Bilateral radicular cyst in primary maxillary molars: A case report

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Introduction
Radicular cysts are true cysts which are inflammatory in origin, most predilections for permanent dentition and seen in the anterior maxillary region. It is also called as apical periodontal cyst, root end cyst. Although dental caries is most common in children, radicular cyst affecting primary teeth appear to be rare with the incidence being as low as 0.5-3.3%. Root end cysts heal uneventfully after endodontic treatment or extraction. However, few authors suggest that suspected cysts must be completely enucleated surgically to remove all epithelial remnants. This case reports reveals a case where there is a bilateral radicular cyst in primary maxillary molar teeth in a 6-year-old male patient.

Case Report
A 6-year-old male patient came to the department with the chief complaint of swelling and pain in upper left back tooth region for the past 2 months. The patient had episodes of pain in the same region which were intermittent, localized, and mild and subsided on taking medications. Swelling started 15 days back in upper left middle third of face which increased gradually in size and was associated with fever for which the patient had taken medications.

Extraoral examination revealed a swelling in the left middle third of face which was diffuse, non-tender, and bony hard [Figures 1 and 2]. Intra-oral examination revealed grossly decayed right and left first primary maxillary molars with obliteration of vestibule due to intraoral swelling extending from distal surface of canine to mesial surface of maxillary second molar, in the left side. The swelling was hard, tender, and non-fluctuant [Figure 3]. Right maxillary molar did not have any signs and symptoms. Based on clinical findings, provisional diagnosis of radicular cyst of both right and left maxillary first maxillary

Abstract
Radicular cyst constitutes only 0.5-3.5% in deciduous teeth. This case report reveals rarest of the case of bilateral radicular cysts in maxillary primary molars in a 7-year-old male patient. Both the cysts were enucleated one after another depending on the severity of signs and symptoms followed by extraction of deciduous teeth. A 5 month follow-up, radiograph was taken to ensure the position of succedaneous teeth.

Keywords: Bilateral radicular cysts, enucleation, succedaneous teeth
Shivanna Bilateral radicular cyst

The molar was arrived at. Orthopantamograph (OPG) revealed well defined periapical radiolucency in relation to both right and left maxillary first molar [Figure 4].

Extraction of both primary molars followed by surgical enucleation was performed depending on the severity of signs and symptoms. As left primary first molar was symptomatic, the cyst was enucleated after the extraction of the teeth. After injecting posterior superior alveolar nerve and greater palatine nerve block, a crevicular incision was given in first molar area, extending from canine anteriorly and second molar posteriorly, a mucoperiosteal flap was increased, extraction of the offending tooth was done followed by removal of cyst followed by surgical curettage of the socket was done [Figure 4]. Surgical specimen was sent for histological review and the diagnosis of the inflammatory radicular cyst was confirmed [Figure 5].

Discussion

A root end cyst, also known as periapical cyst is most commonly associated with, nonvital, discolored, or fractured tooth. These cysts are believed to form from cell rests of malassez which get proliferated from inflamed periradicular tissues.[3] Its size rarely exceeds 1 cm and are more commonly seen in middle age with increased incidence in anterior maxillary region.[4,5] This case report presents a rare representation as. The radicular cyst is usually symptomless and is detected incidentally on plain OPG during routine dental examination. However, some cysts as they grow can cause mobility and displacement of teeth and once infected, lead to pain and swelling, after which the patient usually becomes aware of the problem.[6-8] These cysts grow slowly and enlarge itself, initially bony hard to palpate which later becomes rubbery and fluctuant.

The treatment options available for root end cyst are surgical endodontic treatment, extraction of the offending tooth, enucleation with primary closure and marsupialization followed by enucleation. In this case, extraction of the offending tooth followed by enucleation was performed uneventfully.

Conclusion

An apical periodontal cyst is an inflammatory cyst which is common in middle age. This case illustrates a common condition seen in an uncommon age group at the uncommon
site. As radicular cyst in the deciduous dentition not only cause extensive destruction of bone but also displaces the tooth buds of permanent teeth thus throwing a challenge to the clinician and pedodontist to prevent damage to permanent dentition.

References