



Lip Mucocele: A Case Report

Dr.Rushi Kumar Patel¹, Dr.Nishant Singh², Dr.Aniket Singh Chauhan²,
Dr.Vinay Kumar³

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ABSTRACT:- A mucocele is a mucus-containing benign cystic lesion of the minor salivary gland. Mostly they are two types based on histological features mucous retention cysts and mucous extravasation cysts; arise in the minor salivary glands as a result of mechanical damage to the gland or its duct. The common sites are on the mucosal aspect of the lower lip, particularly in patients with a deep overbite, and in the buccal mucosa posteriorly where an upper wisdom tooth is erupting buccally. Typically the patient presents with a history of recurrent swelling that develops over days or weeks, ruptures and then recurs after a few weeks. They may have a soft consistency, bluish, and transparent cystic swelling. The treatment of choice is surgical removal of the mucocele.

Keywords: Mucocele, Mucous extravasation cysts, Excision, Lower lip, Minor salivary glands

I. INTRODUCTION

The term mucocele is derived from a Latin word, mucus and cocele means cavity. [1] Two types of distinct entities described are the true retention cyst, which is lined by epithelium and the other is the mucous extravasation cyst, which occurs because of the pooling of mucus. [2] It does not have any epithelial lining and is surrounded by compressed connective tissue cells; in some cases only granulation tissue is present. The two main etiological factors for mucocele are: 1) Traumatic injuries 2) Obstruction of salivary gland duct. [3]

Diagnosis of these cysts is not difficult, generally small in size, they appear as painless, superficial, well circumscribed, swellings on the mucosa. Mucocele is often approximately 1 to 2 mm in size. They do not exceed more than 1 to 2 cm in size. Dilemma in diagnosis may arise when they are deep seated. Fluctuation is positive. Colour is variable; it may be translucent or bluish. The mucocele may rupture spontaneously, with the liberation of a viscous fluid. However, in a few days to weeks, additional fluid accumulates and the lesion reappears. This cycle of rupture, collapse and refilling may continue for months. [4]

II. CASE REPORT

A 9-year-old male child reported to our dept. oral and maxillofacial surgery in Rama Dental College Hospital & research centre, Kanpur along with parents with the chief complaint of painless swelling in left lower lip region. (Figure.1) The history of present illness consisted of swelling in inner aspect of lower lip in relation to 73, 74 regions since past 3 months. That was initially small and progressed to the present stage. The history elicited from the accompanying parent showed etiology to be trauma from lip biting on the lower lip 5 months back, and no past medical history like was present. On examination of the lesion, it was soft, fluctuant and palpable with no increase in temperature, oval in shape.

Routine blood investigations were done, and the values were in the normal range. Finally, the case was diagnosed as a mucocele on the basis of the history of trauma and clinical features. The treatment was planned and explained to the parents. Once obtained parent consent, treatment was performed. Oral prophylaxis was done. Surgical removal of the lesion was planned. Local infiltration was given in the lower lip with 2% lignocaine. Elliptical incision was given near the borders of the mucocele. (Figure. 2) Excision of the mucocele from the base was done (Figure. 3, 4) surgical site was irrigated with povidone iodine and saline solution and primarily closed with 3-0 silk sutures. (Figure. 5) All postoperative instructions were given and analgesics were prescribed. Follow up months has not shown any recurrence. The excised tissue was sent for histopathological investigation.

Microscopically Mucocele showed a cystic cavity containing eosinophilic mucinous material and was lined by compressed fibrous tissue as well as granulation tissue with fibroblasts, few blood vessels and acute and chronic inflammatory cells. Few of Minor salivary gland ducts were filled with mucinous material.

