

Case Report

Oral Mucocele: Functional and Esthetic Concern

Dr Suvidha Dere, Dr Manan Doshi, Dr Munaf Maknojia, Dr Jimit Sheth

¹Department of Periodontology, Dr GD POL Foundation's Yerala Medical Trust's Dental College & Hospital, Maharashtra India

***Corresponding author**

Dr Manan Doshi

Email: manandoshi08@gmail.com

Abstract: Mucocele is a common lesion of the oral mucosa that results from an alteration of minor salivary glands due to a mucous accumulation causing limited swelling. Clinically they appear as a soft, bluish and transparent cystic swelling which normally resolves spontaneously. Treatment frequently involves surgical removal if causing aesthetic concern or chewing discomfort. We report a case of twenty three year old female patient having mucocele on lower lip. Surgical excision was performed as she complained of difficulty in mastication & speech. Diagnosis of mucocele is principally clinical. For this reason in the present case report we stress to elaborate the clinical characteristics of mucocele, and its management which can be used for decision making in daily clinical practice.

Keywords: Mucocele, minor salivary gland, cystic swelling, mucocele treatment.

INTRODUCTION

Mucocele a common lesion of the oral mucosa results from an alteration of minor salivary glands due to mucous accumulation that leads to well circumscribed swelling [1]. Yamasoba et al. [2] highlight two crucial etiological factors in Mucocele: traumatism and obstruction of salivary gland ducts. Two types of mucocele can appear- extravasation and retention. Extravasation mucocele results from trauma to salivary glands duct and the consequent spillage into the soft tissues around this gland. Physical trauma can cause a leakage of salivary secretion into surrounding submucosal tissue. Inflammation becomes obvious due to stagnant mucous resulting from extravasation [3] Retention mucocele appears due to a decrease or absence of glandular secretion produced by blockage of the salivary gland ducts [4].

Mucocele of the minor salivary glands are rarely larger than 1.5 cm in diameter and are always superficial. There is no clinical difference between extravasation and retention mucocele. Mucocele present a bluish, soft and transparent cystic swelling which frequently resolves spontaneously. The blue colour is caused by vascular congestion, and tissue cyanosis of the tissue above and the accumulation of fluid below. Coloration can also vary depending on the size of the lesion, proximity to the surface and upper tissue elasticity [5].

Mucocele is a common lesion affecting the general population and diagnosis is principally clinical.

Hence it's of importance to have knowledge about the clinical characteristics of mucocele, and its management to aid for decision-making in daily clinical practice. We hereby report a case of oral mucocele occurring on the lower lip, its clinical significance and management.

CASE REPORT

A twenty three year old female reported to the outpatient department with a chief complaint of swelling on the lower lip (Figure-1). The growth was seen on the inner aspect of lower lip against left canine and first premolar teeth and was present since a month.

The growth was of negligible size when the patient first noticed it, but had a rapid onset and increased consistently till date to attain the present size. There was no history of pain or purulent discharge associated with the swelling but patient often experienced difficulty in mastication and speech. There was a history of trauma to the lower lip while chewing. Medical and family histories were non-contributory.

Intraoral examination of lower lip revealed an afebrile growth of approximately 0.5 cm x 0.5 cm which was reddish pink in colour, soft and fluctuant in consistency, palpable and non-tender, circular in shape in relation to lower left canine and first premolar region. (Figure 1) The overlying mucosa was healthy. Haematological investigations were normal. The case was provisionally diagnosed to be a mucocele of lower lip and the patient was prepared for surgery under aseptic conditions. Oral prophylaxis was completed a

week before the surgical excision of the growth was

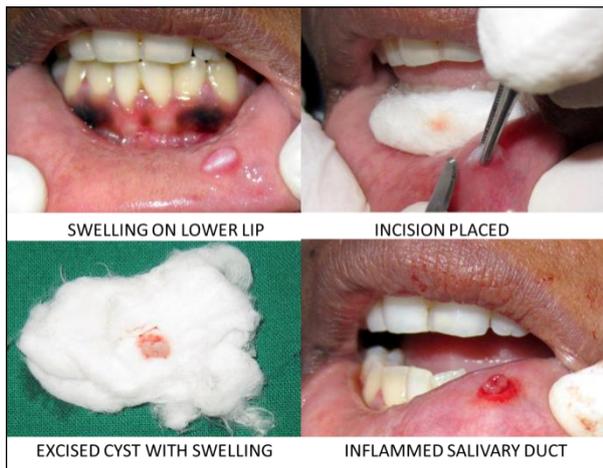


Fig-1

The area was anaesthetised using 1:80000 adrenaline; the growth was held with a haemostat and lifted to locate the base of the swelling. Incision was placed with 15 no blade along the lower border of the haemostat to excise the growth in toto. (Figure-1) The excised area was then examined and tissue tags were removed (Figure 1 and 2). Bleeding was controlled and the sutures were placed to approximate the wound

planned.

