

Management of A Palatally Placed Mesiodens: A Case Report

¹Dr. M. Bhuvaneshwari, B.D.S., Private Practitioner, Smile n Shine Dental and Orthodontic Clinic, Chennai – 600102

Corresponding Author: Dr. M. Bhuvaneshwari, B.D.S., Private Practitioner, Smile n Shine Dental and Orthodontic Clinic, Chennai – 600102

Citation of this Article: Dr. M. Bhuvaneshwari, “Management of A Palatally Placed Mesiodens: A Case Report”, IJDSIR- May - 2021, Vol. – 4, Issue - 3, P. No. 579 – 581.

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Type of Publication: Case Report

Conflicts of Interest: Nil

Abstract

A clinical case of a six years old patient with a chief complaint of teeth positioned on the palate was presented. After the clinical, radiographic, and tomographic diagnosis, the presence of supernumerary teeth (mesiodens) was diagnosed. The treatment of choice consisted was the surgical removal of the supernumerary teeth.

Keywords: Mesiodens, supernumerary teeth, extraction, maxilla, surgical removal.

Introduction

The supernumerary teeth are additional teeth when associated with typical dentition. These can transpire in both the maxilla and mandible. Mesiodens is a specific supernumerary tooth seen in the midline of the maxilla in between the two central incisors.

Mesiodens can be singular, multiple, unilateral, or bilateral. It has a sexual predisposition towards males than girls. The prevalence rate of mesiodens is 0.15 p.c to 2 p.c. OPG, occlusal radiographs are commonly used radiographic techniques in diagnosing mesiodens.

The mesiodens appear to be carried as a dominant autosomal trait in various generations. One of the predisposing determinants to this hyper development is the movement of the facial process during the development of the face and its structures, leading to a rupture of the dental lamina. Therefore, due to the excessive proliferation of the ruptured dental lamina, there is a high probability of the formation of a supernumerary tooth. A mesiodens can manifest varying morphologies like tapering, tuberculate, or molariform. In some people, mesiodens erupt normally while some get impacted or erupt in an ectopic position. It is generally conical, short-rooted and, impacted in many cases.

The complexities emerging from the presence of mesiodens are associated with the delay in tooth eruption, crowding, impaction of permanent teeth, abnormal root formation, midline diastema, infections, rotation of adjacent teeth, or even eruption in the nasal floor.

For earlier diagnosis, it is essential to conduct a clinical investigation and radiographic evaluation in the mixed dentition phase of an individual, to anticipate functional and esthetic predicaments to the adjoining teeth.

Intraosseously retained asymptomatic supernumerary teeth may easily get overlooked by clinical examination. Hence, this study is intended to manifest the summary of cases in kids with mesiodens.

Case presentation

A 6-year-old boy visited Smile 'n' Shine Dental Clinic, Anna Nagar, Chennai with the chief complaint of palatally erupting central incisor on the left side. On clinical examination, the edentulous area of 11, 21 was found with a history of exfoliation of both deciduous central incisors before three months. The parents of the patient were under the impression that a permanent central incisor of 21 was erupting palatally. There was no evident familial history of supernumerary teeth. The parents stated that the boy had some trouble during speech and mastication. Intraoral examination revealed the presence of a supernumerary teeth in the palatal rugae region with normal oral mucosa.



Figure 1



Figure 2

Surgical Management

To aid in the eruption and ideal alignment of the adjacent incisors, it is generally suggested to extract the mesiodens during the early mixed dentition phase, which may lessen the requirement for orthodontic treatments in the future. It might even require up to six months for an unerupted tooth to erupt after removal of the mesiodens.

Treatment was prepared for the surgical excision of the mesiodens. Radiographic analysis was done after the excision to confirm the proper extraction of the mesiodens. Wound healing was uneventful and post-operative complications were absent.



Figure 3

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