



MANAGEMENT OF LARGE MUCOUS EXTRAVASATION CYST IN A PEDIATRIC PATIENT

Dental Science

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ABSTRACT

Mucus extravasation cysts are most common benign, painless swelling occurring in the oral cavity. The reason behind this swelling is due to blockage of salivary gland or its duct. The most common site of occurrence of this lesion is usually lower lip. Diagnosis of these lesions are mainly done based on clinical findings and histopathological evaluation. In the present report we are going to discuss a case of large mucus extravasation cyst clinical findings and its management through conventional surgical approach, along with histopathological evaluation.

KEYWORDS

Mucocele, Mucous Extravasation Cyst, Surgical Excision

INTRODUCTION

The definition of mucocele is - a mucus-filled cyst that may appear in the oral cavity, appendix, gall bladder, paranasal sinuses, or lacrimal sac.⁽¹⁻⁴⁾ Its term is derived from a Latin word, mucus, or mucus and coele or cavity.⁽¹⁻⁵⁾ Mucocele results from accumulation of mucus due to alteration in the minor salivary glands or its ducts.⁽³⁻⁶⁾ There are two types of mucocele appear in the oral cavity, extravasation and retention type. In children, mucus extravasation cysts are common then retention type of mucoceles.⁽⁷⁾ Mucus extravasation cysts results from a broken salivary gland duct causing spillage into the soft tissues. The clinical appearance of both the extravasation and also retention mucoceles is similar. Generally these mucoceles present as bluish, soft, painless and transparent cystic swelling that frequently resolve spontaneously. Mucus extravasation cysts commonly occur on the lower lip followed by the tongue, buccal mucosa, and palate. Where as retention mucoceles appear at any site in the oral cavity.⁽⁶⁾ These lesions are usually asymptomatic but they may cause discomfort by interfering with chewing, or swallowing and during speech. If this lesion is present near the floor of mouth it is termed as ranula.^(8,9) There are several treatment options including conventional surgical excision, marsupialization, or micromarsupialization, laser vaporization therapy, and cryosurgery.^(4,5) This article presents a case report of mucous extravasation cyst on lower lip treated by surgical excision method.

CASE REPORT

A 5 years old male child reported to department of pedodontics with the chief complaint of a big swelling on the left side of the lower lip since one month. On examination dome shaped swelling, which is soft, non tender and having bluish color of size 1*1cm noticed. this lesion is non pedunculate with board base(fig.1).

Based on history and clinical findings the swelling was diagnosed as mucous extravasation cyst. The treatment choice was conventional surgical approach as it is of larger in size. After administration of infiltration local anaesthesia (fig 2)(2% lidocaine with epinephrine 1:100,000) surgical excision of the lesion was done(fig.3&4) and sutures were placed(fig.5).

The excised tissue was sent for histopathological evaluation. Patient was kept under medication for 5 days. After one week follow up was done, sutures were removed and signs of healing was noticed. After one month follow up (fig.6) complete healing of the surgical site was noticed without any signs of recurrence of the lesion. Histopathological evaluation revealed this lesion as mucocele.



Fig.1 mucus extravasation cyst on lower lip



Fig.2 administration of local anaesthesia



Fig3. Surgical incision given on the lesion



Fig 4. Surgical excision of the lesion done



Fig 5. Sutures were placed



Fig 6. one month follow up- complete healing of lesion noticed

DISCUSSION

The incidence of mucus extravasation cyst is 0.4–0.9% and gender predilection was similar in both male and female.⁽⁵⁾ The diagnosis of

these lesions can be done based on location of lesion, history of trauma, rapid appearance, variation in size, bluish color, and the consistency, history, and clinical findings. Swelling of the lips can be due to pathology of any of the tissues of the lips like adipose, connective tissue, blood vessels, nerves and salivary glands. Swelling of the lips appear due to mucocele, fibroma, lipoma, mucus retention cyst, sialolith, phlebolith, and salivary gland neoplasm. However, these can be distinguished from mucocele based on their appearance clinically, color, consistency, etiology, their location of occurrence and through case history.

Mucocele may be appear either as blister in the superficial mucosa or a fluid filled vesicle or as a fluctuant nodule deep within the connective tissue. Recurrence chances were more if spontaneous drainage of mucus cyst especially in superficial lesions.⁽¹¹⁾

Conventional surgical approach is the common method used to treat mucocele. The chances of recurrence can be reduced by removing lesion down to the muscle layer, all the surrounding glandular acini must be removed, and damage to the gland and duct adjust to the lesion should be avoided while placing the suture.^(3,6,10)

CONCLUSIONS

Mucus extravasation cysts are commonly occurring, painless lesions of the oral cavity. Although they are asymptomatic, they cause discomfort to the patient during speech or eating. So, they should be treated and prevented. The chances of recurrence of these lesions were more. Surgical approach is effective in dissection of surrounding and contributing minor salivary gland acini which is proved to be successful with least recurrence rate. So, conventional surgical excision can be considered as one of the best treatment alternative.

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