Case report

A rare presentation of Bilateral mesiodens in maxilla

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Abstract

Supernumerary teeth are a relatively frequent disorder of odontogenesis characterized by an excess number of teeth. Mesiodens is the most common type of supernumerary teeth found in the premaxilla between the two central incisors. They can be supplemental (resembling natural teeth), conical, tuberculate, or molariform. We present a rare case of 41 year old male patient who presented with bilateral mesiodens.

Key words: Mesiodens, supernumerary teeth, maxillary central incisor.

Introduction

Supernumerary teeth are a developmental disturbance occurring during odontogenesis resulting in the formation of teeth in excess of the normal number. They occur in both the deciduous and permanent dentition. The first report of a supernumerary tooth appeared between AD 23 and 79.¹

The term mesiodens refers to a supernumerary tooth present in the premaxilla between the two central incisors. Mesiodens are more common in permanent than in primary dentition. The incidence of occurrence of mesiodens is 0- 1.9% for deciduous teeth and 0.15-3.8% for permanent teeth with male to female occurrence ratio of $2:1.^2$

Complications of mesiodens are median diastema, cystic degeneration and nasal eruption along with bodily displacement, rotation, resorbtion or delayed eruption of permanent incisors.³

Mesiodens can present morphologically as a cone shaped tooth (most common), tuberculate or molariform.4 We report a rare case of bilateral mesiodens present between the maxillary right and left central incisors in a 41 year old male patient. Case Report:

A 41 year old male patient reported with a complaint of sensitivity in the upper left back tooth region for the past one week. Intra oral examination revealed the presence of a decayed tooth involving the pulp in relation to upper left first molar and conical shaped bilateral mesiodens between the right and left permanent maxillary central incisors (Fig-1). The canine, premolars and molars of upper arch were in normal alignment. A full compliment of teeth was seen in the lower arch. The mesiodens were conical in shape. The patient had no problem



Figure-1 Photograph showing bilateral conical shaped mesiodens with the occlusion.

The patient was healthy with an unremarkable medical history (Fig-2).

Intraoral periapical radiograph revealed two conical shaped teeth which were smaller in size when compared with the adjacent normal dentition, present between the maxillary permanent central incisors,



Figure- 2: Extra oral view of the patient

with well formed roots (Fig-3). Since the bilateral mesiodens were asymptomatic and did not cause any problem to the patient, so it

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was decided not to extract the tooth and keep the patient on regular follow up.



Figure- 3: Intraoral radiograph showing conical shaped bilateral mesiodens with well formed roots

Discussion

The etiology for supernumerary teeth is not completely understood. Various theories exist for the different types of supernumerary teeth. One theory suggests that the supernumerary tooth is created as a result of a dichotomy of the tooth bud. Another theory, well supported in the literature, is the hyperactivity theory, which suggests that supernumeraries are formed as a result of local, independent, conditioned hyperactivity of the dental lamina.5,6

Heredity may also play a role in the occurrence of this anomaly, as supernumeraries are common in the twins, siblings, and sequential generation of single family than in the general population.7 However, the anomaly does not follow a simple mendelian pattern.

Mesiodens can be classified on the basis of their

occurrence in the permanent dentition (rudimentary mesiodens) and according to their morphology (conical, tuberculate, or molariform)⁸

In the present case, the bilateral mesiodens present between the permanent maxillary central incisors were conical in shape. There was no familial tendency for supernumerary teeth. The present case is rare due to the presence of bilateral mesiodens between the permanent maxillary central incisors without the presence of any other supernumerary teeth.

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