

MUCOCELE OF THE TONGUE CAUSING FEEDING DIFFICULTY

Pediatric Otolaryngology

Submitted : 26.12.2021

Accepted : 06.07.2023

Published : 06.07.2023

Kayhan Öztürk¹, Nurdoğan Ata¹¹ KTO Karatay Üniversitesi Tıp Fakültesi, Medica Konya Hastanesi**Özet****BESLENME GÜÇLÜĞÜNE SEBEP OLAN DİL MUCOCELİ**

Mukoseller yaygın görülen kistik tükürük bezi lezyonlarıdır. Oral mukoseller en sık alt dudakta yerleşirler ancak oral mukozanın herhangi bir bölümünde yerleşebilirler. Dil mukoselleri nadir görülmektedir. Büyük oral mukoseller dil hareketini kısıtlayarak beslenme zorluğuna neden olabilir. Bu olgu sunumunda dilde şişlik ve beslenme güçlüğü ile başvuran 35 günlük kız bebek sunulmuştur. Mukosel tanısı Magnetik Rezonans görüntüleme ile doğrulandı ve cerrahi rezeksiyon yapıldı. Histopatolojik değerlendirme minör tükürük bezi mukoseli ile uyumluydu. Dil mukoselleri, emme problemlerinin nadir bir nedeni olabilir. Mukoselin tamamen çıkarılmasıyla tekrarlama önlenir.

Anahtar kelimeler: Mukosel, infant, beslenme zorluğu

Abstract**MUCOCELE OF THE TONGUE CAUSING FEEDING DIFFICULTY**

Mucoceles are common cystic salivary gland lesions. The commonest site is the lower lip but can affect any part of the oral mucosa and the involvement of the tongue is rare. Large oral mucoceles may cause breastfeeding problems by restricting tongue movement. Here we report a 35-day-old infant girl who presented with tongue swelling and feeding difficulty. Mucocele diagnosis was confirmed by Magnetic Resonance images and surgical resection was performed. The histopathologic evaluation was consistent with minor salivary gland mucocele. Tongue mucoceles can be a rare cause of sucking problems. Recurrence can be prevented by complete removal of the mucocele.

Keywords: Mucocele, infant, feeding difficulty.

Introduction

Mucoceles are the most common benign cystic lesions of the oral cavity [1]. Mucoceles caused by occlusion of major or minor salivary glands. They are most frequently located in the lower lip in the mouth and are most common in the second decade of life [2]. Tongue mucoceles are rare and are most common on the ventral side of the tongue. Mucoceles can also be seen in the dorsal, lateral and tongue base [3,4]. Large mucoceles of the tongue may cause breastfeeding problems by restricting tongue movement.5 We report an infant girl with breastfeeding problems caused by a large cystic lesion of the tongue.

Case Report

A 35-day-old infant girl presented with feeding difficulty and swelling of the tongue for 1 week. Her medical history was unremarkable. There was no history of oral trauma, oral surgery, foreign bodies, or medical illness. An examination of her tongue revealed a non-tenderness, superficial, protruding, fluctuant, soft on palpation, and approximately 2x2 cm in diameter on the left lateral side of the tongue. No ulceration was observed on the overlying mucosa. There were no palpable masses on her neck.

Magnetic Resonance Imaging (MRI) showed a cystic lesion on the left lateral surface of the tongue in hyposignal T1 and hypersignal T2. The cyst measured 19x17 mm in a diameter. There was no gadolinium enhancement (Figure 1A,B).

