

## A Foreign Body in Infant Palate: A Case Report

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### ABSTRACT

*This report aims to discuss the occurrence and differential diagnosis in hard palate foreign bodies in infants. We present the case of a 16-month-old girl who was found to have plastic part of a toy embedded in her hard palate as a foreign body. The foreign body was extracted with care to avoid aspiration. The possibilities of misdiagnosis and airway aspiration are discussed. Great care was focused on the prevention of airway aspiration.*

**Keywords:** Foreign body, oral cavity, palate, therapy.

### INTRODUCTION

Foreign bodies in the upper aerodigestive tract are commonly seen in the paediatric population (1). Foreign bodies in the hard palate have only rarely been documented (2). Hard palate foreign bodies most commonly occur between the age of 6 and 23 months (3). The curve of the child's hard palate in this age group facilitates adherence of foreign bodies (3). The tendency of mucosa swelling and inflammation can sometimes obscure the foreign body, but not as frequently as in other parts of the oral cavity (3).

### CASE REPORT

A healthy 16-month-old girl was previously treated for 3 months in the Regional Medical Centre by a paediatric dentist. She displayed the diagnosis of oral candidosis and consequently underwent the application of miconazole and nystatin. In the clinical presentation, to our office, a well-circumscribed pink flat area was noted in the middle of the hard palate. It was surrounded by the oedematous mucosa, which overgrew the edges of the foreign body (Fig. 1).

A careful examination of the patient's mouth showed a prominence in the central portion of the area that was suspected to be a foreign body. The patient was placed in the prone position to minimize the concerns for the aspiration of a foreign body. The area was anaesthetized



Fig. 1: A 16-month-old infant with a foreign body in her hard palate.

topically with Gingicaine, and the foreign body was extracted posteriorly to anteriorly, with great caution to avoid possible aspiration.

An extraoral examination of the foreign body indicated that it was a plastic part of a toy (Fig. 2). The patient had an impression on the hard palate with the exact shape of the foreign body (Fig. 3). The patient was reviewed 2 weeks after the procedure in an outpatient setting, and the palate was healing well.

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Fig. 2: Foreign body.



Fig. 3: Impression in palate from the foreign body.

## DISCUSSION

A report by Hussain *et al* contained 27 cases of hard palate foreign bodies described in the English literature in 2008 (4). Various objects have been described as hard palate foreign bodies, ranging from nut shells to clothing buttons. In many cases, the surrounding mucosa became irritated and inflamed, overgrowing the edges of the foreign body. The usual differential in diagnosis, prior to discovering the foreign body is diagnosing the area as a neoplastic formation (3, 5). Beside the neoplastic formation, the initial diagnoses like palatal cleft

and cysts or granulomatous lesions are described in the literature (4, 5).

In this case, the primary diagnosis was the fungal infection of the palatal mucosa. As Rocha described, the factors that influence the diagnosis or misdiagnosis are poor patient history due to children's early age and the noncontributory information given by their parents as well as the brief intraoral clinical examination very often caused by very irritated and uncooperative children condition during the clinical examination (6). When considering palatal lesions in an infant, foreign bodies should always be considered in the differential diagnosis (4). At the moment of foreign body extraction from the hard palate, extreme care must be taken to avoid the aspiration of the extracted foreign body, which can result in respiratory distress, lung injury and possibly even death (4). Some authors (3, 4) described the use of endotracheal anesthesia in the extraction procedure in an effort to prevent aspiration.

Frequent incorrect diagnosis and the danger of aspiration highlight the growing importance of keeping a foreign body high in the differential when facing an unknown mass in the hard palate of an infant.

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## AUTHORS' NOTE

The authors declare that they have no conflict of interests.

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