



Mucocele in the Vestibule: A Case Report

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ABSTRACT

Mucocele is a benign soft tissue mass or growth. It is clinically characterized by a single or multiple, painless, fluctuant swelling. It is usually asymptomatic but causes some discomfort while eating, chewing or even speaking depending on its location. It is often mistaken for lipoma or other benign mesenchymal tumors in the oral cavity. It is diagnosed clinically or with the aid of histopathological investigation. It is a benign growth, thus, does not cause any serious consequences but can cause discomfort and aesthetic problems at times. Here, we report a case of mucocele in the vestibule which is one of the very rare sites to occur. It is the only case reported in Jigme Dorji Wangchuck National Referral Hospital (JDWRH) to the best of my knowledge. We describe this case of mucocele with swelling in the vestibule in a 30-year-old woman without any other complaints or systemic illnesses. The histopathological report of the excised mass confirmed the diagnosis of mucocele.

Keywords: Mucocele; woman; painless; vestibule.

Introduction

Mucocele is a benign soft tissue mass or growth(1, 2). It is clinically characterized by a single or multiple, painless, soft, oval, dome shaped or spherical, smooth, translucent to bluish in color, fluctuant swelling mass(3)(2). It often changes its size depending on the amount of saliva/mucus it has accumulated within it(1). At time it bursts out releasing its content thereby regressing in size(3). It is usually asymptomatic but causes some discomfort while eating, chewing or even speaking depending on its size and location(4). Sometimes, the mucocele of the lips can have aesthetic problems. There are more than 200 minor salivary glands spread all over the oral cavity along with three pairs of major salivary glands. Mucoceles are the most common minor salivary gland lesions affecting the human beings(5). It does not have any gender predilections, however, it can occur more frequently in people who have pernicious habits like lip biting habit, nail biting, gum chewing, trauma, or whose job involves around umpiring like a football umpire(2, 4-6). Minor salivary glands are found in most parts of the oral cavity except the gingiva(1). Vestibule is one of the rarest sites of occurrence of mucocele(6). Mucocele (muco - mucus and coele - cavity) are cavities filled with mucus (saliva). Mucocele is most common in the lower lips and in younger people(4, 5). The prevalence of mucocele varies across the globe with 2.5 lesions per 1000 population among Americans, 0.11% in Swedish and 0.08% in Brazilians(7). They are of two types usually, retention and extravasation types(6). The diagnosis of a mucocele is clinical but at times histopathological examination is essential to confirm the diagnosis(1). Treatment of mucocele depends on the clinicians. Mucoceles have high chances of recurrence, if the lining is not removed completely(1). Dental surgeons / Oral Surgeons remove the lesion by complete excision (surgery), cryotherapy, laser vaporization, laser surgery, nucleation or marsupialization depending on the size and location of the lesions(2, 4, 8). Complete excision along with the lining is the treatment of choice(1, 2, 8).

Case report

A 30 years old woman presented with the complaint of swelling on the right side of the mouth. It was painless with some discomfort but the size of the growth often changed. Sometimes it became big while at times the size regressed and became very small. The patient experienced discomfort while opening the mouth, brushing and eating. She revealed no history of trauma or any injury while brushing or eating. However, she was concerned of the

growth which was not improving on its own or with home remedies she was doing. There were no signs of healing, instead the growth frequently changed in size. Patient has no history of hemorrhage or paresthesia but often complained of discomfort.

During physical examination, extra orally, there was no swelling on the right body of the mandible and the face was symmetrical. Her vitals were within the normal range. She complained of discomfort only on the right side of the mouth without any pain. During intraoral examinations, a pinkish colored mass measuring 4 mm x 2.5 mm was seen on the right vestibule in relation to teeth 44 and 45. No other changes were noted. The growth as seen in the picture below: Figure 1.

