



CASE REPORT: MUCOCELE OF TONGUE

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Abstract: Common oral cavity cystic lesions are called mucoceles. that most commonly occur in the lower lip, floor of the mouth, and buccal mucosa. They can be caused by damage to or blockage of the oral mucosa's small salivary gland ducts. On the other hand, mucoceles that originate from the salivary glands located anteriorly lingually and are incredibly rare. and found on the tongue's ventral surface and are frequently overlooked during screening processes because they don't cause any symptoms. The following article describes a fascinating instance of mucocele in a male patient, age seven, on the anterior ventral surface of the tongue The review of the literature describes the different kinds of mucocele, as well as its pathogenesis, differential diagnosis , epidemiology, and available treatment options.

Keywords: Cyst; Salivary gland; MRI, Mucocele

I. INTRODUCTION

Mucoceles are small salivary gland-derived benign cystic lesions of the oral cavity. production of mucin either extravasating or remaining in the tissue [1]. Two processes, mucus extravasation and mucus retention, are responsible for the development of these lesions. When an accessory salivary gland forms a mucocele brought on by a physical injury, the former is primarily to blame. Swelling results from fluid seeping into the surrounding tissue from burst ducts or acni. As a result of an immune response, Following this, inflammatory cells surround the glandular secretion pool, followed by reactive granulation tissue with a high fibroblast content [2]. According to Jinbu et al. (2003), mucoceles of the lower lip account for 77.9% of all mucoceles, with mucoceles of the mouth floor (15.6) and lingual mucoceles (36%) trailing closely behind. The Blandin Nuhn glands give rise to the mucoceles on the tongue's ventral surface, which are thought to be highly unusual [3]. However the mucocele affecting ventral surface of the tongue unilaterally is uncommon.

Case Report :

A 24 year old male patient reported to the out patient department of Oral Medicine & Radiology, Sharad Pawar Dental College and Hospital, Sawangi ,Wardha DMIHER (DU) with the main complaint being edema throughout the tongue's ventral surface during the previous two months (Figure 1)



Figure 1 : DOME SHAPE SWELLING ON VENTROLATERAL SURFACE OF TONGUE

According to the patient's medical history, the swelling had been on her radar for roughly two months, but she denied experiencing any sporadic swelling or shrinkage. not a history of discomfort, trauma, or disease No prior history of trouble speaking or chewing food. The patient's dental history indicated that they had seen a local dentist a month prior and had been referred for additional care. There was no contributing medical history.

The extra-oral examination's results were not statistically significant (Figures 1, 2, and 3).



Figure 2 : Extra oral

Figure 3 : Intra oral

Upon intraoral examination, the swelling measured roughly 1 X 2 cm in dimension and had a round to oval shape. There was no indication of any discharge from the swelling. There was no pulse that could be seen. Swelling was non-tender and fluctuated when palpated. (Figure 4).



Figure 4 : Non-tender and fluctuated when palpated

A tentative diagnosis of mucocele was made based on the patient's medical history and physical examination.

Investigation : MRI revealed a well-defined round to oval cystic lesion measuring 17 X 16 X 18 mm (AP* TR* CC) along the anterior tongue's ventral surface, slightly off-center from the midline and projecting along the floor of the mouth.

There was no involvement of the tongue's extrinsic muscle, which is suggestive of a benign cystic lesion .

The patient was informed about the nature of the lesion, its benignity, the etiology, and the expected course of treatment for the condition. administering IV and LA sedation Topical anesthesia (xylocaine 5%) was applied to the affected area to begin the procedure The base of the lesion was then treated with infiltration anesthesia (2% lidocaine).

Finally, Three minutes before the procedure, 0.05–0.1 mg/kg of intravenous Midazola sedation was given. with a cumulative total dose of 0.4 mg/kg, not to exceed 6 mg. Using mosquito forceps, the lesion was closed, and the mucocele was removed by making a base incision that covered the affected small glands. Simple interrupted stitches and absorbable thread were used to suture the wound. In addition to prescribing analgesic medication, guidance was provided on post-operative care The patient was given a liquid-only diet. After seven days, the patient was reviewed with no complications.

Review Literature

One of the most frequent benign soft tissue masses in the oral cavity is a mucocele. Mucoceles are, by definition, cavities filled with mucus (muco = mucus, and coele = cavity) [4]. Mucoceles, the collective and clinical term referring to any cystic lesions of the small salivary glands that fall into one of two categories: extravasation or retention. The mucus extravasation phenomenon, also called the escape reaction, occurs when mucus that was contained in a granulation tissue envelope has protruded into the connective tissue. A cyst with retained mucin and ductal epithelium lining it is referred to as a mucus retention cyst [5]. The lip is where mucoceles most commonly occur because it is the most susceptible to injury. The floor of the mouth, the ventral tongue, and the buccal mucosa are the next most common sites for mucoceles [6]. Standish and Shafer [7] reported that About 45 percent of the mucoceles were on the lower lip. Less frequently found are the Blandin-Nuhnseromucous salivary glands the the base of the clefts that separate the von Ebner serous salivary glands and the foliate papillae, the lingual tonsils, the Weber glands, and the anterior ventral surface of the tongues Pathologies of the oral cavity are more common in children; the highest prevalence is seen in salivary gland pathology, which accounts 87.5% of mucous extravasation cysts [8]. Although the majority of mucoceles originate on the tongue's dorsal surface, relatively few cases have been documented where the mucoceles originate on the tongue's ventral surface. The development of a mucous extravasation cyst on a male ventral tongue is described in this article.

Conclusion

This case study shows that mucocele can occur in unusual places, such as the tongue's ventral surface. This highlights the importance of using caution when treating soft tissue swellings in the maxillofacial area in clinicians Their distinct clinical appearance is characterized by longitudinal swelling parallel to the lingual frenulum on the tongue's ventral surface. When the diagnosis is clinically evident, advanced imaging techniques like ultrasound, CT, MRI, or needle aspiration can confirm the diagnosis but are not always required.

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