

Surgical Treatment of Mucocele – A Case Report

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Introduction

Mucoceles (Mouco-mucus and coele-cavity), are cavities filled with mucus. These are one of the most common benign soft tissue masses that occur in the oral cavity. These are swelling in mouth which results from the accumulation of mucous secretion due to trauma and lip biting habits or alteration of minor salivary glands. These are most commonly found on the lower lip, lateral to the midline. These are rarely seen on the upper lip, retro molar pad or palate. These can affect the oral functions such as chewing and speaking and oral hygiene. Mucoceles can have very similar features with other oral lesions. Thus, a dentist must inform patients on their oral lesions advise them to seek further diagnosis and treatment in order to prevent any potential medical threats.

Mucocele may occur at any age, but are seen most frequently in the second and third decade of life. These lesions have no sex predilection and occur more frequently in children, adolescents and young adults. Mucoceles can be single or multiple often rupturing and leaving slightly painful erosions that usually heal within few days.

Etiology of Mucocele can happen when a salivary gland is injured or blocked. Many salivary glands exist in mouth, secreting saliva. Saliva is made of water, mucus and enzymes. Saliva moves from a gland into mouth through tiny tubes called ducts. Sometimes, one of these ducts can be cut, the saliva pools at the cut spot, and causes a swelling, or a mucocele.

Mucocele commonly occur inside the lower lip because of the biting habit, but it also can be found in other places inside the mouth, including the roof of the mouth and the floor of the mouth. If swelling occurs because the submandibular duct is blocked, the mucocele is called a ranula. A ranula is quite large and appears under the tongue or on the floor of the mouth. A mucocele developed on the gums is called epulis.

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Two types of mucocele can appear - extravasation and retention. Extravasation mucocele results from trauma to 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.

Clinically mucocele consist of a soft, bluish and transparent cystic swelling. The blue colour is caused by vascular congestion, and cyanosis of the tissue above and the accumulation of fluid below the mucosa. Coloration can also vary depending on the size of the lesion, proximity to the surface and upper tissue elasticity.

Mucoceles do not change color when pressure is applied on them. If a patient has a blue swelling that looks like a mucocele, the dentist may put pressure on it to see if it changes color. If it does, it may be a harmless growth made of blood vessels. This is known as a hemangioma. The dentist may take out the swollen tissue and send it to a laboratory. The laboratory can tell if the tissue is a mucocele, or if it is some other form of oral lesion. The patient may get an X-ray of the area, and the X-ray will show if the patient has a salivary gland stone. X-rays are often done for patients who have ranulas.

With proper diagnosis and treatment, mucoceles can be cured with an excellent outcome. Infrequently, a mucocele goes away without treatment. But if some mucoceles remain untreated, they can scar over. The dentist should examine any swelling in patients' mouth. Mucoceles are usually removed by surgery. The dentist may use a scalpel or a laser to remove a mucocele. The removed mucocele tissue will be sent to a laboratory for further evaluation.

The literature describes different treatment options for mucocele, including cryosurgery, intra-lesional corticosteroid injection, micro-marsupialization, conventional surgical removal, and laser ablation.

This report presents an eighteen year old male patient having mucocele on lower lip. Treatment performed was surgical removal as he suffered difficulty in mastication and speech.

Case Report

A 18 years old male visited the dental clinic with the chief complain of swelling in the lower lip (Fig 1). The history of present illness consisted of Swelling on the right lower lip since 2 week. It had been increasing since 1week. It was painless and no history of fever or malaise was present. It was Soft, fluctuant and palpable with no increase in temperature, and it was oval in shape (Fig.2).The lab investigations like HB, TLC and DLC were conducted and the values were found to be normal.

The differential diagnosis were Oral ranula, Oral lymphangioma, Oral haemangioma, Cicatricial pemphigoid, Bullous lichen planus and Minor aphthous ulcers.

The provisional diagnosis was formulated as a Mucocele on the basis of the history of the Lip biting habit and Clinical features of the lesion.

Treatment procedure: - It was treated under local anesthesia using scalpel by placing an incision circumferentially and then the lesion was resected from the base, sutures were placed (fig.3).Regular recall and checkup for the recurrence of the lesion was done.

Conclusion

Mucocele are one of the most common soft tissue lesions of the oral cavity which cause distress and discomfort to the patient. The present case report presented a small sized mucocele lesion on lower lip which was successfully treated with excision by scalpel method and it has exhibited uneventful healing with no post-operative complications. Hence we suggest that Out of many advanced treatment modalities simple surgical excision with care is the treatment of choice that can relieve the patient fear and anxiety.

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Fig. 1



Fig. 2



Fig. 3