

Elad Machtey, MD; Ayelet Shles, MD; Ehud Rosenbloom, MD; Nir Friedman, MD

0196-0644/\$-see front matter

Copyright © 2020 by the American College of Emergency Physicians.

<https://doi.org/10.1016/j.annemergmed.2020.08.023>

Figure 1. Physical examination revealed a bluish, oval, 2.5×1-cm, sublingual mass (arrow).

[Ann Emerg Med. 2021;77:e83-e84.]

An 11-year-old previously healthy boy presented to the pediatric emergency department with a progressive, nonpainful, swelling mass in his mouth for the last 2 weeks. The mass caused discomfort without difficulty in talking, swallowing, or breathing.

Physical examination revealed a bluish, oval, 2.5×1-cm, sublingual mass arising from the mouth floor (Figure 1), which was soft and painless. Point-of-care ultrasonography performed by the emergency physician (Figure 2) revealed the diagnosis.

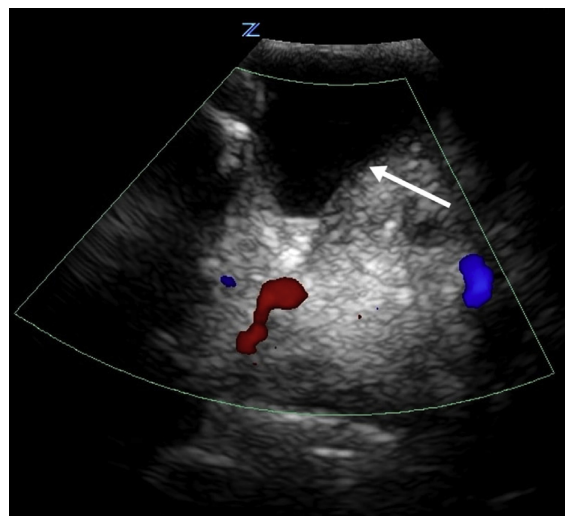


Figure 2. Point-of-care ultrasonography using color Doppler, demonstrating a well-circumscribed anechoic structure (arrow). Doppler did not reveal internal vascularization.

For the diagnosis and teaching points, see page e84.

To view the entire collection of Images in Emergency Medicine, visit www.annemergmed.com

IMAGES IN EMERGENCY MEDICINE

(continued from p. e83)

DIAGNOSIS:

Sublingual ranula. Sublingual ranula is a relatively common finding in the pediatric population, especially during the first and second decade of life.¹ It is a pseudocystic lesion that occurs usually after an oral trauma or sublingual salivary gland inflammation, which leads to extravasation of the saliva to the mouth floor. If left untreated, it can cause difficulty in speech and mastication, and even airway obstruction in rare cases.¹ Diagnosis is made by the combination of clinical presentation and imaging studies. Ultrasonography is often the first imaging modality chosen because of its availability, lack of radiation, and high reliability.^{2,3} Sublingual ranula ultrasonographic features consist of a low or anechogenic ovoidal or lobulated cystic lesion without intracystic vascularity and no to minimal peripheral hyperemia.⁴ When the diagnosis remains unclear, computed tomography or magnetic resonance imaging can be performed.^{4,5} Treatment choice for sublingual ranula between the classic surgical approach versus newer noninvasive medical options is still debated.^{1,6}

After the diagnosis, our patient was discharged home and an otorhinolaryngology visit was scheduled for follow-up.

Author affiliations: From the Pediatric Emergency Department, Meir Medical Center, Kfar Saba, Israel.

REFERENCES

1. Packiri S, Gurunathan D, Selvarasu K. Management of paediatric oral ranula: a systematic review. *J Clin Diagn Res.* 2017;11:ZE06-9.
2. Schwanke TW, Oomen KPQ, April MM. Floor of mouth masses in children: proposal of a new algorithm. *Int J Pediatr Otorhinolaryngol.* 2013;77:1489-1494.
3. Jain P. High-resolution sonography of sublingual space. *J Med Imaging Radiat Oncol.* 2008;52:101-108.
4. Edwards RM, Chapman T, Horn DL, et al. Imaging of pediatric floor of mouth lesions. *Pediatr Radiol.* 2013;43:523-535.
5. Zhi K, Gao L, Ren W. What is new in management of pediatric ranula? *Curr Opin Otolaryngol Head Neck Surg.* 2014;22:525-529.
6. Seo JH, Park JJ, Kim YK, et al. Surgical management of intraoral ranulas in children: an analysis of 17 pediatric cases. *Int J Pediatr Otorhinolaryngol.* 2010;74:202-205.