Hypomineralised second primary molars may be indicative of future molar incisor hypomineralisation

Précis

General dental practitioners should be familiar with the signs of hypomineralised second primary molars (HSPM), as these children are high caries risk and may be more likely to develop molar incisor hypomineralisation (MIH).

Abstract

Background: The term hypomineralised second primary molars (HSPM) describes a prevalent qualitative developmental defect of enamel. Children with HSPM are at a high risk of caries, and are reportedly five times more likely to develop molar incisor hypomineralisation (MIH).

Aetiology: There is an overlap in the development of the second primary molar and the first permanent molar. It is likely that MIH and HSPM have some shared aetiological factors, but in the case of HSPM the insult likely occurred earlier.

Diagnosis: HSPM can be identified as soon as the second primary molar erupts. It has a distinct clinical presentation and many clinical similarities with MIH. HSPM should be differentiated from typical early childhood caries.

Conclusion: Early dental visits for all children would allow early diagnosis of HSPM, which is essential to prevent future problems. Dental teams who work with children should be familiar with the signs of HSPM and use high caries risk preventive strategies, as well as increased vigilance during eruption of the first permanent molars.

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Extraction of a severely impacted mandibular third molar using a sagittal split osteotomy – a case report

Abstract

Statement of the problem: Mandibular third molar tooth impaction is a frequently encountered pathological phenomenon in oral and maxillofacial surgery. Deeply impacted mandibular third molars require extensive bone removal to facilitate extraction. Sagittal split osteotomies provide an alternative treatment option, which can preserve bone and reduce the risk of pathological or iatrogenic jaw fracture in high-risk cases.

Purpose of the review: Clinical awareness of alternative extraction techniques is fundamental to the attainment of optimal patient outcomes. This case report provides an overview of the indications, risks, procedure and outcomes of the sagittal split osteotomy as a technique for the removal of a deeply impacted mandibular third molar.

Method: A case report of surgical removal of an impacted third molar and associated dentigerous cyst by sagittal split is presented. Patient consent was obtained prior to surgery. The chart was reviewed, and clinical information gathered and compiled into a case report. A review of the literature was then carried out to compare the technique presented with similar cases.

Conclusion: This case report highlights the value of sagittal split osteotomy for the removal of deeply impacted mandibular third molars. As part of informed consent, clinicians should consider the sagittal split osteotomy as an alternative treatment option for patients with a high risk of mandibular fracture.

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