

# Early Diagnosis and Conservative Treatment of a Large Odontoma in an 8-Year-Old Male Patient

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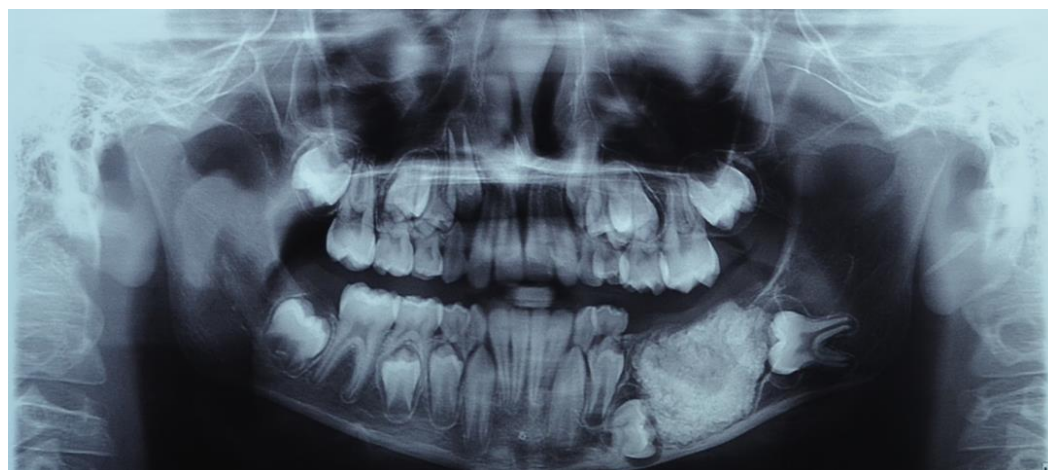
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**Figure 1:** Panoramic radiograph showing the complex odontoma in the left mandibular body.

Odontomas represent the most common odontogenic tumors, frequently diagnosed during the second decade of life. Their slow growth and asymptomatic behavior often allow them to remain intraosseous for extended periods until clinical signs or routine radiographs reveal their presence. In this case report, we describe a large complex odontoma in the mandible, emphasizing the importance of early diagnosis and conservative management [1]. Here, an 8-year-old male patient presented with delayed eruption of the permanent mandibular right first molar (tooth 36). A panoramic radiograph was performed to investigate the cause of the delay. The radiograph revealed a radiopaque mass in the left mandibular body, extending from the region of the angle of the mandible. The lesion exhibited well-defined borders and irregular calcifications consistent with a complex odontoma (Figure 1). Given the clinical and radiographic findings, a diagnosis of complex odontoma was established. The treatment plan involved conservative surgical enucleation of the lesion under general anesthesia. Additionally, an Erich bar was installed to stabilize the mandible during the healing process.

A maxillo-mandibular block was maintained for 30 days to prevent excessive forces on the surgical site. The patient was closely monitored for any signs of pathological fracture, which could occur due to the weakened bone structure caused by the tumor. Over a six-year follow-up period, the patient remained asymptomatic, and there was no evidence of recurrence. The conservative approach proved successful, emphasizing the importance of early detection and appropriate management of odontomas. This case highlights the significance of radiographic investigation in cases of unerupted teeth, delayed exfoliation of deciduous teeth, or ectopic positioning of permanent teeth. Conservative treatment is recommended, as recurrence of odontomas is rare [2]. Dentists should be aware of the clinical and epidemiological profile of these lesions to facilitate timely diagnosis and optimal patient outcomes.

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## References

1. Gervasoni C, Tronchet A, Spotti S, Valsecchi S, Palazzolo V, Riccio S, D Aiuto A, Azzi L, Di Francesco A. Odontomas: review of the literature and case reports. *J Biol Regul Homeost Agents*. 2017 Apr-Jun;31(2 Suppl 1):119-125. PMID: 28691462.
2. Ashkenazi M, Greenberg BP, Chodik G, Rakocz M. Postoperative prognosis of unerupted teeth after removal of supernumerary teeth or odontomas. *Am J Orthod Dentofacial Orthop*. 2007 May;131(5):614-9. doi: 10.1016/j.ajodo.2005.09.032. PMID: 17482080.