



**MESIODENS AN INCIDENTAL ORAL AND MAXILLOFACIAL CONGENITAL
ANOMALY FINDING IN AN ADULT MALE DURING PANDEMIC - AN EYE
OPENER.**

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ABSTRACT

Mesiodens, the most common supernumerary teeth that occurs between the maxillary central incisors. They can be positioned palatally or labially. Embryological and genetic factors have been associated. This article describes a case report of a palatally positioned mesiodens. It was an incidental finding during routine dental examination.

KEYWORDS: Mesiodens, supernumerary teeth



MESIODENS UN HALLAZGO INCIDENTAL DE ANOMALÍA CONGÉNITA ORAL Y MAXILOFACIAL EN UN VARÓN ADULTO DURANTE LA PANDEMIA - UNA REVELACIÓN.

RESUMEN

Los mesiodens, son los dientes supernumerarios más comunes que se encuentran entre los incisivos centrales maxilares. Pueden posicionarse en sentido palatino o labial. Se han asociado factores embriológicos y genéticos. Este artículo describe un caso de un mesiodens posicionado palatalmente. Fue un hallazgo incidental durante un examen dental rutinario.

PALABRAS CLAVE: Mesiodens, dientes supernumerarios

INTRODUCTION

Mesiodens is defined as a supernumerary tooth occurring in the midline between the two central incisors (1). Mesiodens can occur as single, multiple(mesiodentes), unilaterally or bilaterally (2). The prevalence is about 0.15% to 1.9% of the population. Genetic factors and proliferation of the dental lamina have been

suggested as a cause for the development of a mesiodens (3). Early diagnosis is

necessary for optimal treatment. This article describes a case report of a palatally positioned mesiodens

CASE REPORT

CLINICAL EXAMINATION

A 24-year-old male patient reported to our clinic with a chief complaint of crowding of the upper teeth. Clinical examination revealed a supernumerary tooth present

between the maxillary central incisors (Figure 1). Upper midline shift to the right was observed with a Class II molar relation.



Figure 1. Clinical examination revealed a supernumerary tooth present between the maxillary central incisors

DIAGNOSIS

Radiographs were taken to assess the position of the tooth and the suitable

surgical approach. Intra Oral Periapical Radiograph (IOPA) revealed a palatally positioned mesiodens (Figure 2). The root

was completely formed, distally tipped and positioned between the two roots of the maxillary central incisors.



Figure 2. Intra Oral Periapical Radiograph (IOPA) revealed a palatally positioned mesiodens

DISCUSSION

Supernumerary teeth are developmental dental anomalies characterized by an increase in the number of teeth. Mesiodens accounts for 80% of all the supernumerary

teeth is the most common (4). Mesiodens is classified based on its shape into conical, tuberculate and supplemental. Conical is ped shaped and the its root formation is equivalent or ahead that of the central incisor. Tuberculate is multicusped and its



root formation is delayed when compared to the adjacent teeth. Supplemental mesiodens resembles the normal tooth and is rarely impacted. Supplemental mesiodens is commonly seen in primary dentition while tuberculate occurs frequently in the permanent dentition (5,6,7).

The etiology of mesiodens can either be embryological or associated with syndromes. Hyperactivity of the embryonic epithelial cells can result in a separation of tooth bud from the dental lamina leading to the formation of a new tooth bud by the overactivity of Hertwig sheath of cell rests of Malassez. Trauma or genetic factors can split the tooth bud leading to the formation of an extra teeth. Mesiodens can also be associated with syndromes such as Crouzon disease, Fabry's syndrome, Apert syndrome and Cleidocranial dysplasia (8,9,10).

Mesiodens can be diagnosed by the use of xrays such as Intra Oral Periapical Radiograph (IOPA), Orthopantomogram (OPG) and occlusal radiograph. The position can be determined by the use of parallax method. Cone Beam Computed Tomography (CBCT) can also be used (11). Early intervention and surgical removal are the best treatment option as this prevents delayed eruption of the permanent teeth. However, in this case report early intervention wasn't done which led to the crowding of the upper teeth. Impacted mesiodens can cause crowding, space loss and midline shift all of which requires orthodontic correction (12,13).

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