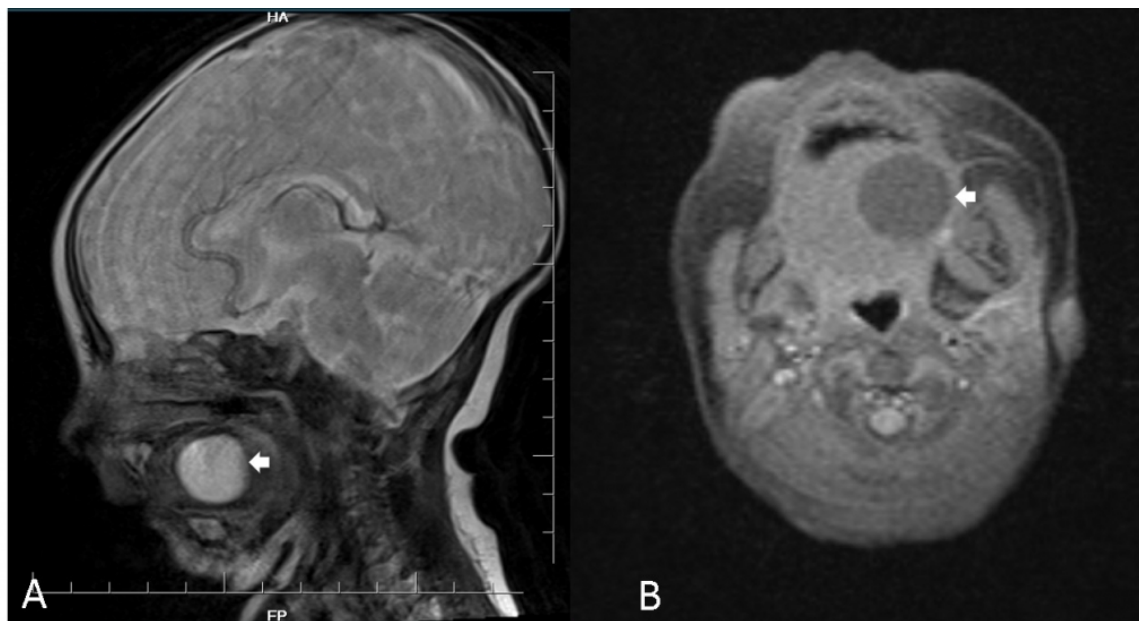


Figure 1

A: Sagittal T2 MRI image showing a well-defined cystic mass with high signal intensity.

B: Lesion showed a low signal intensity on T1-weight axial MRI image.

The cystic mass was removed with general anesthesia (Figure 2 A,B,C).

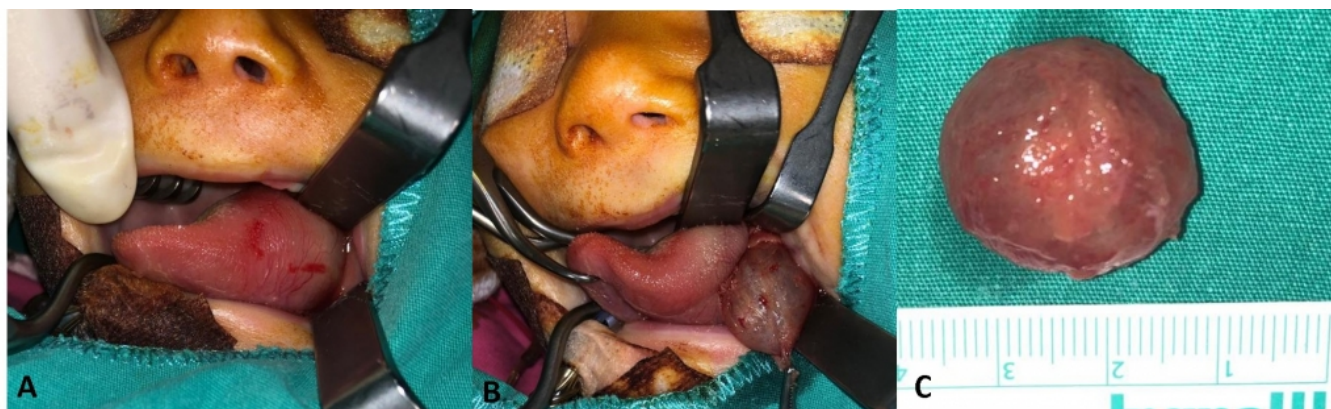


Figure 2

A: Clinical aspect of the lesion located in the lateral surface of the tongue

B: Intraoperative view of cystic mass.

C: Extracted mucocele.

Histopathologic examination of the cyst showed a submucosal cystic lesion with a squamous wall and mucous glands. There was no mitotic activity, nuclear pleomorphism or necrosis. Histopathological examination confirmed the diagnosis of the tongue mucocele, and clinical evaluation at 2-year follow-up demonstrated no evidence of cyst recurrence.

Discussion

Mucocele is a common benign lesion of oral mucosa that occurs due to obstruction of the duct of minor or accessory salivary gland, causing mucous accumulation, especially in young individuals. It usually appears as a solitary painless swelling, fluctuant, and imparts transparent to bluish hue to the lesion. The most common site of occurrence of mucoceles is the lower lip, followed by tongue, buccal mucosa, palate, and retromolar area [6,7].

