Unerupted maxillary primary canine associated with compound composite odontoma: A case report.

Usha Mohan Das a, Nagaratna b, Arathi c.

a. Professor and Head, b. Assistant Professor, c. Lecturer, Department of Pediatric Dentistry, Vokkaligara Sangha Dental college, Bangalore

Unerupted primary teeth is very rare especially in the maxillary anterior teeth. A case of unerupted left maxillary Cuspid due to the presence of compound composite odontoma in a 10 years old female child is presented.

Key Words: Unerupted, Composite Odontoma, Primary teeth.

INTRODUCTION

Unerupted teeth are seen more commonly in permanent dentition and are relatively common in early mixed dentition 1,2. Unerupted primary teeth are less common, but when it does occur it usually involves the first and second molars 3. The obstacle for eruption could be a supernumerary tooth, ankylosis, an odontoma, a cyst, a tumor, or a dento maxillary dysharmony or malposition or malformation of the bud of the tooth itself 4.

Odontoma, also known as composite odontoma is a benign tumor of epithelial and mesenchymal origin, which exhibits complete dental tissue differentiation. It is probably a hamartomatous malformations of the normal or supernumerary odontogenic structures. Odontomas are usually asymptomatic and seen most commonly in association with unerupted teeth and appear as small, solitary and symptomless lesions found on routine radiographic examination 5. The etiology of odontomas is unknown, although local trauma, infection and genetic factors have been suggested 6.

Surgical exposure and elimination of mechanical obstruction is frequently the treatment of choice, spontaneous eruption can then be expected 4. An unerupted primary canine is very rare and a review of the literature reveals only 2 case reports.

CASE REPORT:

A 10 year old female child was referred to the Dept of Pedodontics and Preventive Dentistry, V.S. Dental College, Bangalore for unerupted left maxillary canine. The family and medical histories were insignificant. No history of trauma to the face or mouth was recalled. Extra oral examination was non-contributory.

Intraoral examination revealed mixed dentition period, except for the presence of left maxillary primary or permanent canine. No inflammatory signs were noted in gingiva and alveolar bone but a slight alveolar bulge appeared on the buccal surface. (Fig 1a and 1b)

Radiographic examination showed an unerupted left maxillary primary canine. A well demarcated unilocular, radiolucent follicle, occupied by a radiopaque mass was seen occlusal to the unerupted tooth. The provisional diagnosis was a compound odontoma, which prevented the eruption of the primary cuspid. (Fig 2a and 2b)

1.8 ml of 2% lidocaine with 1:1,00,000 epinephrine was used for local anaesthesia. A mucoperiosteal flap from the distal of the left maxillary lateral incisor to the mesial of the left maxillary first primary molar was raised.

The mass which was enclosed within a fibrous capsule was excised completely by elevation (Fig. 4). All the excised tissues were placed in 10% formalin and submitted in a block for microscopic evaluation. The primary canine was also extracted considering its angular position and to
facilitate permanent canine eruption. The first deciduous molar was extracted as it was mobile (Fig. 3).
The flap was closed by 4.0 black silk sutures and postoperative healing was satisfactory. The patient is under observation for eruption of the permanent cuspid.
The result of microscopic examination and ground section examination confirm compound composite odontoma as was diagnosed earlier by radiographic examination.

DISCUSSION:
The majority of unerupted teeth are seen in the permanent dentition and are relatively common in early mixed dentition. Unerupted primary teeth are uncommon and unerupted primary cuspid is very rare. A review of literature reveals that the incidence of unerupted primary molars is low \(^5,7,8\) and that unerupted primary anterior teeth are usually the maxillary incisors \(^7,8,10\).

The reasons of impacted or unerupted primary incisors were malformed teeth, dense scar tissue covering the crown, compound odontoma and ankylosis. Odontomas associated with primary teeth are very rare and only five cases have been related to impacted primary teeth \(^11,12,13\). Bruneto et al. \(^15\) reported an impaction of a primary maxillary cuspid and an incisor by an odontoma. Othman \(^18\) reported delayed eruption of maxillary primary cuspid associated with a compound odontoma.

Odontomas are asymptomatic, benign lesions and are composed of mixed tissue of odontogenic origin. However, they can have locally harmful effects on the developing teeth such as impaction or delayed eruption, retention of primary teeth and abnormalities in the position of the teeth. Other less frequent signs and symptoms are pain, suppuration and expansion of bone \(^16\).

The odontogenic lesions result from growth of epithelial and mesenchymal cells, exhibiting complete histogenic differentiation into functional ameloblasts and odontoblasts \(^14\). The treatment for odontomas is surgical excision with osseous recontouring when required. Recurrences are uncommon. If detected at earlier stages, interceptive treatment can be provided effectively enhancing esthetics, functions and structural balance in developing dentition.

Fig. 1a: Intra oral view showing the unerupted left primary maxillary cuspid. (Occlusal View)

Fig. 1b: Intraoral view showing the unerupted Cuspid. (Facial View)

Fig. 2a: Periapical Radiograph showing unerupted Cuspid and obstruction due to radiopaque mass odontoma.
REFERENCES.


Reprint Request to:
Dr. Usha Mohan Das.
Vokkaligara Sangha Dental College
K.R. Road, V.V. Puram,
Bangalore, India.