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Bilateral Palatal Swelling: A Case Report

Abstract

Palatal swellings are not commonly encountered swelling as palatal bone is thick and there is very little or no space is present between palatal bone and associated soft tissue. Palatal swelling can be either aggressive or non aggressive in nature. There are so many factors which can lead to palatal swelling. The various aggressive and non aggressive lesions associated with palatal swelling are torous palatinus, malignant squamous epithelial neoplasms such as squamous cell carcinoma, verrucous carcinoma and carcinoma of maxillary sinus. Some salivary gland tumors are also some times seen associated with palate. There are some inflammatory lesions of odontogenic origin which are seen associated with palatal swelling. It is very important to correctly diagnose the pathology and its nature before planning the treatment plan. In this paper we are presenting a case of a 40 yr old lady patient who reported to us with chief complain of swelling and pain in right side palatal region.

Key Words

Palatal swelling; radicular cyst; periapical abscess

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INTRODUCTION

Palatal swellings are not commonly encountered swelling as palatal bone is thick and there is very little or no space is present between palatal bone and associated soft tissue. Palatal swelling can be either aggressive or non aggressive in nature. There are so many factors which can lead to palatal swelling. The various aggressive and non aggressive lesions associated with palatal swelling are torous palatinus, malignant squamous epithelial neoplasms such as squamous cell carcinoma, verrucous carcinoma and carcinoma of maxillary sinus. Some salivary gland tumors are also some times seen associated with palate. There are some inflammatory lesion of odontogenic origin which are seen associated with palatal swelling. Radicular cyst is the most commonly seen inflammatory cysts that develop as a sequel of untreated dental caries with pulp necrosis and periapical infection.[1] This cyst is most commonly found associated with the apices of the involved teeth, however they may also be seen on the lateral aspects of the roots in relation to lateral accessory root canals.[2] Radicular cysts can occur in the periapical area of any teeth, more frequent in maxillary than mandibular teeth.[3] Acute apical abscess, also known as acute periapical abscess, acute dentoalveolar abscess or acute periradicular abscess, is a highly symptomatic inflammatory response of the periapical connective tissues.[4] The clinical symptom associated with periapical abscess is pain ,severity ranging from slight tenderness to intense, throbbing pain. Source of pain is always a carious tooth, which is tender on percussion. In the late stages of abscess formation, the patient tolerance for the discomfort increases if the tooth is not touched directly. Radiographically, the appearance of the periodontal ligament space ranges from within normal limits, to slightly thickened,[5] to a large periapical radiolucency. In this paper we are presenting a case of a 40 yr old lady patient who reported to us with chief complain of swelling and pain in right side palatal region.

CASE REPORT

A 40 years old female patient reported to the Department of Oral & maxillofacial surgery, with a chief complaint of swelling and pain in palatal region for last one month. There is no History of trauma in the involved region. She revealed that swelling gradually increased in size, swelling not associated with any discharge on palatal aspect (Fig. 1). On intra oral examination two swellings were seen in palate region one present in the premaxilla region of palate, which was extending from 21 to 23 regions measuring 2.5 x 3 cms and other was

Fig. 1: Facial profile and intra oral picture of patient

Fig. 2: Occlusal view

Fig. 3: Showing the Intraoperative picture of Cyst Enucleation

Fig. 4: 7 days post op

Fig. 5: 20 days post op

seen left posterior side involving maxillary right first molar measuring approx 3 x 3 cms. A solitary ulcer was also seen over the right side swelling which was tender on palpation. Both the Swellings were soft and fluctuant in nature. For the anterior involved teeths Electric and thermal pulp vitality testing was done and it showed negative response in 21, 22 and 23 while adjacent teeth showed normal response. Teeth were painless to vertical percussion. Occlusal view of maxilla and orthmopentmogram were taken to know the extent of lesion. Occlusal view of anterior maxilla revealed a lesion involving periapical region of 21, 22 and 23 regions respectively. A fine needle aspiration of the swelling showed a discharge containing pus and blood. From the History and Clinical examination a provisional diagnosis of infected radicular cyst in 21, 22 and 23 was made (Fig. 2). Right side swelling on occlusal view appeared as radiolucent lesion associated with carious maxillary right first molar and retained root stump of maxillary right third molar which lead to the provisional diagnosis of Periapical abscess. Treatment planning was followed by explanation of the procedure to the patient and an informed consent was obtained. Patient was not willing for any endodontic treatment so we planned the patient for cyst enucleation and drainage of abscess followed by extraction of carious tooth and retinend root stump under antibiotic prophylaxis. After administration of local anesthesia with 1:80,000 adrenaline, crevicular incision was given in palatal region which extends from 11 to 25 regions. A full thickness mucoperiosteal flap was reflected and irrigated with normal saline. Large palatal bone resorption was present on the site. Complete curettage of the cystic lining and enucleation of cyst was done. Complete curettage done and granulation tissue was removed. Closure of flap was done with 3-0 silk following hemostasis (Fig. 3). For right side palatal swelling extraction of maxillary right first molar and retained root stump was done followed by deep curettage and removal of granulation tissue. There was active discharge of pus from the extraction socket was seen. Wound closure was done with 3-0 mersilk suture. Post-operative instruction given to the patient and patient was kept under Antibiotics and Analgesics. Patient was recalled at intervals of 1, 7, 20 days and 3 months. Suture removal was done on 7^{th} day and the wound healing was uneventful (Fig. 4 & Fig. 5). The cystic lining was sent for histiopatholoagical examination. The histopathology report confirmed the diagnosis of an infected radicular cyst.

DISCUSSION

A radicular cyst is an odontogenic cyst of inflammatory origin formed by the stimulation of cell rests of Malassez found in the periodontal membrane.[6] Radicular cyst is mainly a consequence of pulpal necrosis following caries, with an associated periapical inflammatory response.[7] Few studies in the UK and the South African population have shown that radicular cysts occur more commonly between the third and fifth decades of life, more common in males than females, and more frequently found in the anterior maxilla than other parts of the mouth.[8] Radicular cyst is mostly seen associated with swelling. Initially swelling of these radicular cysts is usually bony hard, but as it increases in size, the covering bone may become very thin despite initial sub-periosteal bone deposition. Finally, with progressive bone resorption, the swelling can exhibit 'springiness' or 'egg shell crackling'.[9] The tooth associated with the cyst is usually non vital and may show discoloration. It is important to note that there is no resorption of root associated with the cyst. All radicular cysts are lined partially or completely by non-keratinized stratified squamous epithelium. If keratinization is present than orthokeratinization is more common than parakeratinization. Several treatment options are available for a radicular cyst such as endodontic treatment, extraction of the offending tooth, enucleation with primary closure, and marsupialization followed by enucleation. In this case, surgical enucleation was preferred and was performed uneventfully.[8]

CONCLUSION

In present article the patient was treated by cyst enucleation and extraction of involoved tooth followed by drainage of abscess. The healing was uneventful. It is very important to take detailed history and do complete radiological examination before planning treatment for palatal swelling.

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