Case report

Rare Oral Mucous Extravasation Cyst: Case Report

Rajae El Gaouzi *, Bassima Chami 

1Oral Surgery Department, Faculty of Dentistry, Mohammed V University, Rabat 6212, Morocco
2Oral Surgery Department, Faculty of Dentistry, Mohammed V University, Rabat 6212, Morocco

*Corresponding author: Rajae El Gaouzi; rajaie_elgaouzi@um5.ac.ma

Received 13 March 2021; Accepted 28 April 2021; Published 10 April 2021

Abstract

Mucoceles are a benign lesions characterized by an extravasation or retention of mucous in submucosal tissue from minor salivary glands caused most probably by a trauma or habit of lip biting. They usually present as an asymptomatic small superficial swelling, which were known to occur most commonly on the lower lip, followed by the floor of mouth and in other sites. However, uncommon variants of oral mucoceles sometimes occur. Such lesions may be difficult to diagnose due to their unusual localization and atypical clinical presentation. This paper highlights a rare case of mucocele localized in hard palate in a 63 years old male patient. The lesion was depressed, with a bluish appearance, and it measured 7 mm × 5 mm × 2 mm. Diagnosis is based on clinical characteristics, and confirmed with histological features.

Keywords: Mucocele, hard palate lesion, extravasation cyst, benign lesion, surgical excision

Introduction

Mucocele is the most common lesion of the oral mucosa, it results from the accumulation of mucous secretion due to trauma and lip biting habits or alteration of minor salivary glands that causes limited swelling, characterized by a rounded, well-circumscribed, transparent, and bluish colored lesion of variable size [1]. Mostly they are soft in consistency and fluctuate on palpation. Mucocele is painless and have a tendency to relapse [2]. The aim of this work was to present a patient who has been diagnosed to have a hard palate mucocele, and to evaluate the outcome of the surgical excision of this lesion.

Case report

A systemically healthy 63-years-old man was referred to department of oral surgery of Ibn Sina dental consultation and treatment center in Rabat, Morocco, with chief complaint of localized swelling on the hard palate mucosa since three months. He reported a history of mucosal trauma caused by a fishbone. Intraoral examination revealed a painless swelling with light bluish hue on the posterior of hard palate, about 7 mm × 5 mm × 2 mm in diameter, soft and fluctuant on palpation (Figure 1).

Figure 1: Pre-operative view of the lesion

Based on clinical appearances, provisional diagnosis of mucocele cyst and angioma was made. Excision of the lesion was planned under local anesthesia also a diode laser was planned to use in these cases to provide bloodless field. The lesion was anaesthetized with articaine 68 mg/1.7 ml with 1/200 000 adrenaline. Aspiration test was made using a syringe 20 cc, resulting in release of viscous yellowish liquid. Then the complete excision was done (figure 2), and a few fine non-absorbable sutures were placed (figure 3), the bleeding was stopped without using diode laser.
A palate dental tray was used to protect the area during eating and swallowing. (Figure 4).

The tissue (figure 5) was conserved in Formol 10% and sent for histopathologic investigation which revealed a stratified squamous mucosal lining, surmounted by a thin layer of parakeratinized cells corresponding to mucus extravasation cysts (figure 6-7).

The removal of the sutures was done at the 7th day after the surgery (figure 8). The cyst was completely healed one month later (figure 9).
that results in the rupture of excretory duct of minor salivary glands [8].

Khanna et al. affirmed that parafunctional habits, such as biting and sucking the lower lip, are also related to the higher incidence in this region [9].

The clinical appearance of a mucus cyst is a distinct: fluctuant, painless swelling of the mucosa. About 75% of the lesions are smaller than 1 cm in diameter; however, rarely, the size can vary from few millimeters to several centimeters. Superficial lesions take on a bluish to translucent hue, whereas deep lesions have normal mucosal coloration and bleeding into the swelling may impart a bright red and vascular appearance [10]. The various differential diagnoses are abscess, hematomata, fibroma, lipoma, hemangioma like this case, lymphangioma, salivary neoplasms, recurrent herpes, mucous pemphigoid, benign and malignant tumors of salivary gland origin, varicose vein, irritation fibroma, oral lymph-epithelial cyst, gingival cyst of the adult. They are different by their clinical aspects and features [11].

Bhargava et al. attested that histopathological examination is crucial to confirm the clinical diagnosis [5]. Extravasation mucoceles are usually resolve spontaneously, after surgical excision in some cases [11].

