

Presentation Of Two Simultaneous Eruption Cysts Haematomas In Relation With Two Adjacent Permanent Teeth, Causing Tumour Scare.

Abstract

Mostly the eruption cysts occur in a single presentation, but this paper presents a rare case report of two simultaneous eruption cysts/ haematomas in relation with two adjacent unerupted permanent teeth in a nine years old child, that caused undue tumour scare in the minds of the parents of the child.

Discussion focuses on the pathogenesis, clinical presentation, clinical, radiographic & histological features of eruption cysts / haematomas. Treatment if required is also discussed.

Key Words

Eruption cyst, Eruption Haematoma, Dentigerous cyst, Tumour scare

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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 ridges².

An eruption cyst is in fact a dentigerous cyst occurring in the soft tissues. Whereas, the dentigerous cyst develops around the crown of an unerupted tooth lying in the bone, the eruption cyst occurs when a tooth is impeded in its eruption within the soft tissues overlying the bone¹.

Clinically, the lesion appears as a circumscribed, fluctuant, often translucent swelling of the alveolar ridge over the site of the erupting tooth. When the circum-coronal cystic cavity contains blood, the swelling appears purple or deep blue; hence the term "eruption haematoma". Sometimes, due to its large size or typical deep blue colour, when the parents of a child discover an eruption cyst or haematoma, they may fear that the child has a serious disease such as a malignant tumour. The dentist must be understanding and sensitive to their anxiety while reassuring them that the lesion is not serious¹³.

Majority of these cysts disappear on their

own and usually does not require any treatment. If they hurt, bleed or are infected they may require surgical treatment to expose the tooth and drain the contents.

CASE REPORT

Concerned parents of a 9 years old male child reported to the Out Patient Department of Bhojia Dental College & Hospital, Baddi with the chief complaint of bluish black swelling on the gums in the left side of the upper jaw. Parents of the child were fearful, assuming the lesions to be malignant tumours. History of the case revealed that the lesions started appearing as normal mucosa coloured, translucent swellings more than 3 weeks back and it slowly increased to its present size.

The colour of the lesions also slowly changed from its normal red mucosa to the present bluish black colour. There was no pain, pus / fluid discharge or any other associated symptoms. The general physical examination of the child showed no abnormalities. There was no history of any acute infection, trauma, drug or food allergy in the recent past.

Examination of the oral cavity revealed that the child was in the mixed dentition stage.

All the permanent incisors and 1st molars had completely erupted and teeth No. 54 & 64 were grossly decayed and teeth No. 55 & 65 were also carious (Figure 1).



Figure 1
Eruption cysts / Haematomas – Occlusal view
(Image as seen in the mirror)

Soft tissue examination did not show any abnormalities except, the presence of two gingival swellings opposite teeth No. 63 & 64. Clinically the gingival lesions appeared as bluish-black, circumscribed, fluctuant swellings on the buccal gingiva over the site of un-erupted teeth No. 23 & 24. Swelling over tooth No. 23 measured approximately 1.2 x 1.3 cm. and was very soft and fluctuant, while the swelling over tooth No. 24 was measuring approximately 1.2 x 1.4 cm and was a bit less fluctuant. (Figures 2[A] & 2[B]).

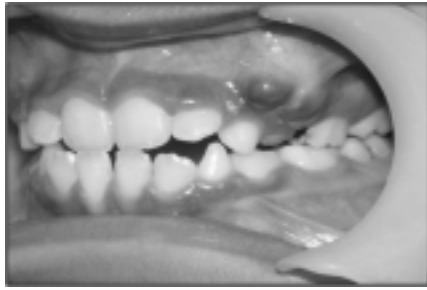


Figure 2 [A]
Eruption cyst / Haematomas – Lateral view



Figure 2 [B]:
Eruption cyst / Haematomas – Front view

Both the lesions were non-tender and there was no sign of any discharge. The overlying mucosa was smooth and no ulceration was present. X-rays of the lesions confirmed the presence of teeth No. 23 & 24 in the stage of eruption and there were no signs of bone involvement or any radiolucency surrounding these teeth.

