



Palatal Mucocele: A Case Report

¹Dr. Geeti Vajdi Mitra, professor and Head, Sri aurobindo college of Dentistry, MDS OMFS

²Dr. Nikit Agrawal, reader, (Sri aurobindo college of Dentistry, MDS OMFS

³Dr Nupur Shukla, Resident 3rd year OMFS dept Sri aurobindo college of Dentistry

⁴Dr. Tejas Motiwale, professor, (Sri aurobindo college of Dentistry, MDS OMFS)

*Corresponding Author:

Dr Nupur Shukla Resident 3rd year OMFS dept Sri aurobindo college of Dentistry

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Abstract

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Introduction

Hundreds of minor salivary glands are distributed in the oral mucosa, they secrete mucus into the oral cavity through their minor ducts. Obstruction of these ducts can lead to retention of mucus with a cystic lesion lined by salivary duct epithelium, which is termed as mucus retention cyst, however, it is very rare to find an epithelial lining for these lesions [1,2]

Although, the disease is not common in the hard palate, it was previously reported by many authors in the soft palate. The aim of our study was to present pediatric patients who were diagnosed to have mucocele of the hard palate, and to evaluate the outcome of the surgical excision of this lesion.

Mucus extravasation phenomenon or mucus escape reaction is a more accepted theory for the development of those cystic swellings of the oral cavity [1,3,4].

Mucocele is a lesion of the oral mucosa that results from an alteration of major or minor salivary glands duct. There are two types of mucocele - extravasation and retention. Extravasation mucocele results from trauma to salivary glands duct and the consequent spillage into the soft tissues around this gland. Retention mucocele appears due to a decrease or absence of glandular secretion produced by blockage of the salivary gland ducts. Mucoceles present a bluish, soft and transparent cystic swelling. The blue colour is caused by vascular congestion, and cyanosis of the tissue above and the accumulation of fluid below the mucosa. Coloration can also vary

depending on the size of the lesion, proximity to the surface and upper tissue elasticity. Lower lip is the most frequent site for mucocele with tongue being the second most common location followed by the buccal mucosa and palate; rarely found in the retromolar region and posterior dorsal area of tongue. As mucocele is a common lesion and affects the general population.

Case Report-

A 30 old male reported in the department of oral and maxillofacial surgery with the chief complaint of pain and swelling over the palate since 2 month. The history of the present illness presented with swelling on the palate since 2 months which started as a small negligible swelling on the right side of the palate which progressively increased in size crossing the mid-palate. It was associated with frequent pus discharge mix with blood and patient also experienced occasional mild pain associated with the swelling. Patient also gives a history of loosening of the teeth since 2 months. Patient is a chronic smoker since 15 years. With no significant Medical and Family history.

On clinical examination:- A nodular swelling seen over palate extending from right 13 region up to the junction of hard and soft palate anteroposteriorly and from 13 region involving the mid palate and crossing the median palatine raphe distoproximally.

On palpation-The swelling is firm with multiple areas of fluctuancy, non tender with no local rise in temperature, with smooth surface and overlying mucosa appear normal with well defined borders.

It is ovoid in shape approximately of about 4×2 cm in size. Grade 3 mobility present with 13 14 15 and 36 teeth.



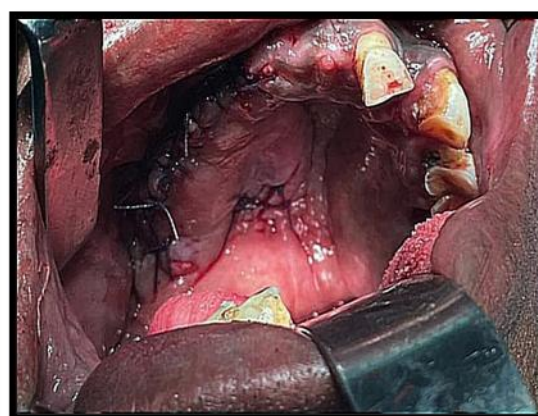
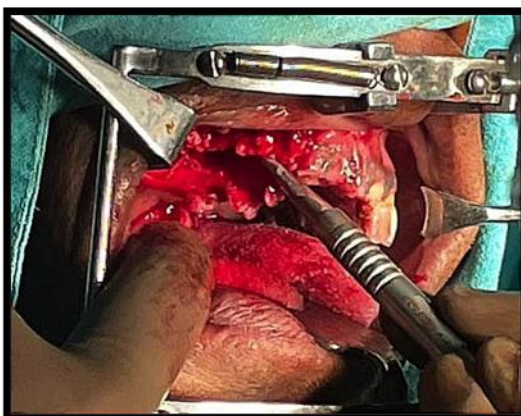
Hemogram of the patient was within normal limits. Excision of the growth was performed under GA in relation with 12-18 region (partially edentulous).

