

EXTRAVASATION MUCOCELE MIMICKING HEMANGIOMA - A CASE REPORT

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ABSTRACT

Mucoceles are the cystic lesions of the minor salivary gland, which consist of cavities filled with mucus, two types exist- extravasation type or the retention (true retention cyst) type. The majority of mucoceles, being of the extravasation type, consist of a circumscribed cavity in the connective tissue and submucosa, producing an elevation of the mucosa with thinning of the epithelium. This case report describes a lesion involving the ventral surface of the tongue which was clinically mimicking a capillary hemangioma, but on histological examination, it was diagnosed as extravasation mucocele.

KEYWORDS: Extravasation mucocele, Glands of Blandin and Nuhn, Hemangioma, Mucinophages, Ventral surface of the tongue.

INTRODUCTION

The mucous retention phenomenon or mucocele (muco meaning mucus and coele meaning cavity).^[1] is considered to be of traumatic origin. It is a lesion involving salivary glands and their ducts.

The seventeenth most common salivary gland lesions seen in the oral cavity are mucocele.^[2] They are mostly subdivided into two categories- 1.mucus extravasation type which is a result of the injury. It can lead to leakage and the collection of saliva in the surrounding tissues. A cavity is formed within the soft tissues, which is not surrounded by epithelial wall lining, thus a pseudocyst is developed. 2. Mucus retention type; obstruction of the salivary duct leading to a true cyst covered by epithelium.

Mucoceles may develop at any age. Among various studies, a higher incidence of both the 2nd and 3rd decade of life is seen with no sex predilection. Extravasation cyst is more common and occurs at a younger age when compared to the mucus retention type. The most common sites for extravasation.^[3] type are the lower lip (80%) followed by the ventral surface of the tongue and retention type is frequently seen in cheek, palate, and floor of the mouth.^[3]

Mucoceles present as an asymptomatic soft, painless swelling ranging from deep blue to normal pink in color, non - tender, fluctuant, and moveable because of their mucous contents.^[4]

Superficial lesions appear as raised, circumscribed vesicles, with bluish translucent color because of tissue cyanosis and vascular congestion.^[5] In the deeper lesion, because of the thickness of the overlying tissue, color and surface appearance are those of normal mucosa.

Treatment consists of surgical excision and other options for large lesions are marsupialization, cryosurgery, laser ablation, and the use of steroid injections.^[6]

Hemangioma is a benign tumor caused by excessive blood vessel growth. They are soft, smooth, sessile, or pedunculated. The color varies, depending on the depth of the lesion, from pink to red and violet. Sizes ranging from a few millimeters to a few centimeters, bleeding occurs spontaneously or reactively.

This case report describes a lesion involving the ventral surface of the tongue which was clinically mimicking capillary hemangioma and by histological examination, it was diagnosed as extravasation mucocele.

CASE REPORT

A 14-year-old female patient came to the department of Periodontology with the chief complaint of swelling on the ventral surface of the anterior portion of the tongue for two years and since two days it became large reddish in color. [Figure-1]. There was no relevant systemic history.

On extraoral examination, there was no obvious swelling or cervical lymphadenopathy. On intraoral examination it revealed, non-tender, and fluctuant, soft, friable, reddish colored swelling exerting pressure towards the teeth causing internal bleeding which was mimicking hemangioma. The Patient was put on anti-inflammatory drugs and called after 3 days. The swelling was reduced on recall. [Figure- 2].

It was not congenital and there was minimal growth and considering the age of the patient and clinical examination, the provisional diagnosis was mucocele.

Management consisted of initially disinfecting the area with 0.12% chlorhexidine mouthwash and local anesthesia was injected adjacent to the area. The lesion was held with a hemostat and superficial horizontal incision was given with 15 no blade and complete surgical excision of the lesion was done [Figure- 3] and sutures were placed. Betadine and saline irrigation was done. Analgesic was prescribed. Healing was uneventful.

The biopsy sample was submitted for histologic evaluation in 10% formalin. [Figure-4]. Histological evaluation revealed a non-keratinized stratified squamous epithelium. Underlying connective tissue consisting of loosely arranged collagen fibers with numerous proliferating blood capillaries filled with RBCs, moderately dense infiltration of chronic inflammatory cells and endothelial cells proliferation. One of the areas was showing a large empty space surrounded by granulation tissue. Mucinophages were observed surrounding the extravasated mucous. [Figure-5]. The Final diagnosis was mucocele extravasation type.



Figure 1: Initial presentation of the lesion on ventral surface of the tongue.



Figure 2: Presentation of lesion after 3 days showing shrinkage of the lesion.



Figure 3: Surgical excision of the lesion.



Figure 4: Excised tissue submitted for biopsy.

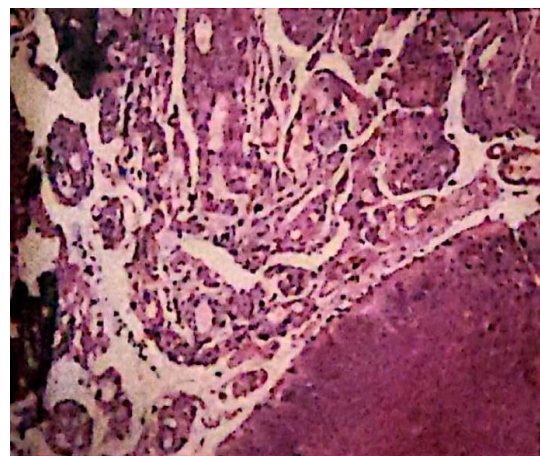


Figure 5: Histopathological presentation showing pseudocyst and mucinophages.

DISCUSSION

Three types of lingual oral minor salivary glands are glands of Von Ebner, glands of Weber, and glands of Blandin-Nuhn.^[7]

Glands of Blandin-Nuhn are a compact group of the mixed mucous and serous salivary gland, present on both the sides of the midline of the ventral tongue surface, embedded in the muscles of the ventral aspect and covered by a thin layer of mucosa.^[8]

Harrison reviewed 400 cases of mucocele in which only 9 cases were present on the tongue. It could be because the mucocele of glands of Blandin and Nuhn has not been fully characterized and contradictory results were obtained from the previous studies.^[9]

Joshi et al did a cross-sectional retrospective study of 164 cases of mucocele from 2005 to 2010 in which 30 cases of Blandin and Nuhn were selected for the study. He concluded that the glands of Blandin and Nuhn were prominent on the midline of the tongue, more frequently in the second decade of life in females and all 30 cases showed extravasation type of mucocele. Therefore, the mucocele of Blandin and Nuhn should not be considered as rare.^[10]

The findings of our case are similar to Joshi et al study matching in age, gender, and type of mucocele. In the same study recurrence of mucocele of Blandin and Nuhn was seen in 3 cases after surgical excision. Hence it was recommended that it should be removed up to the muscle plane including the small glands found in the surgical field.^[10]

CONCLUSION

In this study, mucocele originating from glands of Blandin and Nuhn in a female patient from the second decade of life present on the ventral surface of the tongue which was mimicking a hemangioma is discussed.

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