# Oral Cavity Foreign Body Masquerading as a Hard Palate Lesion in an Infant

Jay Bhatt, MD \(^1\); Kevin Huoh, MD \(^1,2\)

\(^1\)University of California, Irvine Medical Center, \(^2\)CHOC Children’s Hospital

## Introduction

We report an unusual case of a foreign body masquerading as a hard palate lesion in an infant. Given the rarity of such lesions and concern for malignancy, a thorough workup was obtained.

We discuss the case and our management. We also include a review of benign and malignant hard palate lesions in the pediatric population. Workup and management options are presented.

## Methods and Materials

PubMed query of English literature to collect publications, including case reports and review articles, published over the last 25 years, pertaining to hard palate lesions in the <18 year old population was performed. Fewer than 10 pertinent published articles were found.

## Case Presentation

A 12-month old boy presented to the pediatric otolaryngology clinic with a 3 day history of an anterior hard palate lesion and an inability to tolerate liquids. There was no history of trauma, including no known oral burns due to hot bottles or liquids. A complete review of systems was negative, expect for white patches that the mother was able to wipe away.

### Physical Exam and Workup

On exam, the anterior hard palate had a 2cm bright red lesion of the mucosa with mild surrounding inflammatory changes and irregular borders. The lesion was tender to palpation, with no obvious bony exposure. The remainder of the head and neck exam was unremarkable.

A complete blood count, comprehensive metabolic panel, and coagulation studies were all within normal limits.

A presumptive diagnosis of an infectious etiology was made and the patient was started on fluconazole and amoxicillin/clavulanate. A culture was performed which resulted only in light growth of *Prevotella* sp.. The patient returned for clinic follow up 11 days later. He was now taking normal liquids and solids. The lesion was similar sized, slightly more yellow colored. Additionally, palpation was concerning for potentially exposed bone. Flexible nasal endoscopy did not show involvement of the nasal floor.

Given the persistent nature of the lesion and our concern for a more insidious etiology, the patient was admitted for expedited imaging and surgical biopsy. A CT scan of the face and neck was obtained, which showed slight ulceration of the soft tissue of the palate but no bony erosion or changes.

### Operative Course

The patient was taken to the operating room for a biopsy. Monopolar cautery was used in an attempt to excise a portion of the lesion, and in doing so, the lesion was able to be lifted off in its entirety. The underlying mucosa was entirely normal.

The lesion was inspected on the back table and was identified to be a round 2cm sticker. In retrospect, the mother recalls the patient playing with circular stickers that resembled this foreign body. The patient was monitored overnight and had no postoperative issues.

## Discussion

Our review revealed that there is a paucity of literature describing palatal masses in the pediatric population. Case reports indicate that lesions include: *Epstein’s pearls* and Bohn’s nodules in newborns, palatal abscess, mucoceles, tori palatine, traumatic lesions and less commonly, salivary gland tumors, congenital hairy polyps, rhabdomyosarcoma and other sarcomas, teratoma, and reactive conditions such as necrotizing sialometaplasia.

### Workup

Given the range of potential diagnoses, a thorough history and physical should be performed. Systemic findings should prompt a further workup, including evaluation for infectious etiology. A punch biopsy can also be performed for suspected malignancy. CT imaging, with special attention to coronal sections to evaluate for bony involvement of the hard palate, for extension to the nasal fossa, maxillary sinus, and the skull base, can be performed as well. MRI imaging can be used for suspected perineural invasion. Most importantly, the clinician should maintain a broad differential, as even a simple sticker can incite a foreign body response and require a thorough workup.

### Management

Options include observation for suspected benign conditions and treatment with antibiotics for infectious etiology. Surgical excision, when indicated, should be performed with consideration of reconstruction, given the risk of velopharyngeal insufficiency.

## Conclusion

To our knowledge, this is the first report of a sticker stuck to the hard palate, inciting a foreign body response that resembles a palate lesion. Review of literature also indicates that hard palate masses are rare in the pediatric population, which should thus prompt a thorough workup and management.

## References