

A Case Report

Mucocele : A Case Report

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INTRODUCTION

Mucocele is a common salivary gland disorder that can appear in the lacrimal sac, paranasal sinuses, oral cavity, appendix, or gall bladder. These lesions occur due to mucous accumulation resulting from the alteration of minor salivary glands. Lower lip is the most common site of occurrence of these lesions in the oral cavity and most probable cause is trauma or habit of lip biting. Mucocele is defined as a mucus-filled cyst that may appear in the oral cavity, appendix, gall bladder, paranasal sinuses, or lacrimal sac. Two types of mucocele can appear in the oral cavity, namely, extravasation and retention type. In children, extravasation mucoceles are common and retention type of mucoceles are very rarely found. Extravasation mucocele results from a broken salivary gland duct causing spillage into the soft tissues around the gland. These extravasation mucoceles undergo three evolutionary phases. In the first phase, mucus spills diffusely from the excretory duct into the connective tissues. In the next phase, i.e., resorption phase, because of foreign body reaction, formation of granuloma occurs. In the final phase, there is formation of pseudocapsule (without epithelial lining) around the mucosa. Blockage of the salivary gland ducts causing decrease or absence of glandular secretion causes retention mucocele.

Clinical Features

Male and Females are equally predilected. It is Dome shaped, Incidence is 2.5/1000 patients, Size varies from 1-2 mm to several cms .Children and young adults are most commonly affected. Generally color is bluish translucent hue.generally fluctuant but some are firmer to palpation. Not associated with pain, Cannot be emptied by digital pressure, On aspiration yields a sticky, viscous clear fluid ,Fluctuant bluish, soft, and transparent cystic swelling that frequently resolve spontaneously. Blue color is due to vascular congestion, cyanosis of the tissue above, and accumulation of fluid below.

Histological Features

Hematoxylin and eosin section shows mucin pooled regions in central luminal area surrounded by granulation tissue. Periphery of the lesion shows salivary gland acini .

Differential Diagnosis :

- Haemangioma
- Haematoma
- Varicosity
- Low Grade Mucoepidermoid Carcino-ma
- Lipoma
- Superficial Cyst
- Lymphangioma

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DOI:
<https://zenodo.org/record/8116212>

How to cite this article: Thakran et al.:
Mucocele : A Case Report, HTAJ OCD 2023;
May-June(5):29-31

CASE REPORT

A 44-year-old man reported with complaint of swelling on the lower lip since 1 month. He had a history of trauma 1 month back. Swelling was soft, oval, sessile, and painless which was fluctuating in size. Patient took medication but swelling did not subside and not associated with any pain or any discharge. (Fig 1&2)

Investigation: Based on the clinical appearance and history, a soft oval swelling in left front region of lower lip, size approx-1\2 cm. Extension skin over the swelling was stretched, no secondary changes were seen. It was soft in consistency and freely moveable.

Provisional Diagnosis: Mucocele

Treatment: Under local anesthesia, surgical excision of lesion was done using scalpel blade and sutures were placed. Specimen was sent for histopathological analysis that confirmed the diagnosis. (Fig.3 &4)

Histopathologically: Hematoxylin and eosin section under 10 and 40 magnification showing granulation tissue encapsulated by dense fibrous connective tissue. (fig 5)

Final Diagnosis: On considering patient history, clinical and histopathological report the final diagnosis was Extravasation type mucocele was given.

Prognosis: Follow up was done for 3 months and no post operative complication was noted. An uneventful healing took place. Although occasionally it can recur, if the feeding glands are not removed.

Figure 1



Figure 2



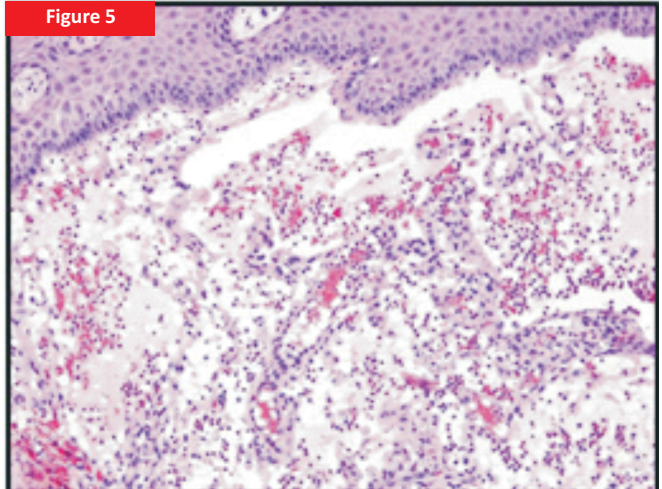
Figure 3



Figure 4



Figure 5



DISCUSSION

The appearance of mucocele is pathognomonic. Location of lesion, history of trauma, rapid appearance, variation in size, bluish color, and the consistency, history, and clinical findings lead to the diagnosis of superficial mucocele. Mucocele, fibroma, lipoma, mucus retention cyst, sialolith, phlebolith, and salivary gland neoplasm appear as swelling on the lip. However, these can be distinguished from mucocele based on their clinical appearance, color, consistency, etiology, and their location of occurrence. Conventional surgical removal is the most common method used to treat mucocele. Elliptical incision is the most popularly used treatment procedure. To reduce the chance of recurrence, lesion should be removed down to the muscle layer, all the surrounding glandular acini must be removed, and damage to the adjacent gland and duct should be avoided while placing the suture.

CONCLUSION

Mucocele are usually asymptomatic but sometimes can cause discomfort by interfering with speech, chewing, or swallowing. Treatment options include surgical excision, marsupialization, micro marsupialization, cryosurgery, laser vaporization, and laser excision. Because of high chances of recurrence, management of mucocele is a challenging task. However, surgical excision with dissection of surrounding and contributing minor salivary gland acini proved to be successful with least recurrence. Simple surgical excision is the treatment of choice, and when done with care, is the best treatment alternative.

REFERENCES

1. Baumash HD. Mucoceles and ranulas. *J Oral Maxillofac Surg.* 2003;61:369–78. [PubMed] [Google Scholar]
2. Ozturk K, Yaman H, Arbag H, Koroglu D, Toy H. Submandibular gland mucocele: Report of two cases. *Oral Surg Med Oral Pathol Oral Radiol Endod.* 2005;100:732–5. [PubMed] [Google Scholar]
3. Rao PK, Hegde D, Shetty SR, Chatra L, Shenai P. Oral Mucocele – Diagnosis and Management. *J Dent Med Med Sci.* 2012 Nov;2:26–30. [Google Scholar]
4. Laller S, Saini RS, Malik M, Jain R. An Appraisal of Oral Mucous Extravasation cyst case with Mini Review. *J Adv Med Dent Sci Res.* 2014;2:166–70. [Google Scholar]
5. Sukhtankar LV, Mahajan B, Agarwal P. Treatment of lower lip Mucocele with Diode Laser – A Novel Approach. *Ann Dent Res.* 2013;2(Suppl 1):102–8. [Google Scholar]