

Dens invaginatus and the paediatric dental patient: two case reports

Précis

Dens invaginatus in paediatric dental patients presents both patient management and technical challenges for the general dental practitioner. Awareness of clinical features and preventive strategies is essential.

Clinical relevance statement

With a prevalence of up to 10% in the permanent dentition, practitioners are likely to encounter dens invaginatus in the paediatric population. Timely identification and intervention if required, or referral for treatment, may yield better clinical outcomes for these patients.

Abstract

Background: Dens invaginatus (DI) in paediatric patients presents a challenge in treatment planning, patient management and potentially complex endodontic treatment. DI has been reported to be as prevalent as 0.3-10% in permanent teeth. Clinicians may be challenged in managing both the patient and the dental anomaly.

Aims: The aim of these case reports is to highlight the presenting features of DI, treatment strategies, and to highlight the need for a national clinical care pathway for children affected by dental anomalies such as DI, in addition to complex traumatic dental injuries and developmental defects of enamel and dentine.

Conclusions: Awareness of the clinical features of, and early identification of teeth affected by DI can allow for prevention, minimally invasive management and, where necessary, appropriate referral for specialist management of these cases. Sealing the palatal surfaces of young permanent incisors can limit the sequelae of pulpal necrosis in teeth with DI. Teeth with DI and complex anatomical presentation are predisposed to pulpal pathology and restorative management can be extremely challenging. There are currently limited referral options for general dental practitioners who identify cases of DI in primary care settings in Ireland. This may lead to delayed treatment, prolonged symptoms, and suboptimal outcomes for patients. A national clinical care pathway is recommended.

Journal of the Irish Dental Association December 2022/January 2023; 68 (6): 320-325.



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