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Periodontal defect associated with an inverted mesiodens

Sir,

Mesiodens refers to an unerupted supernumerary tooth in the midline of the maxilla, between the central incisors, and the term was coined by Bolk in 1917.[1] A study on mesiodens in children revealed a prevalence of around 0.8% (0.15–1.9%).[1] Majority of the mesiodens

(62.8%) were vertically aligned. Inverted and horizontal positions were observed in 30.8% and 6.4% of the cases. Most of the mesiodens (53.8%) were impacted, and were associated with complications, and only 26.9% were asymptomatic.[1] Cause of inversion of the mesiodens has been postulated to be due to the contact of the incisal edge of the crown of the mesiodens by the apex of the root of the erupting right maxillary central incisor tooth.[2]

A 60-year-old male patient reported to the Department of Periodontics with the complaint of pain in relation to the maxillary left central incisor. On clinical examination, a deep periodontal pocket was noticed on the mesial side of the maxillary left central incisor [Figure 1]. Swelling over the maxillary midline area just near the labial frenum [arrow in Figure 1] and Grade I mobility was also noticed. Intraoral periapical radiograph showed bone loss along the involved tooth and a radio-opacity between the roots of the two central incisors [Figure 2].

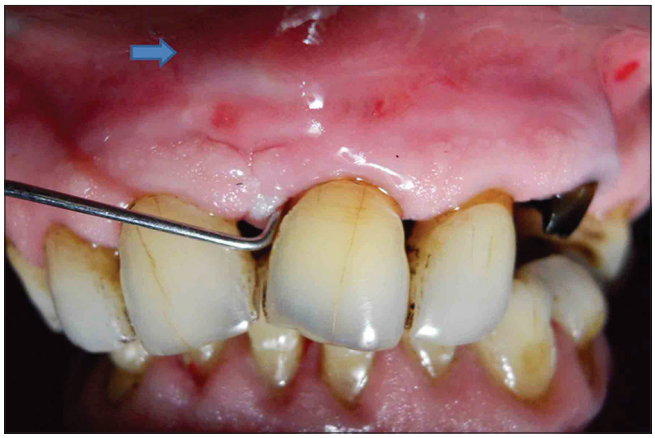

Figure 1: Clinical image showing deep periodontal pocket between the two maxillary central incisiors. The arrow shows the swelling over the maxillary midline area just near the labial frenum

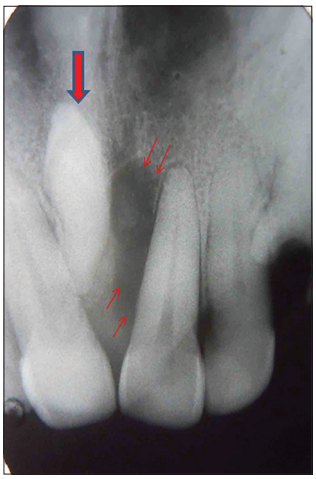

Figure 2: Intraoral periapical radiograph showing the inverted mesiodens and bone loss along the root of the maxillary left central incisor

On a closer analysis, this radio-opacity was diagnosed as an impacted and inverted mesiodens. The radiolucency was ill defined and without cortication, ruling out the possibility of a cyst. The patient was referred to the Department of Oral Surgery for removal of the inverted mesiodens. A treatment plan comprising of flap surgery with bone grafts was formulated to save the maxillary left central incisor.

Periodontal bone loss associated with impacted inverted mesiodens has not been reported so far. Established complications associated with mesiodens include interference with the eruption and alignment of the adjacent teeth, delayed or non-eruption of the maxillary incisors, radicular resorption and dentigerous cyst formation.[1] Clinical management of mesiodens could be confusing about whether and when they should be surgically removed, or whether they should be retained and followed-up radiographically.[3] Early detection and diagnosis of this anomaly is critical. Early removal of the mesiodens may not be the only treatment option; however, when pathological changes or interference with the normal teeth are diagnosed, removal should be performed.[3]

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