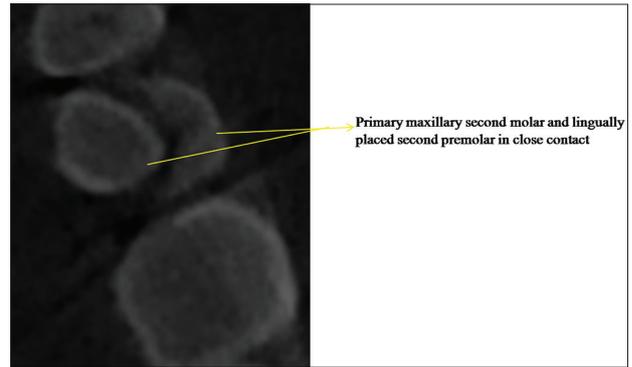


Figure 4: Axial section of cervical third of crown revealing closely placed primary maxillary second molar and second premolar

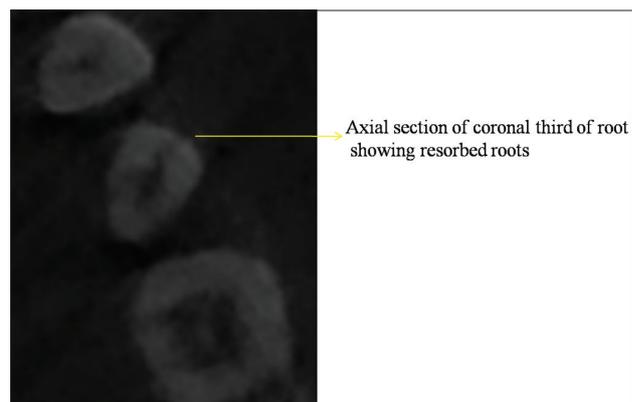


Figure 5: Axial section of coronal third of root revealed resorbed roots of primary maxillary second molar

Conclusion

1. Usage of diagnostic aids like CBCT helps in understanding the malpositions and anatomy of crown and root.
2. Over-retention of primary teeth causes dental abnormalities. Careful clinical examination and appropriate treatment of extraction in time can prevent this condition.
3. As clinicians, we can ensure our ability to diagnose and treatment plan for the patient in such a way that we honestly assess the difficulty of the case and then determine whether to treat or refer.

References

1. Kondo S, Wakatsuki E, Shun TH. Comparison of the crown dimensions between the maxillary second deciduous molar and the first permanent molar. *Okajimas Folia Anat* 1996;73:179-84.
2. Marimo C. Delayed exfoliation of primary teeth due to second pathoses: Case series study. *Med J Zambia* 2009;36:92-4.
3. Robinson S, Chan MF. New teeth from old: Treatment options for retained primary teeth. *Br Dent J* 2009;207:315-20.

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