

Huge Palatal Abscess in the Hard Palate Mimicking the Tumor in a Child; An Unusual Case Report

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Abstract

Palatal mass in children can impose a huge diagnostic challenge for clinicians. This mass can be a palatal torus, pleomorphic adenoma, hemangioma or palatal abscess. Palatal abscess usually originates from infection of the pulp cavity or periodontal region. Usually, it occurs as a mass lateral to the midline in the premolar and molar area. Here we report an unusual case of a 10-year-old girl with a huge palatal abscess predominantly in the right side of hard palate extending to the left crossing the midline.

Keywords: Palatal Abscess; Palatal Prosthesis; Pleomorphic Adenoma

Introduction

The palatal swelling results from the periodontal abscess or tumor [1]. It should be differentiated from the history of the patient. The palatal abscess should be thought of, if the swelling has a relatively short period of onset. The dental infection should be ruled out in any case of palatal mass. It can arise from a non vital lateral incisor or the palatal root of an upper first molar [2]. Orthopantomogram helps to see dental infection and CT scan shows the extent of disease and helps to rule out the other benign and malignant masses [3]. Here we present a 10 year old child with huge swelling at the hard palate which looks like a tumor.

Case Report

A 10 year old girl presented to the otolaryngology Outpatient Department of Metrocity Hospital, Pokhara with history of swelling in the roof of the mouth for 2 weeks. Swelling was slowly increasing in size. Her father took her to the local practitioner and got a prescription of oral antibiotics for a week. Despite treatment, swelling was increasing so she was brought to our hospital for further treatment.

She had no other medical diseases in the past. Oral cavity examination revealed a swelling in the hard palate about 4×5 cm size, soft in consistency and predominantly involving the right side of the palate and extending to the left side (Figure 1A). The swelling was not mobile. Overlying mucosa was normal. A scar mark was seen on the medial side of the swelling which was due to incision previously. Orthopantomogram showed radiolucent area at right upper canine tooth suggestive of dental caries (Figure 2A). CT scan showed heterogenous mass with hypodense area in the hard palate suggestive of palatal abscess (Figure 2B).

Incision and drainage was planned under general anesthesia. Around 10 - 15 ml of straw coloured serosanguinous fluid was drained with deroofting of the lesion (Figure 1B). Thorough wash was done with 5% Povidone iodine followed by compressive packing which was held in place by Vicryl 3-0. Patient was kept nil per oral for 72 hrs. Palatal prosthesis was made (Figure 3A). Oral feeding was resumed and the patient was discharged on the 7th Postoperative day. Debris tissue was sent for histopathology which showed sheets of acute inflammatory cells mixed with chronic inflammatory cells, degenerative cells and fibrin suggestive of palatal abscess.

Dental caries were managed by a Dental surgeon. Follow up at 3 weeks of surgery showed complete healing (Figure 3B).

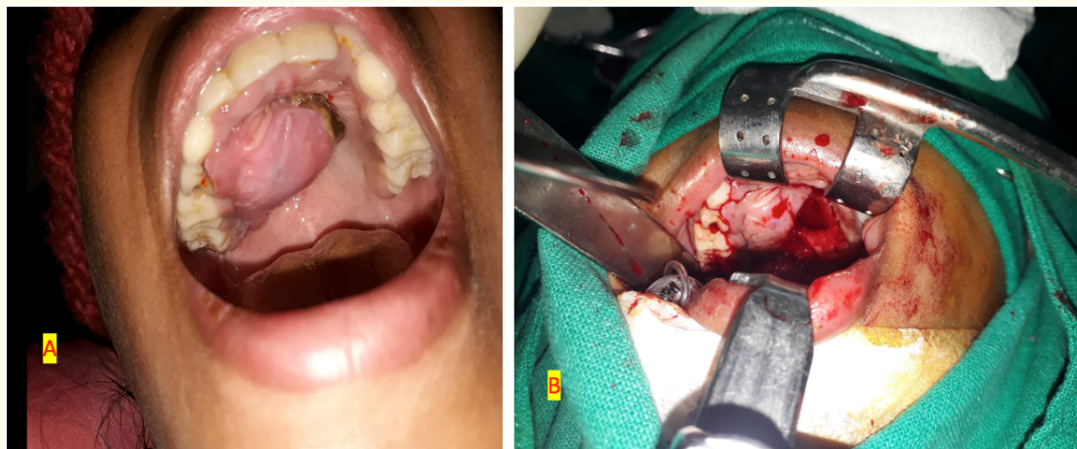


Figure 1: 1A: Showing palatal swelling in the right extending to the left side crossing the midline. 1B: Showing the oral cavity following the drainage of abscess and deroofting.



