

# A supernumerary tooth: A case report of a mesiodens

Majed Mansour Alsuwaida

## ABSTRACT

**Introduction:** Mesiodens is an erupted supernumerary tooth located between the maxillary central incisors.

**Case Report:** This report presents a case of a fully erupted mesiodens in a 10-year-old girl causing incisor displacement. The patient presented for a dental checkup with dental caries and a mesiodens visible on clinical exam. Radiographs confirmed eruption of the mesiodens. Extraction was planned to prevent further crowding. Erupted mesiodens can still cause complications like malocclusion and cysts. Extraction is the treatment of choice.

**Conclusion:** Early diagnosis allowed for removal before additional orthodontic problems. Monitoring and restorative care are needed after extraction. This highlights the importance of prompt mesiodens diagnosis and extraction even when fully erupted.

**Keywords:** Dental abnormalities, Extra tooth, Mesiodens, Supernumerary teeth

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## INTRODUCTION

Mesiodens is a supernumerary tooth in the maxillary central incisor region [1]. Although frequently impacted, some cases may fully erupt into the oral cavity [2]. Erupted mesiodens can still lead to complications like crowding, rotation, and cyst formation [3]. Extraction is generally the preferred treatment even for erupted mesiodens [4]. This report describes the diagnosis and management of a fully erupted mesiodens in a pediatric dental patient.

## CASE REPORT

A 10-year-old girl was presented to the dental clinic for a routine checkup accompanied by her father. Clinical examination revealed multiple carious lesions on the anterior and posterior teeth with otherwise normal soft tissues. Multiple restorations were noted on the maxillary and mandibular molars. Some permanent teeth were unerupted. Notably, a supernumerary tooth (mesiodens) was observed fully erupted between the upper central incisors (Figure 1). Radiographic imaging confirmed the presence of the fully erupted mesiodens positioned between the central incisors (Figure 2).



Figure 1: Clinical image showing a fully erupted supernumerary tooth (mesiodens).

Treatment options were discussed with the patient's father. The proposed treatment plan consisted of extraction of the erupted mesiodens to prevent further crowding and displacement of the permanent incisors. The patient was scheduled for extraction of the mesiodens under local anesthesia (Figure 3). Following extraction, regular monitoring will be necessary to ensure proper alignment of the permanent incisors as they continue to erupt. The multiple carious lesions will also need to be restored to prevent further demineralization and maintain oral health.



Figure 2: Periapical radiograph showing a fully erupted mesiodens positioned between the central incisors.



Figure 3: Post-extraction image of the mesiodens.

## DISCUSSION

Despite being fully erupted, this mesiodens was causing displacement of adjacent incisors likely due to its abnormal position. One study found that 39% of erupted mesiodens cases showed incisor displacement [5]. Early extraction was planned to prevent worsening displacement from the erupting permanent teeth. Monitoring eruption after extraction will also be important. Though more technically simple to extract, erupted mesiodens can still benefit from early removal to avoid future malocclusion.

## CONCLUSION

This case demonstrates a fully erupted mesiodens causing incisor displacement in a 10-year-old girl. Early diagnosis and extraction were performed to prevent complications and need for complex orthodontics later. Careful monitoring and restoration of decayed teeth are also needed following removal of the mesiodens. Prompt diagnosis and extraction are recommended even for erupted mesiodens to limit orthodontic problems. Moreover, publishing a case report on a common condition like mesiodens can still be valuable for several reasons. Firstly, it serves an essential educational purpose by providing a well-documented resource for dental students and professionals, ensuring a comprehensive understanding of even the most prevalent conditions in dentistry. Secondly, within common conditions, there can be variations in treatment approaches or unique cases that warrant sharing and discussion. Thirdly, your case report allows you to share valuable clinical insights, experiences, and any innovative approaches you may have employed in managing these cases. Additionally, common conditions often serve as the foundation for further research, and your report can become a reference point for future studies. Ultimately, each publication, even on common conditions, contributes significantly to the body of dental literature, allowing you to establish credibility and expertise in the field, aligning with your passion for research and writing in dentistry.

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**Author Contributions**

Majed Mansour Alsuwaida – Conception of the work, Design of the work, Acquisition of data, Analysis of data, Interpretation of data, Drafting the work, Revising the work critically for important intellectual content, Final approval of the version to be published, Agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved

**Guarantor of Submission**

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**Conflict of Interest**

Author declares no conflict of interest.

**Data Availability**

All relevant data are within the paper and its Supporting Information files.

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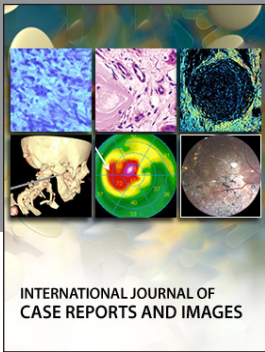
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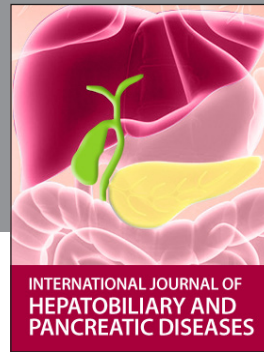
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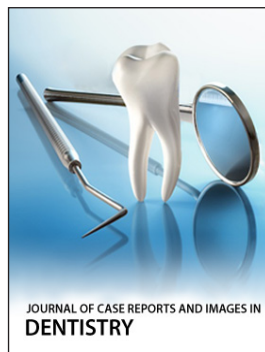
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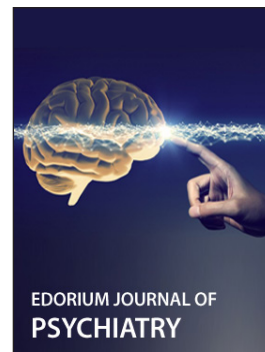
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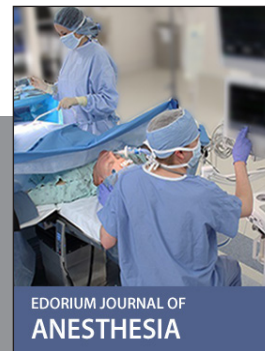
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