

Mesiodens- A Report of Two Cases

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ABSTRACT

Teeth more than normal in number are termed as supernumerary. The presence of multiple supernumerary teeth is termed as 'mesiodentes'. Supernumerary tooth usually results in oral problems such as malocclusion, food impaction, poor aesthetics, and cyst formation. This paper presents a case report on successful management of mesiodens and mesiodentes.

Keywords: Mesiodens; mesiodentes; supernumerary teeth.

INTRODUCTION

Teeth more than normal in number are termed as supernumerary. Supernumerary teeth are classified on their morphology and location in the dental arches.¹ According to the shape and size, it is subdivided into eumorphic and dysmorphic. Tooth present in the midline of the maxilla between central incisors is termed as mesiodens.² Mesiodens may be single, multiple, unilateral or bilateral. The presence of multiple supernumerary teeth is termed as 'mesiodentes'. There have been multiple theories regarding the development of a supernumerary tooth i.e., atavism, dichotomy of the tooth germ, or local hyperactivity of the dental lamina.³

CASE REPORT

Case 1

A 11 year female patient reported to department of Pediatric and Preventive dentistry with the chief complain of extra tooth in upper front region of the jaw. History of present illness revealed problem

in occlusion while closing mouth. Medical and family histories were non-contributory. Intra oral examination revealed mixed dentition with presence of supernumerary tooth in palatal aspect between maxillary central incisors with slight proclination of maxillary left central incisor. Occlusal radiograph was taken to rule out the possibility of multiple supernumerary teeth and extension of the root of supernumerary teeth. Occlusal radiograph and clinical picture showed presence of only one supernumerary tooth i.e., mesiodens (Figure 1 & 2). In this case, patient's age was 11 years and adjacent permanent central incisors were totally erupted, so the treatment plan was to extract mesiodens (Figure 3) under local anaesthesia followed by correction of proclined incisor. Both informed and written consent were taken from the parent's prior

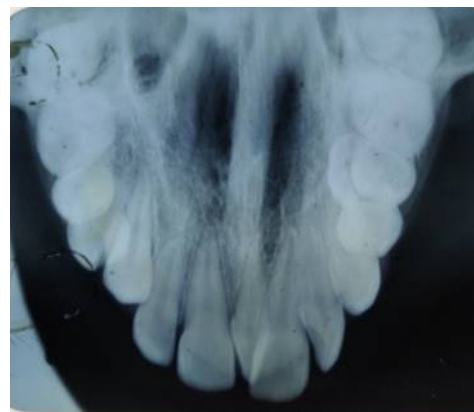
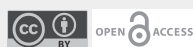


Figure 1: Occlusal Radiograph showing Mesiodens.

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Figure 2: Clinical picture showing mesiodens.



Figure 3: Extracted Mesiodens.

to surgical procedure. Intra-alveolar extraction (forceps technique) of erupted supernumerary teeth was done. Post extraction instructions were advised and healing was satisfactory.

Case 2

A-12-years old healthy female patient reported to department of Pediatric and Preventive Dentistry with a chief complain of extra tooth in upper front region of the jaw. Clinical examination revealed presence of supernumerary teeth in palatal aspect of maxillary central incisors and proclined upper central incisors (Figure 4). Occlusal radiograph was taken to rule out the possibility of any other impacted supernumerary teeth. Occlusal radiograph revealed presence of two supernumerary teeth (mesiodentes) without any other impacted teeth (Figure 5). Extractions of mesiodentes were advised under local anesthesia. Both informed and written consent were taken from the parents prior to surgical procedure. Intra-alveolar extraction (forceps technique) of erupted supernumerary teeth was done (Figure 6). Post extraction instructions were advised and healing was satisfactory.



Figure 4: Clinical picture showing Mesiodentes.

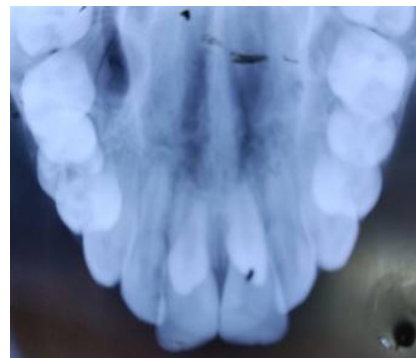


Figure 5: Occlusal Radiograph showing Mesiodentes.

DISCUSSION

Supernumerary teeth are classified on the basis of their morphology and their position in the dental arch. Based on the morphology, four classifications have been given for supernumerary teeth i.e., conical, tuberculate, supplemental and molariform.



Figure 6: Extracted Mesodentes.



Conical type of supernumerary teeth is most commonly found in permanent dentition. These are small peg-shaped conical tooth. Sometime they are found high and inverted into the palate. These conical supernumerary teeth can lead to rotation or displacement of the permanent incisor, but it rarely delays eruption. The tuberculate can have one or more cusp or tubercle. They are commonly seen on the palatal aspect of central incisor. The supplemental supernumerary is the copy of teeth in the normal series and is found at the end of a tooth series. The crown of molariform type of mesiodens's crown resembles closely to a premolar⁴. Based on the position or form classification has been proposed as mesiodens, paramolars and distomolars. Mesiodens are present in the incisor area, while the paramolars are present beside molars and the distomolars are present distal to last molar.⁴ Mesiodens is considered as an extra tooth along with normal teeth with prevalence 0.15 to 1.9%. Single tooth mesiodens occurred in 78.1% of the cases and in two in 21.9% of the cases. Most of the mesiodentes (55.2%) are found to be in vertical position, and it is followed by inverted position (37.6%) and with the list at horizontal position (7%). Most of the mesiodens remain unerupted, and if they are erupting, it will be an ectopic eruption.^{5,6}

This case report consists of erupted mesiodens and mesiodentes. The supernumerary teeth can lead to problems like disturbance in eruption and alignment of normal dentition. In this case series,

the patient presented in both the cases had difficulty in proper closing of mouth due to hindrance of mesiodens which relates with other supporting literatures creating problem in the alignment of normal dentition. Conical form of mesiodens is more common⁷ which relates with present study as in both the cases the shape of mesiodens was conical with an appreciable root length. Mesiodens can be seen as an isolated finding or can be associated with syndrome, specifically with cleft lip and palate, gardener's syndrome and cleidocranial dysostosis.² In both the cases no such correlation can be found out. Other problems which are encountered with supernumerary tooth/ teeth are: Failure of eruption displacement and Crowding. In case of tuberculate mesiodens tooth fails to erupt.

SUMMARY

Early detection and management of all supernumerary teeth is an important part of the preventive dentistry. There is no individual treatment available. The treatment is based on the clinical and radiographical findings. Treatment should be focused on patient compliance and treatment needs. In this case no extensive surgical procedure was needed which helped the patient to cope up the treatment without any extensive procedure.

Conflict of Interest: None

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