

Case Report-Mucocele

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ABSTRACT:

Mucocele it is a mucus retention phenomenon of major and minor salivary gland. Mucocele is the common salivary gland disorder and it is second most common benign soft tissue tumor in the oral cavity.

Mucoceles occur most commonly on the lower lip, followed by the floor of mouth and buccal mucosa being the next most frequent sites Mucoceles are usually asymptomatic, though in some patients they can cause discomfort by interfering with speech, chewing, or swallowing. Treatment options for mucoceles include surgical excision, marsupialisation, micromarsupialization, cryosurgery, laser vaporization, and laser excision.

Keywords: *Mucocele, minor salivary gland, lower lip, surgical excision.*

INTRODUCTION

Mucocele is the common lesion of the oral cavity which is originated from the rupture of a salivary duct and extravazation of the mucin into the surrounding soft tissue.¹ Generally, mucoceles are nodular and/or vesicobullous lesions, fast growing at the beginning and which can afterwards vary in size. Clinically they consist of a soft, bluish and transparent cystic swelling which normally resolves spontaneously. Yamasoba et al. highlight two crucial etiological factors in mucoceles: traumatism and obstruction of salivary gland ducts.² Mucoceles are usually asymptomatic, though in some patients they can cause discomfort by interfering with speech, chewing, or swallowing.³ Two types of mucocele can appear-extravasation and retention. Extravasation mucocele results from a broken salivary glands duct and the consequent spillage into the soft tissues around this gland. Retention mucocele appears due to a decrease or absence of glandular secretion produced by blockage of the salivary gland ducts.⁴

CASE REPORT

A 26 yr old male patient visited dental clinic with chief complaint of swelling in lower lip since 1month.the history of present illness patient was alright 1 month back and he started noticing soft,fluctuant swelling in the lower left labial mucosa in the tooth 31and 32 region which is increasing gradually since 1 month. The various differential diagnosis are Blandin and Nuhn mucocele, Ranula, Benign or malignant salivary gland neoplasms, Oral Hemangioma, Oral Lymphangioma, Venous varix or venous lake,Lipoma, Soft irritation



fibroma, Oral lymphoepithelial cyst, Gingival cyst in adults, Soft tissue abscess, Cysticercosis (parasitic infection), Superficial mucoceles may be confused with Cicatricial pemphigoid, Bullous lichen planus and Minor aphthous ulcers provisional diagnosis was formulated as a mucocele based on the history of lip biting habit and clinical features of the lesions.patient had no medical history.

It was treated under local anesthesia using scalpel by placing an incision circumferentially; and then the lesion was resected from the base, the surgical wound was closed with interrupted sutures. Post-operative instructions were given, and the patients were prescribed amoxicillin 500 mg 3 times a day for 3 days, and Ibuprofen 400 mg 3 times a day for 3 days.

The sutures were removed after a week.



Mucocele lesion seen on lower lip



Surgically excised mucocele



Interrupted suture given

DISCUSSION

Mucoceles may be located either as a fluid filled vesicle or blister in the superficial mucosa or as a fluctuant nodule deep within the connective tissue. It is a self-limiting mucous containing cyst of salivary glands occurring in the oral cavity with relative rapid onset and fluctuating size.^{5,6}

According to Dent et al., mechanical trauma to the ducts of the salivary glands causes rupture of the ducts which is followed by the extravasation of mucin in the connective tissue and is called as mucus extravasation phenomenon. When mucus is retained in the duct of the



salivary glands as a result of obstruction, it is referred to as mucus retention phenomenon.⁷ The extravasation type undergoes three evolutionary:

- Phases I: In the first phase, there is spillage of mucus from salivary duct into the connective tissue.
- Phase II: In the second phase, it is the resorption phase in which granulomas appear due to the presence of histiocytes, macrophages, and giant multinucleated cells associated with foreign body reaction.
- Phase III: In the third phase, there is formation of pseudocapsule without epithelium around the mucosa.⁸

Mucous retention cysts are lined by epithelium. The epithelial lining may consist of flat duct cells similar to intercalated duct cells or of bilayered duct cells similar to striated ducts or the surrounding excretory ducts.⁹

Conventional treatment of oral mucoceles is the surgical extirpation of the cyst, surrounding mucosa, and glandular tissue. Laser ablation, cryosurgery, and electrocautery are approaches that have also been used for the treatment of the conventional mucocele with variable success. Alternatives to surgery include steroid injections ¹⁰ and a method where the cystic cavity is filled with rubber impression material presurgically, improving the visual access for surgical excision.¹¹

CONCLUSION

In our case report we used excision by scalpel and with this procedure we didn't experience long healing period and more bleeding, we adopted this procedure mainly because it's easy and economical compared to laser ablation, cryosurgery and electrocautery.

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