

44. MOLAR INCISOR HYPOMINERALIZATION ASSOCIATED WITH SUPERNUMERARY TEETH



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Introduction. Molar incisor hypomineralization (MIH) is a qualitative enamel defect that usually occurs on one or more permanent first molars with or without involvement of the permanent incisors, with reported rates ranging from 2.5% to 40.2%. Although the exact cause of MIH is still unknown, some authors believe it to be complex. An odontostomatologic anomaly known as supernumerary teeth (ST) is defined as having more teeth than is typical for a given dental formula. The prevalence of ST has been reported at 0.2–3% in primary and permanent dentition. There are many theories about the development of ST etiology, even if they are not fully explained, such as dental lamina hyperactivity or tooth bud dichotomy. The molecular mechanism during the early phase of tooth development may be a reason for a single ST. Several STs occur more frequently in relatives of affected patients than in the general population.

Case presentation. Is a clinical case of association between MIH and two permanent upper central incisors.

Discussions. This study reports a clinical case of association between MIH and two supernumerary central incisors in a 7-year-old girl who presented for dental care at the Department of Pediatric Dentistry. The intra-oral examination revealed the characteristic MIH clinical picture of all permanent first molars and the presence of temporary upper incisors without mobility. The maxillary lateral incisors were completely erupted. To clarify the diagnosis, CBCT was performed, which revealed the presence of two impacted maxillary central incisors, placed posteriorly to the primary central incisors. In addition, CBCT also confirmed the presence of two supernumerary teeth, also placed behind the impacted central incisors. Both MIH and ST are major challenges in pediatric dental practice due to the complexity of clinical symptoms and the long-term effects these conditions can produce. The causes are different, and the management of each condition will take into account the presence of the other. Management of ST depends on the type, location, outcome, and potential influence on adjacent teeth. Tooth sensitivity in cases of MIH can cause a child to neglect oral hygiene, resulting in susceptibility to caries. The medical condition may be linked to persistent pulpal inflammation. Concerns about appearance are prevalent, particularly when the anterior teeth are involved.

Conclusion. There is a need for early emphasis on preventive measures to avoid post-eruptive enamel breakdown in cases of MIH. The choice of treatment method in such cases must take into account the type of additional tooth, the distance from the permanent germ to the supernumerary tooth, and the availability of space inside the arch for an unerupted tooth..