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INCIDENTAL FINDING OF PALATAL FOREIGN BODY OF AN INFANT- A CASE REPORT AND REVIEW OF LITERATURE

Maxillofacial Surgery

Dr. Debasmita Ray* Bds, 3rd Year Mds Postgraduate Trainee, Dept. Of Oral And Maxillofacial Surgery, Guru Nanak Institute Of Dental Sciences & Research, Panihati, Kolkata. *Corresponding Author

Dr. Tamal Kar Bds, 2nd Year Mds Postgraduate Trainee, Dept. Of Oral And Maxillofacial Surgery, Guru Nanak Institute Of Dental Sciences & Research, Kolkata.

Dr. Amit Ray Bds, Mds Professor, Hod At The Dept. Of Oral And Maxillofacial Surgery, Guru Nanak Institute Of Dental Sciences & Research, Kolkata.

Dr. Avishek De Sarkar Bds, Mds Professor, Dept. Of Oral And Maxillofacial Surgery, Guru Nanak Institute Of Dental Sciences & Research, Kolkata.

ABSTRACT

Context : Foreign body in palate is very much common in infants and children. In case of infants, negative pressure from pacifier use, thumb sucking, breast feeding and characteristic texture of the child's palate can cause adhesion of the foreign object to the roof of the mouth. In case of children, they are naturally curious and explore their environment using their hands and mouths. These objects can clinically resemble more serious oral pathologies such as neoplasia or chronic inflammatory conditions. There are several literatures have been reported predominately by dentists, oral surgeons and paediatricians in the worldwide. **Aim :**The aim of this case report was to describe a rare case of foreign body in the palate of an infant and to highlight the thorough clinical examination in an uncooperative child and foreign bodies must be considered in the differential diagnosis of palatal lesions found in children because unique foreign body and its position in the oral cavity made this diagnosis more difficult. **Conclusion :** A clinical examination is utmost important, often can be done under anesthesia, if necessary, before a diagnosis is reached.

KEYWORDS

Foreign body, Palate, Children, Differential diagnosis

INTRODUCTION: -

Foreign bodies are uncommonly impacted in the oral cavity in adults but may commonly be associated with infants and children. Although normally such objects are expelled, swallowed or aspirated, but negative pressure from pacifier use, thumb sucking, breast feeding and characteristic texture of the child's palate, can cause adhesion of the foreign object to the roof of the mouth. Most cases occur in infants and children and are usually accompanied by a poor history and difficulty in clinical examination, which may be a problem to establish an accurate diagnosis and sometimes it created life-threatening situation as it can be aspirated. Over time, surrounding soft tissue can become inflamed and even grow over the object entirely. [1]

As clinical examination of the oral cavity in infants and children is challenging, radiographic evaluation is often performed in order to evaluate abnormal regions within the oral cavity. These radiographic scans can be extremely helpful, but may be unnecessary as illustrated in this case. So, a clinical examination is utmost important, often can be done under anesthesia, if necessary, before a diagnosis is reached. [2]

Report Of A Case: -

We report a case of a one and half year old healthy female child who was brought by his parents to the Department of Oral and Maxillofacial Surgery, Guru Nanak Institute of Dental Sciences and Research, Kolkata because the mother incidentally noticed something in the child's mouth, 10 days before. The lesion was "Y" shaped and white coloured over the hard palate and had associated with inflammatory changes over the surrounding tissue on inspection. On palpation, it was hard, slightly elevated in relation to mucosal plane and there was no difficulty during feeding.

Patient's parent did not give any complaint about fever, weight loss and he was not taking any medication for this. Clinical examination was so much difficult as patient was irritated and uncooperative. So that, 2 ml. Triclofos oral solution was given and wait for 10 mins. After that, thorough examination was done and noted that it was a foreign body resemble with learning alphabet letter "Y". [Figure 1]

Removal of the object was done [Figure 2] and there was erythematous underlying mucosa. No lymphadenopathy was detected, and the remainder of the examination was noncontributory. One week later the palatal mucosa had fully recovered. [Figure 3]

DISCUSSION: -

In the preschool age group, impalement injuries of the oral cavity are not uncommon because children of this age often walk about while sucking or holding objects in their mouths. [3]

In the group of children under 6 years of age, injuries to the mouth and oropharynx are usually caused by objects, such as pens, pipes, and cylindrical toys. [3]

Differential diagnosis without a detailed clinical examination may include different malignant tumours and cysts, such as eosinophilic granuloma, melanotic neuroectodermal tumor of infancy, sarcoma, osteolipoma, sphenoethmoidal encephaloceles or odontogenic cysts. [2, 4]

Also, leukemic infiltrates, ulcerative and necrotic lesions or fungal infections should be considered, although these are also infrequent diagnoses in paediatric population.

Foreign bodies should also be included in the differential diagnosis of palatal masses in the infant population and may, in fact, be more common than pathogenic lesions. Approximately 20 cases have been reported in the English literature, mostly occurring in children under two years of age. [4]

The mechanism of attachment is likely related to both the anatomy of the pediatric palate and the behavioural tendencies of small children who frequently place small objects in their mouths. With concomitant thumb-sucking, pacifier use, and feeding, these objects may form a tight seal to the mucosa of the hard palate.

When considering a palatal lesion in an infant, foreign bodies should always be considered in the differential diagnoses. In previous literatures, where the foreign body has been undiagnosed, imaging studies such as Computerised Tomography have been carried out on the infant. This has led to unnecessary exposure to radiation and the CT scans themselves have contributed little to the diagnosis. [5]

A thorough examination may require local anesthesia or even general anesthesia. In addition, foreign bodies may go through local inflammatory changes and adhere with the underlying mucosa, preventing their removal in the Outpatient Department. Furthermore, airway control and the prevention of accidental aspiration during removal may necessitate removal in the operating room. The possible outcomes of aspiration include acute respiratory distress, chronic and

irreversible lung injury and even death.

CONCLUSION: -

Foreign bodies should also be included in the differential diagnosis of palatal masses in the infant population. Thorough clinical examination should be considered for every case despite uncooperative nature of children before going for a radiographical examination. Accidental aspiration may occur during removal so, patient should laid down laterally during removal.

Consent: -

Written informed consent were obtained from the patients for publication of this research article and accompanying images.

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Conflicts Of Interest: -

The authors of this manuscript declare that they have no conflicts of interest, real or perceived, financial or nonfinancial in this article.

Figure: -

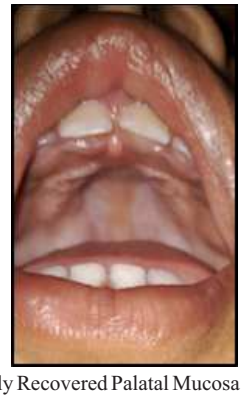
Figure 1

Impacted Object Prior To Removal

Figure 2

Removed Object

Figure 3



One Week Later Fully Recovered Palatal Mucosa

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