



ISSN : 2350-0743

www.ijramr.com



International Journal of Recent Advances in Multidisciplinary Research

Vol. 03, Issue 12, pp.2063-2065, December, 2016

## CASE REPORT

### EXCISION OF MUCOCELE – A CASE REPORT

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#### ARTICLE INFO

##### Article History:

Received 24<sup>th</sup> September, 2016  
Received in revised form  
26<sup>th</sup> October, 2016  
Accepted 18<sup>th</sup> November, 2016  
Published online 30<sup>th</sup> December, 2016

##### Keywords:

Mucocele, Surgical excision,  
Lower lip, mucous retention cyst,  
Minor salivary gland.

#### ABSTRACT

**Introduction:** The mucocele is one of the most common benign soft tissue masses that occur in the oral cavity. Mucoceles (mucus and coele - cavity), by definition, are cavities filled with mucus. Two types of mucoceles can appear – extravasation type and retention type. Diagnosis is mostly based on clinical findings. The common location of the extravasation mucocele is the lower lip and the treatment of choice is surgical removal. This paper gives an insight into the phenomenon and a case report has been presented.

**Case report:** Twenty five year old female patient reported with chief complaint of small swelling on the left side of the lower lip since 2 months. The swelling was diagnosed as extravasation mucocele after history and clinical examination. The treatment involved surgical excision of tissue and regular follow up was done to check for recurrence.

**Conclusion:** The treatment of lesion such as mucocele must be planned taking into consideration the various clinical parameters and any oral habits as these lesions have a propensity of recurrence.

#### INTRODUCTION

Mucocele is a common lesion of the oral mucosa that results from an alteration of the minor salivary glands due to the mucous accumulation causing limited swelling (Bagan Sebastian *et al.*, 1990). Two types of mucocele can appear - Extravasation and retention. Extravasation mucocele results from trauma to salivary gland duct and consequent spillage into the soft tissues around this gland. Retention mucocele appears due to decrease or absence of glandular secretion produced by blockage of salivary gland duct (Boneu *et al.*, 2005). Lower lip is the most frequent site for mucocele followed by buccal mucosa rarely found in retromolar region and posterior dorsal area of tongue (Neville *et al.*, 2004). When located on the floor of the mouth these lesions are called ranulas because the inflammation resembles the cheeks of a frog.

#### CASE REPORT

A healthy 25 year old female patient came with the chief complaint of swelling on the left side of lower lip since 2 months. The history of present illness consisted of swelling in the inner aspect of lower lip, which was of negligible size initially and gradually increased to the present size. The patient gives history of lip biting. No relevant medical or family history was elicited. Clinical examination of swelling showed it to be round, sessile nodule measuring about 5mm in diameter, soft and fluctuant, non-tender with no increase in temperature.

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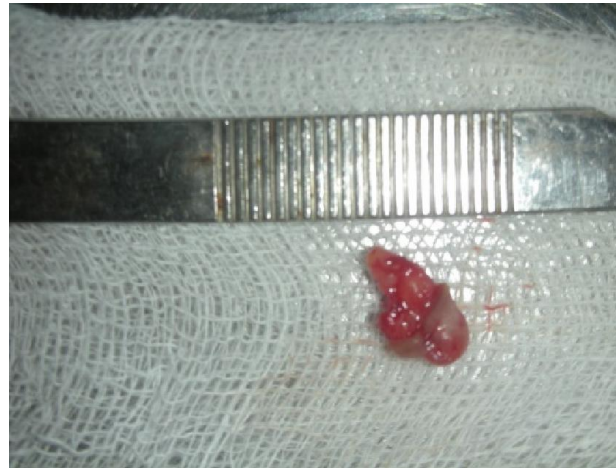
The patient was otherwise asymptomatic. The patient did not have any difficulty in speaking or chewing. There was no evidence of calcification or retained foreign body present in the radiograph of the soft tissue in this region. The clinical examination led to a tentative diagnosis of mucocele. Presurgical blood investigations were conducted and the values were found to be normal (Hb 13%, BT- 2min, CT- 6-10 min; TLC- 7200/cm). After general examination of the patient, an excisional biopsy was planned under local anaesthesia. Oral prophylaxis was performed on the first visit and oral hygiene instruction was given. After local infiltration, an elliptical (half-moon) incision (Fig 1) was given and the mucocele was resected completely (Fig 3) as a cyst. The wound was approximated and sutured (Fig 4). The specimen was sent for histopathological examination. Post-operative instruction was given and analgesics were prescribed. Patient was recalled after 1 week for the removal of sutures and a satisfactory wound healing was seen. No recurrence was seen after a follow up at 1 month, 3 months and 1 year.

#### DISCUSSION

Mucoceleles are usually formed secondary to rupture of an excretory duct of a salivary gland which leads to outpouring of saliva into surrounding tissues. The resulting pool of glandular secretion is first surrounded by inflammatory cells and later by reactive granulation tissue consisting of fibroblasts. This granulation tissue reflects an immune response (to wall of mucin). Although there is no epithelial lining surrounding the mucin, it becomes well encapsulated by this granulation tissue and is therefore categorised as false cyst or pseudo cyst.



**Fig. 1. Elliptical incision**



**Fig. 2. Excised specimen**



**Fig. 3. Complete excision**



**Fig. 4. Suturing done**

In contrast, a mucus retention cyst is a true cyst lined by epithelium. This type of cyst appears to be caused by obstruction of salivary duct by a calcified mass called sialolith or stone (Indraz Mustapha *et al.*, 2004). The incidence of mucocele in general population is 0.4 to 0.8% (Anastasaov *et al.*, 2000). As per the 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 site (40 – 80% cases) (Knapp, 1971) followed by cheek mucosa and floor of the mouth. The tongue, palate and upper lip are infrequent locations. Daley reviewed the clinical differential diagnosis of the swelling of the lower lip, listing mucocele, fibroma, lipoma, mucus retention cyst, sialolith, phlebolith and salivary gland neoplasm as possibilities (Daley, 1984). The literature describes different treatment options, including cryosurgery, intra-lesional corticosteroid injection, micro-marsupialization, conventional surgical removal, and laser ablation (Silva *et al.*, 2004; Twetman and Isaksson, 1990; Wilcox and History, 1978; Delbem *et al.*, 2000; Ata-Ali *et al.*, 2010). Surgical excision with removal of the involved accessory salivary gland has been suggested as the treatment. Baumash proposes 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 (Baumash, 2003).

This 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 for recurrence. Larger mucoceles can be treated by a procedure named marsupialization which involves surgical removal of cystic contents and suturing of cyst epithelium to the surrounding tissue. This will prevent recurrence. This procedure is also called the PARTSCH operation.

### Conclusion

Mucocele is the most common benign self-limiting condition. Trauma is the most common cause and therefore identification of the habit is important. Majority of these lesions are seen in the lower lip which can cause distress to the patient while speaking and chewing. Simple surgical excision is the treatment of choice and when done with care, it is the best treatment that can relieve the patient's anxiety and discomfort.

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