Figure 2: 2A: Orthopantomogram showing radiolucent area at right upper canine tooth. 2B: CT scan showing heterogenous mass with hypodense area in the hard palate.

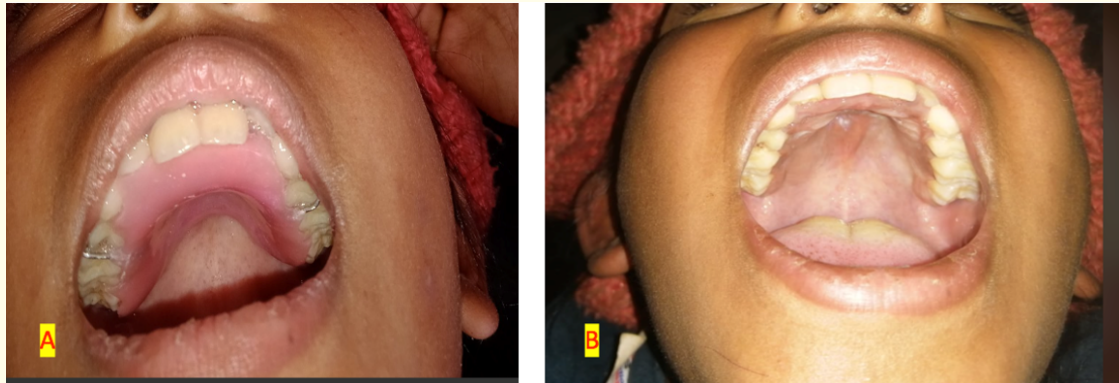


Figure 3: 3A: Showing the palatal prosthesis used in the child post-operatively. 3B: Showing complete healing at 3 weeks post-operatively.

Discussion

Palatal swelling is a rare presentation in the outpatient department. There are several differentials of palatal swelling. They are palatal abscess, nasopalatine cyst, pleomorphic adenoma, fibroma etc. Out of these, palatal abscess is one that needs to be managed on time to prevent the spread of the disease.

Odontogenic infections are the major cause of palatal abscess. These infections are very common in children due to excessive consumption of junk foods like chocolates and juice. It spreads from the affected teeth along the path of least resistance leading to formation of palatal abscess. Most of the palatal abscess occurs is the maxillary molar tooth as the odontogenic infection is common in this area [1].

Most of these abscess occurs as a compressible mass in the premolar and molar area lateral to midline [4]. However, in our case it has extended beyond the midline which is confusing with minor salivary gland tumour [3]. Radiological investigation is vital before any surgical intervention.

In our case we did an orthopantomogram which showed the panoramic view of the whole teeth. Some centers prefer to do cone beam CT.

CT scan is necessary to see the extent of the disease, bone erosion and to rule out tumour [5].

Definitive treatment was done by drainage of the palatal abscess and extraction of carious teeth. It is important to maintain proper feeding of the child to prevent malnutrition and facilitate healing. Nasogastric tube feeding could be used but it is not tolerated by young children as in our patient. So, we did manage with palatal prosthesis which helps to heal the wound and maintain the feeding of the child that ultimately helps to improve the nutrition of the growing child.

Conclusion

Palatal swelling should be considered seriously. So, it should be differentiated from minor salivary gland tumors. Palatal abscess is one of the differential diagnoses in patients of palatal swelling. Drainage and deroofing of palatal abscess with appropriate management of the offending tooth helps to prevent the complications of Palatal abscess. In the management of Palatal abscess, palatal prosthesis helps

in the early healing of wound and maintain the nutrition of child as it helps to avoid the Nasogastric tube feeding which is agonising for pediatric patients.

Competing Interest

We declare no competing of interest.

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