

CASE REPORT

AN ERUPTION CYST IN MAXILLARY ANTERIOR REGION OF A PEDIATRIC PATIENT- A CASE REPORT

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ABSTRACT:

Eruption cysts are benign cysts that appear on the mucosa of a tooth shortly before its eruption. Clinical appearance is soft, often translucent swelling of the mucosa overlying the crown of the involved tooth, the color of which may vary from pink to bluish-purple. This article presents a case report of a 6 year old male patient having chief complaint of swelling in upper front region of jaw since one and half month. Patient was diagnosed on the basis of clinical, radio - graphical and histopathology examination.

Key words: Eruption cyst, Dentigerous cyst, soft tissue cyst

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INTRODUCTION

Eruption cyst is defined as an odontogenic cyst with the histologic features of a dentigerous cyst, surrounds a tooth crown that has erupted through bone but not soft tissue and is clinically visible as a soft, fluctuant mass on the alveolar ridges.¹

The eruption cyst is considered as a soft tissue counterpart of the dentigerous cyst, but as a distinct clinical lesion. It is defined as a cyst that lies superficial to the crown of an erupting tooth, and is lined by stratified squamous non-keratinizing epithelium. Clinically the lesion presents as a circumscribed, fluctuant, dome shaped translucent swelling on the alveolar ridge in relation to the site of the erupting tooth. Presence of blood in the cystic cavity imparts a purple or deep blue color.

CASE REPORT

A 6 -year-old girl along with his father reported to outpatient department with a chief complaint of swelling in relation to the upper front teeth region since 1 month. Patient was apparently well one and half month back when his father noticed a swelling while his son was talking in his upper front tooth region of jaw which has gradually increased in size. Patient's father gives no history of association of swelling with fever or pain. Patient's father also did not report of any difficulty in chewing food due to the swelling in upper front tooth region. On intra oral examination of maxillary anterior region of 11, 21 alveolar

ridge, two well defined dome shaped swelling reddish in color having bluish hue in central region of approximately of size 1.5cm in diameter seen (Figure 1).



Figure 1 - Intra oral picture showing cyst development in maxillary anterior region

Surface of the swelling appeared to be smooth and shiny and overlying mucosa resembles the surrounding mucosa. On palpation, Swelling was uniformly soft in consistency and fluctuant in nature. Had distinct margins extending from middle third of coronal portion of 52 to incisal third of coronal portion of 62 medio-laterally and from attached gingiva of 11, 21 to alveolar crest superior-inferiorly There was no tenderness on palpation. An intra-oral periapical radiograph of the site of interest revealed an erupting 11,21 with an overlying soft tissue shadow. (Figure 2)



Figure 2: Intraoral periapical view of region 51, 61 showing erupting 11, 21 with soft tissue shadow



Figure 3: Intra-operative picture showing exposure of 11, 21

Chair side investigation of fine needle aspiration was done which resulted in a Blood tinged clear fluid of 0.5 ml. Cytological examination revealed numerous inflammatory cells in a background of RBC's. Based on the clinical, radiographic and cytological features, a final diagnosis of an Eruption Cyst was made. As management, Incision was performed under local anesthesia in the region of 11, 21 and the cyst lining was Excised (Figure 4) and sent for histopathological evaluation, which reiterated the initial diagnosis. Post-operative healing was uneventful.

Histopathology revealed stratified squamous parakeratinized epithelium with an underlying connective tissue stroma. A cystic lining resembling the reduced enamel epithelium was seen within the stroma. A faint demarcation was noted between the cystic stroma and overlying stroma. The cystic stroma was extremely cellular and showed a moderate chronic inflammatory cell infiltrate, which was suggestive of an Eruption cyst.

DISCUSSION

Eruption cyst is the soft tissue analogue of the dentigerous

cyst, but recognized as a separate clinical entity.¹ Clinically, eruption cyst appears as a dome shaped raised swelling in the mucosa of the alveolar ridge, which is soft to touch and the color ranges from transparent, bluish, purple to blue-black.¹⁻⁴ The color of the cyst ranged from reddish black to bluish. The etiology of this lesion still remains unknown. Some authors have linked its development to degenerative cystic changes in the reduced enamel epithelium. They are found in children of different ages and rarely in adults associated with delayed eruption.² Mean age of occurrence is in the age range of 6-9 years.² The incisal and molar areas are the most common sites of occurrence, followed by the canine and premolar areas.³ The site of involvement of the present case synchronized with the Site predilection of eruption Cysts, hence adding another classic case to literature.

Clinically, the eruption cyst presents as a smooth swelling over the erupting tooth and has the color of normal gingiva or appears blue. It is commonly painless unless infected and is soft and fluctuant.⁵ Our case demonstrated a similar clinical presentation with characteristic non-tenderness. Surface trauma may lead to collection of blood in the cystic fluid, which is the reason for a blue to purplish-brown color to the lesion.⁶ Radiographically, a soft-tissue shadow is usually in the region of the cyst, without any bone involvement.⁷ The dilated and open crypt may be seen on the radiograph with no bony changes.

CONCLUSION

Any disturbances of the developing dental structures may result in pathology such as eruption cyst, which is present as swelling of the overlying mucosa of the erupting deciduous or permanent teeth. In various occasions, due to its size & color may result in tumor scare among the patients or concerned parents of the child. It is the responsibility of an oral physician to reassure the parents about the benign nature of the lesion.

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