



## Management of Ranula in Primary Care

### Authors

**Dr Juan Toral Sanchez<sup>1</sup>, Dr Ahmed Hassan<sup>2</sup>**

<sup>1</sup>Family Medicine Consultant. Al Wakra Health Center (Qatar)

<sup>2</sup>Family Medicine Consultant. Omar bin Al Khattab Health Center (Qatar)

### Structured Abstract

**Introduction:** *A ranula is a benign mucous cyst arising from the sublingual gland. Although it is not a common lesion—particularly in children, where infectious processes are frequent—it can easily be mistaken for lymphadenopathy. Early recognition in Primary Care prevents unnecessary treatments and reassures families.*

**Case Presentation:** *An 8-year-old boy attended the Primary Care clinic because his mother had noticed a small lump under the mandible three days earlier. Initially, she did not pay much attention, as the patient had recently suffered from a common cold and she assumed it was an enlarged lymph node. Neck examination was normal. On oral inspection, the physician observed a translucent, fluctuant lesion on the floor of the mouth, consistent with a simple ranula. The child was asymptomatic. He was referred to ENT for further evaluation.*

**Discussion:** *Ranulas may resemble other common pediatric conditions, leading to misdiagnosis and inappropriate use of treatments, particularly antibiotics. Careful oral cavity examination is essential. The family physician plays a key role in recognizing these lesions and guiding families appropriately.*

**Conclusion:** *Ranula should be included in the differential diagnosis of sublingual or submandibular masses in children. A thorough oral examination in Primary Care can prevent diagnostic errors and facilitate appropriate management.*

**Keywords:** *ranula, mucocele, pediatric oral lesions, primary care, sublingual gland.*

### Introduction

Oral lesions in childhood are a frequent reason for consultation in Primary Care, yet they are not always easy to diagnose. Children may struggle to describe their symptoms, and oral examination can be challenging. Among the less common lesions is the ranula, a mucocele resulting from mucin extravasation from the sublingual gland. Although

benign, its appearance may cause confusion and alarm for both physicians and families. In early stages, it may go unnoticed or fluctuate in size, leading many families to believe it is an inflamed lymph node or an infection.

For family physicians, particularly in regions with a large pediatric population such as ours in the Middle East—where multiple languages coexist and

communication can be difficult—it is important to be familiar with this condition. Parents often present with concern, and distinguishing a benign lesion from one requiring referral avoids unnecessary investigations and reduces uncertainty and anxiety. It is common for parents to describe a lump under the mandible without realizing that the lesion is actually intraoral. This misunderstanding may result in inappropriate treatments, usually antibiotics, or delays in referral.

In this article, we present the case of a child whose family believed he had a submandibular lymphadenopathy. Careful examination allowed the identification of a ranula. The case highlights the importance of a systematic approach in Primary Care and of maintaining a broad differential diagnosis when evaluating masses in the submandibular or sublingual region.

### Case Presentation

An 8-year-old boy attended the clinic accompanied by his mother, who had noticed a small lump on the left side of his neck, beneath the mandible. She reported that the previous week her son had suffered from a common cold with nasal discharge and rhinorrhea, and she assumed the lump was an enlarged lymph node. The child was otherwise well, with no fever, pain, or dysphagia.

Neck examination was completely normal: no lymphadenopathy, tenderness, or inflammatory signs were present. A complete blood count was requested to rule out abnormalities in the white cell series, and results were entirely normal.

However, upon asking the child to open his mouth, a rounded, translucent, fluctuant swelling was observed on the left side of the floor of the mouth. The mucosa was intact and the lesion was painless. The mother noted that it sometimes appeared larger, particularly after meals.

The appearance and location were highly suggestive of a simple ranula. The benign nature of the lesion was explained to the family, and a scheduled referral to Otolaryngology was arranged.

### Extended Discussion

Although ranula is not among the most frequent oral lesions encountered in Primary Care, it is important to consider it, as it may be confused with other conditions and lead to uncertainty, unnecessary investigations, and iatrogenesis. In children, the distinction between an intraoral mass and a cervical mass is not always evident to parents. As in this case, many families interpret any lump near the mandible as a lymph node.

Ranulas typically present as painless, translucent, fluctuant swellings on the floor of the mouth. Their size may vary, especially after meals, due to increased salivary flow. This clinical behavior is a useful feature to differentiate them from lymphadenopathy or infectious processes, which are usually painful, firm, or associated with systemic symptoms.

In Primary Care, diagnosis is usually clinical and does not require complementary tests. Careful oral examination is essential, as lesions may be missed if only the neck is inspected. Recognizing the benign nature of the lesion avoids unnecessary antibiotic use, which still occurs when ranulas are mistaken for abscesses or adenitis.

Initial management consists of reassuring the family and arranging referral to a specialist. While some ranulas remain stable, others require surgical treatment. Marsupialization or excision of the sublingual gland are the most commonly employed techniques. If only the cyst is drained without addressing the gland, recurrence is highly likely.

This case underscores the importance of maintaining a broad differential diagnosis when assessing submandibular or sublingual masses in children. It also highlights the role of the family physician in guiding families, reducing anxiety, and ensuring appropriate referral.

### Conclusions

Ranula is a benign lesion that can easily be mistaken for lymphadenopathy in children. This case illustrates how a simple oral examination can clarify the diagnosis and prevent unnecessary treatments. The Primary Care physician is well positioned to

identify these lesions, reassure families, and coordinate referral. Including ranula in the differential diagnosis of sublingual or submandibular masses enhances diagnostic accuracy and improves quality of care.

### References

1. Baumash HD. Mucoceles and ranulas. *J Oral Maxillofac Surg.* 2003;61(3):369-78.
2. Zhao YF, Jia Y, Chen XM, Zhang WF. Clinical review of 580 ranulas. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod.* 2004;98(3):281-7.
3. Harrison JD. Modern management and pathophysiology of ranula: literature review. *Head Neck.* 2010;32(10):1310-20.
4. Patel MR, Deal AM, Shockley WW. Oral and plunging ranulas: what is the most effective treatment? *Laryngoscope.* 2009;119(8):1501-9.
5. Morton RP, Bartley JR. Simple ranulas: pathogenesis, diagnosis and management. *Aust N Z J Surg.* 1995;65(7):469-73.
6. Kurabayashi T, Ida M, Yasumoto M, et al. MRI of ranulas. *Neuroradiology.* 2000;42(11):917-22.
7. Zhi K, Wen Y, Ren W. Management of pediatric ranula. *Int J Pediatr Otorhinolaryngol.* 2009;73(7):923-6.