

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 the hard palate as foreign body. The foreign body was extracted with care to avoid aspiration. The possibilities of misdiagnosis and airway aspiration were discussed. Great care was focused on prevention of airway aspiration.

Keywords: Foreign body, oral cavity, palate, therapy

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INTRODUCTION

Foreign bodies in the upper aero-digestive tract are commonly seen in the pediatric 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 oral cavity (3).

CASE REPORT

A healthy 16 month old girl was previously treated for three months in the regional medical center by a pediatric dentist. She carried the diagnosis of oral candidosis and consequently underwent application of myconazol 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 edematous mucosa, which overgrew the edges of the foreign body (Figure 1).



Figure 1. A 16-months old infant

A careful examination found 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 concerns for aspiration of a foreign body. The area was anesthetized topically with gingicain and the foreign body was extracted posterior to anteriorly, with great caution to avoid possible aspiration.

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



Fig 2: Foreign body



Fig 3: Impression in palate from the foreign body

DISCUSSION

A report by Hussain- reported 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 neoplastic formation initial diagnoses like palatal cleft and cysts or granulomatous lesions are described in literature (4, 5).

In this case primary diagnosis was fungal infection of palatal mucosa. As Rocha described, factors with influence on 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 aspiration of the extracted foreign body, which can result in respiratory distress, lung injury and possibly even death (4). Some authors (3, 4) describe the use of endotracheal anesthesia in the extraction procedure in an effort to prevent aspiration.

Frequent incorrect diagnosis and 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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