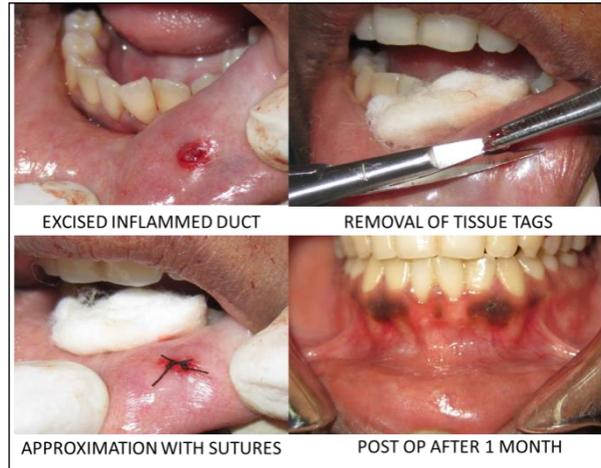


Fig-2

properly. (Figure-2) Post-operative instructions were given and analgesic was prescribed.

The excised tissue (Figure-1) was placed in 10% formalin and was sent for histopathological examination. Sutures were removed a week later, uneventful wound healing was seen (Figure-2).

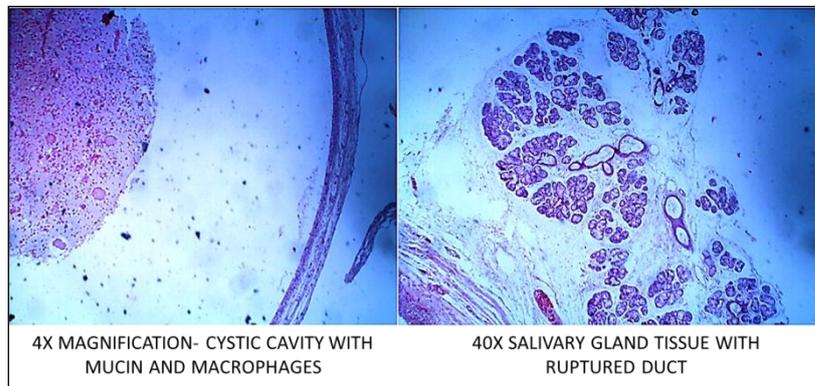


Fig-3

Histopathological report, (Figure-3) revealed Para keratinized stratified epithelium with few rete ridges. The underlining connective tissue stroma showed presence of numerous salivary gland tissues along the cystic space lined by inflammatory cell infiltrate suggestive of a mucous retention cyst. The final diagnosis of the case was thus a Mucocele (mucous retention type). Re-evaluation was done after 1 month. (Figure-2)

DISCUSSION

Mucocele is a painless, asymptomatic swelling located either as a fluid filled vesicle or blister in the superficial mucosa or as a fluctuant nodule deep within the connective tissue. In our case the growth had a rapid onset and was fluctuating.

Diagnosis is mainly clinical; therefore, a proper history and a thorough clinical examination should be carried out, looking for previous trauma. Palpation can be helpful for a correct differential diagnosis. Cysts, mucocele, abscess and haemangioma show fluctuation on palpation [6].

Histopathological examination is crucial to confirm the diagnosis and to ensure that glandular tissue is completely removed. Two types of mucocele are present: retention mucocele and extravasation mucocele. Retention mucocele are true cysts with an epithelial covering [6] Extravasation mucocele are pseudo cysts without defined walls. Histopathology of our case was suggestive of retention Mucocele.

The most frequent occurrence of the mucocele is in the lateral aspect of the lower lip [7], which also is a trauma-prone site. The lower lip is more susceptible to accidental trauma or nibbling and suction habits.

Our present case report also supports the role of trauma as an etiologic factor. The incidence of mucocele in the general population is 0.4-0.8% [8]. The literature describes different treatment options, including cryosurgery, intra-lesion corticosteroid injection [9], micro-marsupialization [10], conventional surgical removal, and laser ablation. Surgical excision along with removal of the involved accessory salivary gland has been suggested as the treatment approach[3]. The use of conventional approach using scalpel in our case minimizes the risk of relapse. Special care is required to avoid damaging other glands or ducts with the suture needle, since this may become a cause of recurrence. The excised tissue should always be submitted for histopathological investigations to confirm the diagnosis and rule out the salivary gland tumours.

CONCLUSION

Mucocele is relatively a common salivary gland cyst. Its recurrence rate is rare if the involved accessory salivary glands are removed. Care must be taken to eliminate the aetiology along with the surgical excision of the lesion.

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