A compound odontoma in the path of an erupting incisor

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DESCRIPTION

A 12-year-old girl presented with a missing upper front tooth. Extra oral examination was unremarkable. On intraoral examination, the right maxillary central incisor was missing (figure 1). Other quadrants had all permanent teeth from incisors to second molars. No abnormalities were detected on soft tissue examination. An intraoral periapical radiograph showed a radiopaque structure at the distoincisor aspect of impacted right maxillary central incisor resembling a mini-tooth like structure surrounded by a radiolucent halo (figure 2). A provisional diagnosis of compound odontoma was considered. On excisional biopsy, the gross specimen showed two calcified structure, one in the form of a mini tooth like structure and another spherical calcified mass. On histopathological examination, the H&E stained section of the specimen showed pulp space and dentine in normal relationship and the attached connective tissue consisted of collagen fibre bundles with interspersed fibroblasts and a slit-like vascular space suggestive of compound odontoma.

The missing maxillary central incisor is less commonly encountered in dental practice accounting for 0.06–0.2%.¹ Since it is a highly demanding area from aesthetics, phonetics and functional point of view; it requires early detection with well-synchronised and interdisciplinary approach to obtain an acceptable results.¹ Supernumerary teeth and odontomas are the most common cause. About 56–60% of supernumerary teeth cause impaction of the permanent incisors due to a direct obstruction for the eruption.²

Figure 1 Intraoral view showing missing right maxillary central incisor.

Figure 2 Radiograph showing embedded right maxillary central incisor whose eruption was blocked by a calcific mass.

Learning points

- ▶ Proper evaluation of patients for any missing teeth in mixed dentition period.
- ▶ Compound odontoma is one common cause of missing incisors.
- ▶ It mandates early diagnosis and management of missing incisors as it have effect on self esteem and general social interaction.

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