III. FIGURES



Figure-1



Figure-2



Figure-3



Figure-4



Figure-5

IV. DISCUSSION

Mucocele is one of the most common benign soft tissue masses that occurs in the oral cavity. Various etiological factors that have been forwarded, are obstruction of a salivary duct, trauma to a salivary duct which is either pinched or severed, trauma to the secretory acini, congenital atresia of submandibular duct orifices, cystic type of papillary cystadenoma etc. Incidence is commonly seen in connection with the minor salivary glands. There is no predilection for age or sex. However, it has been reported that retention cysts occurred more frequently in older patients, whereas the extravasation cysts occur more commonly in the younger age group. Majority of mucoceles are seen to affect the lower lip. With the exception of the anterior half of the hard palate which is devoid of salivary glands. They can occur anywhere in the oral cavity, i.e. cheeks, ventral surface of the tongue, floor of the mouth, retromolar area.

The mucous extravasation cysts, do not have any epithelial lining, and are simply, poorly defined pools containing eosinophilic mucinous material and vacuolated macrophages, granulation tissue and condensed fibrous tissue, may be seen containing lymphocytes, polymorphonuclear leukocytes and eosinophils. The retention cysts will be partly or completely lined by epithelium which may be of stratified squamous epithelium or of cuboidal cells or pseudostratified columnar epithelium, macrophages may be associated with the epithelium lining.[5]

Conventional technique is commonly enucleation of mucoceles is frequently followed by recurrences. They are best treated by surgical excision together with the associated minor salivary gland tissue and surrounding connective tissue. A study of 14 pediatric patients describes micro marsupialization techniques with 85% success. The aim of this technique is to drain the mucus and reduce the size of the lesion. This technique consists of passing thick silk thread through the lesion at its largest diameter and then making a surgical knot. The suture is removed after 7-10 days, enough time for the mucocele to disappear.[6] Some studies have reported using cryosurgery in treating mucoceles with encouraging results[7,8]. Some authors have also suggested mucoceles were removed using intralesional steroid injection.[9] In a study of 82 patients suffering from mucoceles on the lower lip treated with CO₂ laser, it was observed that 2 lesions reappeared afterwards and one patient suffered temporary paraesthesia.[10].

V. CONCLUSION

Mucocele are one of the most common soft tissue lesions of the oral cavity which mainly benign and self-limiting in nature, easily diagnosed based on clinical appearance and accurate history. Most lesions have some history of trauma in that region. Simple surgical excision with care is also the treatment of choice that can relieve the patient fear and anxiety, and recurrence has been associated if the lesion excision is incompletely.

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REFERENCES

- [1]. Yague-Garcia J, Espana-Tost AJ, Berini-Ayres L, Gay-Escoda C. Treatment of oral mucocele -scalpel versus CO2 laser. *Med Oral Patol*
- [2]. *Oral Cir Bucal* 2009;14:e469-74.
- [3]. Nallasivam KU, Sudha BR. Oral mucocele: Review of literature and a case report. *J Pharm BioallSci* 2015;7:S731-3.
- [4]. Yamasoba T, Tayama N, Syoji M, Fukuta M. Clinicostatistical study of lower lip mucoceles. *Head Neck*. 1990;12:316-20.
- [5]. Dayashankar et al.; *BJMMR*, 17(8): 1-6, 2016; Article no. BJMMR.28157
- [6]. Baurmash HD. Mucoceles and ranulas. *J Oral Maxillofac Surg* 2003;61:369-78.
- [7]. Delbem AC, Cunha RF, Vieira AE, Ribeiro LL. Treatment of mucus retention phenomena in children by micro-marsupialization technique: case report. *Pediatr dent*. 2000;22:155-8.
- [8]. Marcushamer M, King DL, Ruano NS. Cryosurgery in the management of mucoceles in children. *Pediatr Dent*. 1997;19:292-3.
- [9]. Gill D. Two simple treatments for lower lip mucoceles. *Australas J Dermatol* 1997;38:104.
- [10]. Luiz AC, Hiraki KR, Lemos CA Jr, Hirota SH, Migliari DA. Treatment of painful and recurrent oral mucoceles with a high-potency topical corticosteroid: a case report. *J Oral Maxillofac Surg*. 2008;66:1737-9.
- [11]. Huang IY, Chen CM, Kao YH, Worthigton P. Treatment of mucocele of lower lip with carbon dioxide laser. *J Oral Maxillofac Surg*. 2007;65:855-8.