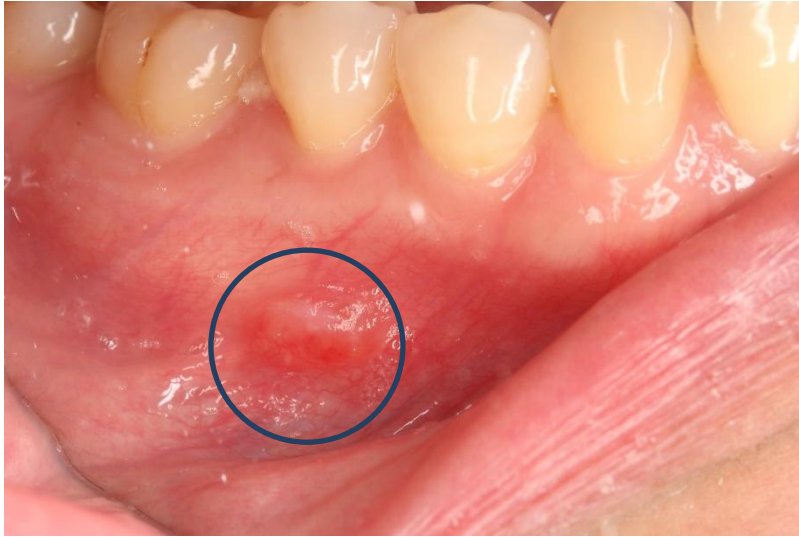
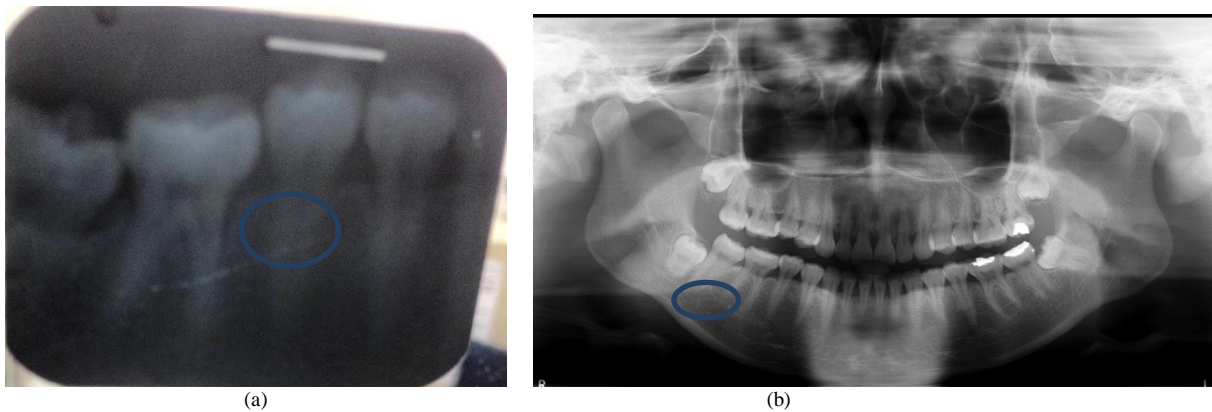


Figure 1. Patient with Intra- oral swelling/ growth

Radiographs, Periapical radiograph and full mouth x-ray, Orthopantomogram (OPG) were done to see if there were growth or bony involvement. Both the radiograph did not revealed any significant changes in the bone. The radiographs are as in (Figure 2) below:



(a)
Figure 2. Radiographs (a) Periapical radiograph and (b) Orthopantomogram (OPG)

After excision of the growth, it was sent for histopathological examination. Histopathological examination was consistent with mucocele. The histopathological finding is seen as in pictures below in (Figure 3):

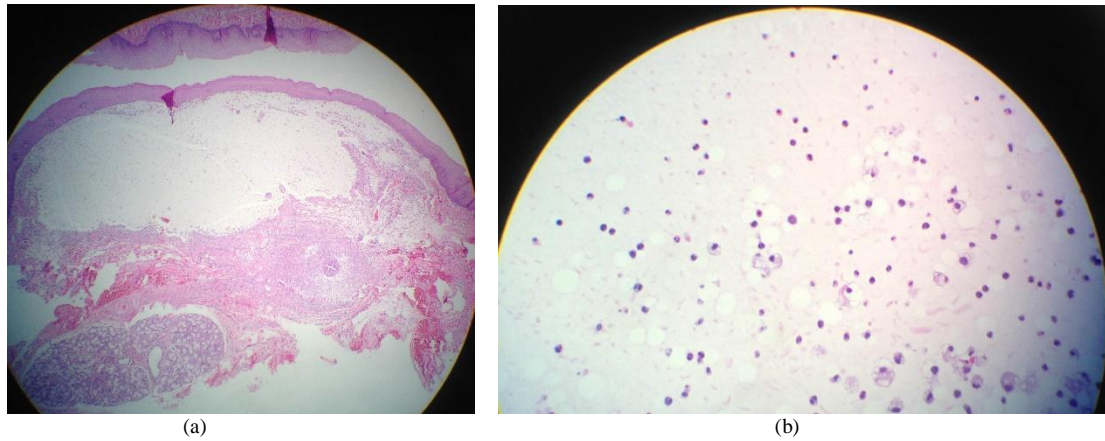


Figure 3. Histopathology Slides. (a) At Low Power Field (x4) and (b) At High Power Field (x40)

Patient was treated here at Dental department, JDWNRH. Excision of the growth was done (at the time of excisional biopsy). Triamcinolone Acetonide 0.1 % in orabase was given to reduce the swelling and inflammation. Paracetamol was advised to take only if there was pain. The patient was followed at 1 month and 3 months. The excision wound healed without scarring and there was no recurrence.

Discussion

Mucocele is the most common soft tissue cyst(5). Most frequently it is found on the lower lips(4, 5). Other sites are ventral surface of the tongue or the floor of the mouth(1). The occurrence or finding a mucocele in the vestibule is extremely rare(6). There are equal predilections for both male and female. It is usually caused by damage to the duct which leads to extravasation of saliva(1). Extravasation type of mucocele is more common than retention types(5). This saliva eventually pools up to form a mucocele with a connective tissue lining. It also rarely occurs due to salivary duct obstruction and dilatation forming a retention cyst with an epithelial lining(2).

Conclusion

Mucocele are benign lesions, as such does not pose any threat to life. This, non-neoplastic disease of salivary gland pose a diagnostic and therapeutic challenge to many clinicians. An experienced clinical eye, typical clinical findings should suffice the diagnosis. Thus, clinical knowledge of oral lesions, as well as the determination of aspects related to the cause of these lesions is necessary for the correct diagnosis and for the indication of appropriate treatment.

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