From the case history recordings, signs, symptoms, clinical and radiographic examination a clinical diagnosis of the eruption cysts / haematomas was made. Parents of the child were given counselling regarding the lesions and were reassured that these swellings are not malignant tumours. Patient and the parents of the patient were advised to observe the swellings for another 2 weeks as they will rupture at their own & most probably will not need any surgical intervention.

DISCUSSION

Eruption cyst is the soft tissue analogue of the dentigerous cyst¹. The pathogenesis of the eruption cyst is probably very similar to that of the dentigerous cyst. The difference is that the tooth in case of eruption cyst is impeded in the gingival soft tissues rather than in the bone. The factors which actually impede eruption in the soft tissues are not known, but the presence of particularly dense fibrous tissue could be responsible. Kuczek A. et al⁷ reported a case of a child on

Cyclosporine-A developing eruption cysts. In this case, presumably the cysts developed because of collagen deposition in the gingival connective tissue that resulted in a thicker, less penetrable pericoronal roof⁴.

Shear³, recorded 0.8% frequency of occurrence rate for eruption cysts in his study on pathological specimens, over a period of 32 years. According to Shear it is likely that clinically they occur more frequently but since many of them burst spontaneously, these are not excised and are therefore not submitted for histological examination.

The eruption cysts are found in children of different ages, and occasionally in adults if there is delayed eruption³. Most of the examples are seen in children younger than 10 years of age^{1, 12}. There seems to be a gender predilection in favour of males^{5, 12}. Few cases of eruption cysts occurring with natal⁵ or neonatal¹¹ teeth have also been reported. Although these cysts may occur with any erupting tooth, the lesion is most commonly associated with the deciduous mandibular central incisors, the first permanent molars⁵, and the deciduous maxillary incisors¹. The general opinion is that eruption cysts are most frequently seen in the teeth anterior to the first permanent molars³. The eruption cyst appears as a soft, often translucent swelling in the gingival mucosa overlying the crown of an erupting deciduous or permanent tooth¹. It may be either the colour of normal gingiva or when surface trauma results in a considerable amount of blood in the cystic fluid, it may appear purple or deep blue or brown in colour^{1, 2}. Such lesions are referred to as "eruption haematoma". Transillumination is a useful diagnostic aid in distinguishing an eruption cyst from an eruption haematoma⁸.

Eruption cysts mostly occur in a single presentation⁶ but as seen in this case, sometimes more than one cyst may be

present^{2, 3}. There is often a brief history of about 3-4 weeks duration during which they enlarge to approximately 1-1.5 cm. Since, they are usually exposed to masticatory trauma, the cysts rupture spontaneously, permitting the tooth to erupt. Eruption cyst is usually painless unless infected and is soft and fluctuant³. On radiological examination, it may show a soft tissue shadow since the cyst is confined within it and there is usually no bone involvement². The dilated and open crypt may be seen on the radiograph³.

Intact eruption cysts seldom are submitted for histopathological examination^{1, 12} and most examples consists of the excised roof of the cyst which has been removed to facilitate tooth eruption. Microscopically, these show surface oral epithelium on the superior aspect. The underlying lamina propria show a variable inflammatory cell infiltrate. The deep portion of the specimen, which represents the roof of the cyst, shows a thin layer of non-keratinizing squamous epithelium¹.

Few of the conditions that could be considered in the differential diagnosis of the eruption cyst are haemangioma, neonatal alveolar lymphangioma, pyogenic granuloma, amalgam tattoo etc¹⁴.

Usually no treatment is necessary as the cyst often ruptures spontaneously. If this does not occur, then simple excision of the roof of the cyst generally permits speedy eruption of the tooth.

CONCLUSION

Disturbances of the dental development may result in anomalies which many a times appear in the form of swelling of the overlying mucosa of the erupting deciduous or permanent teeth, mostly in children. Eruption cyst / haematoma is one such lesion associated with erupting teeth which on numerous occasions, due to its size or peculiar, purple-blue or bluish black colour may result in tumour scare among the

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patients or concerned parents of a child. Since, the lesion is benign and usually resolve at its own, an understanding dentist must reassure the patients or parents of a child patient that the lesion is not serious.

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