Tongue mucoceles can be congenital or acquired. Acquired mucoceles can be caused by physical trauma such as biting or tearing; Therefore, the lower lip is the common site of these cysts. However, they can also result from a blockage in the salivary duct caused by a sialolith or a mucus plug [4]. In our case, the absence of congenital complaints suggests that the acquired mucocele or small-sized congenital mucocele, which was not noticed before, may have enlarged.

The clinical symptoms of tongue mucoceles vary depending on the size and location of the lesion. Small mucoceles can be asymptomatic. Speech, chewing and swallowing disorders can be seen due to large mucoceles [4].

Radiological imaging is necessary when diagnosis is unclear. Magnetic resonance imaging (MRI) is superior to computed tomography scans for oral cysts due to provide excellent soft tissue detail and distinguish the content of cyst. MRI of the mucoceles usually show high signal intensity on T2-weighted images and low signal intensity on T1-weight images [3,4].

The differential diagnosis of tongue mucocele includes other etiologic factors causing tongue swelling such as, abscess, lipoma, fibroma, pyogenic granuloma, hemangioma, lymphangioma, salivary neoplasms, recurrent herpes, mucous pemphigoid, hematoma and squamous papilloma [8,9]. Other than these, ectopic tongue localized thyroid should be kept in mind in the differential diagnosis [10].

The treatment of mucocele is surgical. When possible, it is beneficial to identify and remove the minor salivary glands associated with the mucocele to reduce the rate of recurrence [8]. Laser or cryosurgery ablation of the mucocele, marsupialization and intralesional steroid injection are other treatment options [2]. To make histopathological distinction from other cystic masses, it is important to subtract total instead of marsupialization [11]. Needle drainage and simple incision are not recommended for treatment due to the risk of recurrence. It has been reported in cases that resolved spontaneously [2].

Conclusion

In conclusion, mucoceles of the tongue are rare in infants. Although it is most common on the ventral side of the tongue, it can also be located on the lateral surface of tongue. Depending on its size and location, it can cause breastfeeding problems. Complete removal of the mucocele is recommended to prevent recurrence.

References

1. Zúñiga MD, Méndez CR, Kauterich RR, Paniagua DC. Paediatric oral pathology in a Chilean population: a 15-year review. *Int J Paediatr Dent*. 2013;23:346–51
2. Rodríguez H, De Hoyos Parra R, Cuestas G, Cambi J, Passali D. Congenital mucocele of the tongue: a case report and review of the literature. *Turk J Pediatr*. 2014 Mar-Apr;56(2):199-202.
3. Jinbu Y, Kusama M, Itoh H, Matsumoto K, Wang J, Noguchi T. Mucocele of the glands of Blandin-Nuhn: clinical and histopathologic analysis of 26 cases. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod*. 2003

- Apr;95(4):467-70.
4. Hur JH, Byun JS, Kim JK, Lee WJ, Lee TJ, Yang HS. Mucocele in the Base of the Tongue Mimicking a Thyroglossal Duct Cyst: A Very Rare Location. *Iran J Radiol.* 2016 Jan 26;13(1):e24827.
 5. Wong Chung JE, Ensink RJ, Thijs HF, van den Hoogen FJ. A congenital mucocele of the anterior dorsal tongue. *Int J Pediatr Otorhinolaryngol.* 2014 Jul;78(7):1179-81.
 6. Yamasoba T, Tayama N, Syoji M. et al. Clinicostatistical study of lower lip mucoceles. *Head Neck.* 1990;12:316–320.
 7. Bansal S, Verma DK, Goyal S, et al. Comparison of Micromarsupialization and Modified Micromarsupialization for the Management of Mucocoele of Lower Lip: A Prospective Randomized Clinical Trial. *J Maxillofac Oral Surg.* 2017;16:491-496
 8. Guimarães MS, Hebling J, Filho VA, et al. Extravasation mucocele involving the ventral surface of the tongue (glands of Blandin-Nuhn). *Int J Paediatr Dent.* 2006;16:435-9.
 9. Mandhan P, Napaki S, Ali M. Mucocele of the tongue. *ANZ J Surg.* 2017;87:E327-E328.
 10. Batsakis JG, El-Naggar AK, Luna MA. Thyroid gland ectopias. *Ann Otol Rhinol Laryngol.* 1996;105:996-1000.
 11. Nair V, Dey B, Deshpande AH, Nigam JS. Cystic Schwannoma of Tongue Masquerading as Mucocele: A Cytological Pitfall. *J Cytol.* 2018 Apr-Jun;35(2):125-126.