There are no differences in the management of retention and extravasation mucoceles, and surgical removal is the standard method widely used for both. According to Romeo et al., surgical excision is the only treatment for this lesion, as constant recurrences in extravasation mucocele are observed when this procedure is not performed [2]. Baurmash proposed complete excision for small lesions and unroofing procedure (Remove the roof or covering of the cyst) for large mucoceles [14]. A strategy to prevent recurrences is to perform the excision of small lesions down to the muscular plane, with a margin of salivary gland tissue. In case of large lesions, marsupialization help prevent damage to vital structures, such as the labial branch of the mental nerve [2]. The excised tissue should be submitted to the pathological investigations to confirm the diagnosis. Laser ablation, cryosurgery, and electrocautery are approaches that have also been used for treatment of the conventional mucoceles, with variable success [4]. Another surgical method of oral mucocele management is ablation with CO2 laser, which decreases the chances of recurrence and complication and allows fast and simple lesion ablation. This procedure is also suitable for patients who cannot tolerate long procedures [12]. Steroid injection was also used in the non-surgical management of mucoceles [12].

### Conclusion

Oral mucocele is a fairly common lesion that primarily affects young patients and preferentially affects the lower lip. A mucus cyst on hard palate in old male patient is extremely rare. Extravasation mucocele is the most common subtype, affecting patients. Excision surgery is the most widely used treatment in able to avoid recurrences.

### Ethics approval and consent to participate

Written informed consent was obtained from the patient to publish anonymized information in this article.

### Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this paper.
Authors’ contributions

REG wrote the manuscript, BC read and corrected it. All authors read and approved the final manuscript.

References

[1] K.U. Nallasivam and B.R. Sudha. Oral mucocele: Review of literature and a case report. 2015 Aug; 7(Suppl 2): S731–S733.
[2] T.M.M. Bezerra, B.V.B. Monteiro, A.C.G. Henriques, M.V. Carvalho, C.F.W. Nonaka, M.C.C. Miguel. Epidemiological survey of mucus extravasation phenomenon at an oral pathology referral center during a 43 year period. Braz J Otorhinolaryngol. 2015.
[3] B. Senthilkumar, M.N. Mahabob. Mucocele: An unusual presentation of the minor salivary gland lesion. J Pharm Bioall Sci 2012;4:180-2.
[4] S. Titsinides, D. Kalyvas, K. Tosios. Mucocele of the dorsal surface of the tongue: A case report. 2018. 10, 495–498.
[5] N. Bhargava, P. Agarwal, N. Sharma, M. Agrawal, M. Sidiq, P. Narain. An unusual presentation of oral mucocele in infant and its review. Case Rep Dent. vol.2014. ID 723130, P6.
[6] A.C. Chi, P.R. Lamberd, M.S. Richardson, B.W. Neville. Oral mucoceles: a clinocopathologic review of 1,824 cases, including unusual variants. J Oral Maxillofac Surg. 2011. 69(1), 86-93.
[7] M. Abdel-aziz, B. Khalifa, A. Nassar, A. Kamel, N. Naguid, A. El Tahan. Mucocele of the hard palate in children. Int. J. Pediatr. Otorhinolaryngol. 2016. 85, 46-49.
[8] Ahad, A. Tandon, AK. Lamba, F. Faraz, P. Anand, A. Aleem. Diode laser assisted excision and low-level laser therapy in the management of mucus extravasation cysts: a case series. J Lasers Med Sci. 2017. 8(3), 155–159
[9] S. Khanna, N.N. Singh, G. Sreedhar, A. Purwar, S. Gupta. Oral mucous extravasation cyst: case series with comprehensive and systematic review on differential diagnosis. Int J Dent Case Rep. 2013. 3, 17-27.
[10] More CB, Bhavsar K, Varma S, Tailor M. Oral mucocele: a clinical and histopathological study. J Oral Maxillofac Pathol. 2014;18:S72-7.
[11] Ata-Ali J, Carrilo C, Bonet C, Balaguer J, Penarrocha M, M. Oral mucocele: review of the literature. J Clin Exp Dent. 2010;2:E18-21.
[12] Luiz AC, Hiraki KR, Lemos CA Jr, Hirot a SK, Migliari DA. Treatment of painful and recurrent oral mucoceles with a high-potency topical corticosteroid: a case report. J Oral Maxillofac Surg. 2008;66:1737-9.