

Follicular Cyst due to Impacted Canine

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Summary

A follicular cyst may be associated with an impacted canine and the possibility of such an occurrence should be considered in the differential diagnosis of swellings in the anterior hard palate end in the upper labial sulcus. The paper emphasises the possibility of such large cyst involving the floor of the mouth and the advisability for all such buried teeth to be removed.

Introduction

Cystic swellings of the hard palate may be the result of different kinds of cysts: odontogenic, non-odontogenic or bone cysts (Lucas classification)¹ with erosion, expansion and destruction of the floor of the nose. A case is described whose origin was unerupted canine.

Case Report

A 16 years old Afghan refugee was referred to Oral and Dental Unit, Khyber Medical College complaining of swelling over the upper left anterior region buccally and palatally over a period of 7 months.

Clinical examination extra-orally showed a soft mobile cyst-like swelling in the region of left side of ala of the nose; the remaining part of the face being normal. Intraorally there was a large hard swelling extending from the upper left canine region into the palate without involving the teeth.

General oral condition of the patient was good, the full compliment of teeth being present except upper left permanent canine whereas upper left deciduous canine was over-retained. None of the teeth were painful to percussion.

Radiographic examination (Fig-I) showed a very large cyst about 3x2x2 cm. covering a big area buccally and palatally extending from the upper left

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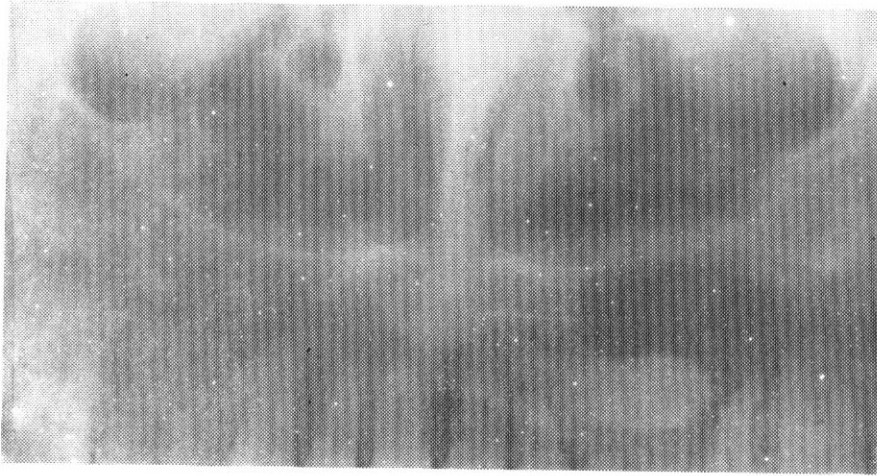


Fig. 1. Follicular cyst due to impacted canine

lateral incisor to the upper left first molar. Within the cyst upper left canine appeared palatally.

Aspiration was performed with a large bore needle without infiltration anaesthesia and straw coloured fluid was aspirated which was sent for protein estimation (Toller).³

Under local anaesthesia a large cyst was enucleated together with the left canine. The cyst lining was sent for biopsy which confirmed the diagnosis of follicular cyst. Protein estimation was also more than 4 gm/100 ml. which is typical of odontogenic cyst (Toller).³ After the toilet of the cavity, the wound was closed; the remaining teeth were intact.

Discussion

Follicular cyst form from reduced enamel epithelium present on the surface of the tooth crown after it has become completely calcified. This epithelium proliferates towards the surface of the alveolus where it meets and fuses with the downward proliferating basal cells of the alveolar epithelium. Lysis within this mass of cells forms an epithelial lined pathway through which the tooth erupts (Mc Hugh).² Failure of the overlying alveolar epithelium to breakdown will give rise to an eruption cyst. Where eruption is impeded or delayed, these cells may continue to proliferate around the crown of the tooth and then undergo liquefaction degeneration leaving a pericoronal cyst.

This patient had a very large follicular cyst associated with impacted canine and the possibility of such an occurrence should be considered in the differential diagnosis of swellings in the anterior hard palate and in the upper labial sulcus. The present case merely emphasises the advisability for all such burried teeth to be removed and the possibility of such large cyst involving the floor of the nose exists.

No body will disagree on the role of x-rays in such circumstances but aspiration is also a useful pre-operative investigation, and should be carried out where concern exists as to the nature of cystic lesion. Follicular and periodontal cyst fluid is usually straw coloured and clear containing varying amount of cholestrol crystals. These have bright glistening appearance which can be seen in the barrel of the syringe and on a dry swab, whereas the odontogenic keratocyst contains a white viscid suspension of keratine. Cyst fluid may be sent for electrophoresis in which case a follicular and periodontal cyst will reveal albumin and globulins resembling serum with a total proteins in excess of 4 gm/100 ml. Keratocyst contents tend to have little detectable protein on electrophoresis i.e. less than 4 gm/100 ml. This biochemical investigation has not only a diagnostic advantage but it also correlates fluid content with cyst behaviour (Toller).⁴ Stained smears can be made from aspirated cyst fluid which will show parakeratinized squames in case of keratocyst. This may be done by spreading a drop of cyst fluid on two cleaned slides, allowing them to dry and stained with haematoxylin and eosin and by the rhodamine B fluorescence method. Accurate diagnosis of a keratocyst may be achieved by combination of electrophoresis and smear techniques.

References

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