Extraction of 13 14 15 was done.

Operative Procedure

Under general anesthesia with oral endotracheal intubation, the patient is placed in the supine position with the head extended by small pillow below the shoulders. Injection of mucosa around the swelling with 2% lignocaine with 1:200,000 adrenaline was done. An elliptical mucosal flap was elevated, meticulous sharp dissection was performed with care to avoid rupture of the swelling. After complete exposure of the swelling, it was removed completely, and homeostasis was achieved with bipolar diathermy.

The mucosal flap was returned to its place and sutured to the surrounding mucosa using vicryl 4-0 sutures.

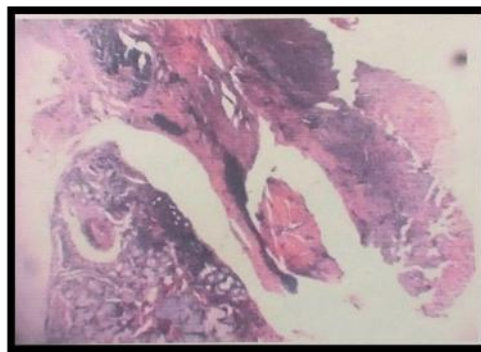


Cyst enucleation and curettage was done. Necrotic bone & sharp bony spicules removed. Specimen of the excised tissue was placed in 10% Formalin and sent for histopathological examination. Copious irrigation was done with Normal saline + Betadine and closure with 3-0 vicryl was done.



Ryles tube was secured and patient was extubated uneventfully. On post operative day 11 sutures were removed with normal healing observed.

Histopathological examination revealed lesional connective tissue comprising of cystic spaces, marked inflammatory infiltrate chiefly composed of lymphocytes, plasma cells along with numerous fibroblasts, bundles of collagen fibres and single endothelial lined blood vessels with extravasated RBCs along with mucus acini seen.



Over all clinicopathological correlation suggestive of mucocele of palate.

Histopathological examination revealed that there was an epithelial wall for the lesion, denoting that the lesion was mucus retention cyst rather than mucus extravasation in the submucosal tissues. Bodner et al.[5]

Discussion

Mucoceleles are painless, asymptomatic swellings that have a relatively rapid onset and fluctuate in size. Mucoceleles may be located either as a fluid filled vesicle or blister in the superficial mucosa or as a fluctuant nodule deep within the connective tissue. Spontaneous drainage of the inspissated mucin especially in superficial lesions followed by subsequent recurrence may occur.

The mechanism of formation of the mucocele is still not totally clear. The development of mucocele usually depends on the disruption of the flow of saliva from secretory apparatus of the salivary glands. The lesions are most often associated with

mucus extravasation into the adjacent soft tissues. The incidence of mucocele in the general population is 0.4-0.8%. As per age, the peak incidence is in the second or third decades of life, and as regards to location the lower lip is most frequently affected location (40-80% cases) followed by the cheek mucosa and the floor of the mouth. The tongue, palate and upper lip are infrequent locations. There are various treatment options, including cryosurgery, intra-lesional corticosteroid injection, micro-marsupialization, conventional surgical removal, and laser ablation. Complete resection of the mucocele through careful dissection, and ensuring that both the affected and neighbouring glands are removed, along

with the pathological tissue, before primary closure of the wound. This minimizes the risk of relapse. Special care is required to avoid damaging other glands or ducts. The excised tissue should always be submitted to the pathological investigations to confirm the diagnosis and rule out the salivary gland tumors. The various differential diagnosis are Blandin and Nuhn mucocele, Ranula, Benign or malignant salivary gland neoplasms, Oral lymphoepithelial cyst, Gingival cyst in adults.

Conclusion

Oral mucoceles can develop on the hard palate of the senior citizens, the lesions are mucus retention cysts. Complete surgical removal of the lesions with their cystic wall is a good treatment options, it carries no risk of recurrence. Mucocele are relatively common salivary gland cyst. With palatal being less common site of its presentation. Its recurrence rate is rare if the involved accessory salivary glands are removed .

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