

Mucocele: A Rare Presentation on Tongue

Dr. Mohd Rehan¹, Dr. Manish Khatri², Dr. Mansi Bansal³, Dr. Komal Puri⁴, Dr. Nisha Parveen⁵

Senior Lecturer¹, Professor & Head², Reader^{3,4}, PG Student⁵, Department of Periodontics, Institute of Dental Studies & Technologies, Kadrabad, Modinagar

Abstract

A solitary, nodular lesions of the oral mucosa is a diagnostic dilemma to the dentist. The lesions that appear on the tongue, a soft muscular organ are distinct and even rarer with varied manifestations. Oral mucosa presents lesions of the tongue in all age groups that may range from a small nodular swelling and ulcer formation in an infant of a few days old to an ulcer or a lesion in a 70-year-old. The reason for the appearance of an ulcer may be trauma to the soft tissues however, etiology for such lesions range from presence of natal teeth in infants to presence of a sharp tooth in the older individuals.¹

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Introduction

Oral mucocele is a common lesion resulting from an alteration of minor salivary glands due to mucus accumulation. Rapid appearance, specific location, history of trauma, bluish colour, and consistency help in the diagnosis. Conventional surgical removal is the treatment of choice but has several disadvantages like damage to adjacent ducts with further development of satellite lesions.

Mucocele are broadly classified into two types: extravasation and retention type. Extravasation mucocele results from a traumatized salivary gland duct with consequent spillage into the soft tissues around the gland whereas retention type appears due to a decrease or absence of glandular secretion produced by blockage of the salivary gland ducts. They are benign soft tissue masses clinically characterized by single, painless, soft, smooth, spherical, and translucent and fluctuant nodule, which is usually asymptomatic.

There are various treatment modalities which include surgery, laser ablation, cryosurgery, sclerotherapy, micro marsupialization, laser surgery, and intralesional injection of sclerosing agent or corticosteroid. Although surgery is widely used, it has several disadvantages such as lip disfigurement and damage to adjacent ducts with further development of satellite lesions. However, usage of intralesional corticosteroid is meagre in the literature. Luiz et al. (2008) and Baharv and et al. (2014) reported cases treated with intralesional corticosteroids whereas Mortazavi et al. (2014) had attempted combined intralesional dexamethasone and micro marsupialization.

Case Report

A male patient reported to the Department of Periodontics with a painless swelling of 4 day duration on the ventral surface of the tongue in the medial plane. The patient could not recollect any history of trauma. Clinical appearance was that of a mucocele. On examination the swelling was of the same color as that of normal mucosa, soft in consistency, fluctuant and translucent measuring about 2mm x 2mm (Fig.1). The differential diagnosis, included pyogenic granuloma, vascular lesions, lipoma, polyp and squamous papilloma. It was decided to excise the lesion under local anesthesia (Fig.2) The solitary lesion was excised together with the minor salivary glands by dissection down to the muscle layer (Fig. 3 & 5). The wound was left to heal for 3 weeks after suturing (Fig.4)



Figure 1: Pre-operative photograph



Figure 2: Surgical excision under local anesthesia



Figure 3: Post operative photograph

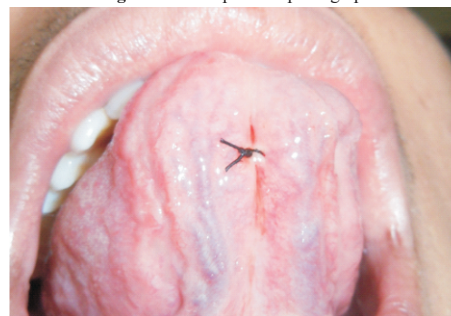


Figure 4: Suture placement after excision



Figure 5: Surgically excised lesion

After three weeks there was complete resolution of the solitary lesion. The patient has not reported second recurrence for six weeks. On follow-up of the patient after 18 months there was no recurrence of the lesion.

Discussion

Mucocele is a common benign lesion of the oral mucosa filled with mucus (muco meaning mucus and coele meaning cavity), which is the secretory product of salivary glands. originating

from the rupture of a salivary duct and extravasation of the mucin into the surrounding soft tissues.²

Mucocele on the tongue are rare and occur almost exclusively on the ventral surface where the glands of Blandin and Nuhn are located. If the mucocele is located directly under the mucosa (superficial mucocele), in the upper submucosa (classic mucocele) or in the lower corium (deep mucocele).²

In small mucocele cases, they are completely excised with primary closure and healing is rapid and uneventful. On the other hand, larger lesions may also be managed by marsupialization¹, cryosurgery³, laser ablation⁴ and micro-marsupialization².

Alternatives to surgery include steroid application such as corticosteroid clobetasol propionate 0.05%, which we have used in our case and a method where the cystic cavity is filled with rubber impression material presurgically, to improve the visual access for surgical excision can be tried out.⁶

It is recommended that mucoceles affecting the glands of Blandin and Nuhn should be removed up to the muscle plan, including the small glands found in the surgical field, to avoid recurrence. The glands of Blandin and Nuhn are not encapsulated and are directly overlapped to the muscle tissues; their manipulation tends to be different from the other oral mucoceles, besides they cannot be removed in toto like other mucoceles. When only marsupialization is performed, the lesion has every chance of recurrence as soon as the draining site is repaired.⁷

Conclusion

This case report stresses the importance of clinical aspects in the diagnosis of Blandin and Nuhn Mucocele to avoid its misdiagnosis. Different non-surgical methods of resolution such as tying of mucocele, intralesional injections of corticosteroids/ sclerosing agents etc can be tried out as treatment modalities. As clinicians, we should be prepared to encounter, different variants of mucoceles, whose occurrence is rare at various sites in the oral cavity

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