



Infant Foreign Body of Hard Palate

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Abstract

Most victims of foreign body aspiration are older infants and toddlers. Children <3 yr age account for 73% of cases. Impaction of foreign bodies in the upper digestive tract is a very severe pathologic condition that occurs in ear, nose, and throat practice and is particularly common in children. There are only 12 cases of foreign body in the hard palate. The presence of a foreign body in the infant's palate is rare that just one case of foreign body had been reported in the palate of children less than one year old.

Case: An 8-month-old female patient was admitted to hospital with hard plate Lesion. CT was requested for her. The lesions in CT were suspected to tumor. The type of the tumor was not recognized. The surgeon recommended biopsy and surgery. The infant was referred to a neonatologist. He had examined the patient. The specialist was suspected to foreign body and removed by pressure in private clinic. The little bleeding was occurred at the site of injury and stopped immediately and the child was discharged.

Conclusion: In areas especially in places like Iran that eating nuts is a common behavior of the diet in differential diagnosis of hard plate lesions we should noticed hard palate foreign body.

Keywords: Foreign bodies; Hard palate; Infant

Introduction

Infants and toddlers use their mouths to explore their surroundings. Most victims of foreign body aspiration are older infants and toddlers. Children <3 yr age account for 73% of cases. One third of aspirated objects are nuts, particularly peanuts. Fragments of raw carrot, apple, dried beans, popcorn, and sunflower or watermelon seeds are also aspirated, as are small toys or toy parts. The most serious complication of foreign body aspiration is complete obstruction of the airway. Globular or round food objects such as hotdogs, grapes, nuts, and candies are the most frequent offenders [1].

Impaction of foreign bodies in the upper digestive tract is a very severe pathologic condition that occurs in ear, nose, and throat practice and is particularly common in children, and psychiatric patients. Commonly found objects include fish bones, dental prostheses, coins, and needles. The first step of patient assessment are to recognize the type of object, its exact location in the gastrointestinal tract, the presence of any complications that associated with foreign body, and the presence of any underlying esophageal conditions [2]. Palatal masses in infants are very rare; the differential diagnose includes: leukemic infiltrates, eosinophilic granuloma, congenital lipomas, and melanotic neuroectodermal tumor of infancy, sarcomas, and other malignancies that occur in palate. Foreign bodies should also be included in the differential diagnosis of palatal masses in the infant and may be more usual than pathogenic lesions only 12 cases of foreign body in the hard palate was reported [3]. The presence of a foreign body in the infant and neonatal palates is rare and among them one case of foreign body had been reported in the palate of 9 months baby [4].

Case Presentation

A nine month old female child was admitted to hospital with hard plate Lesion. At first palate lesion was recognized with the child's mother and she was referred to a physician in the city of Sabzevar (North east of Iran) and he referred patient to a pediatric surgeon with suspected to palate tumor.

The surgeon was requested CT for her. CT report lesion size was $1.85 \times 1.05 \times 0.63$ that was covered by a thin bony structural lesion and is localized in the anterior of hard palate in the midline. The area was covered with soft tissue. Bubbles of air were inside the lesion. Destructive bone lesions

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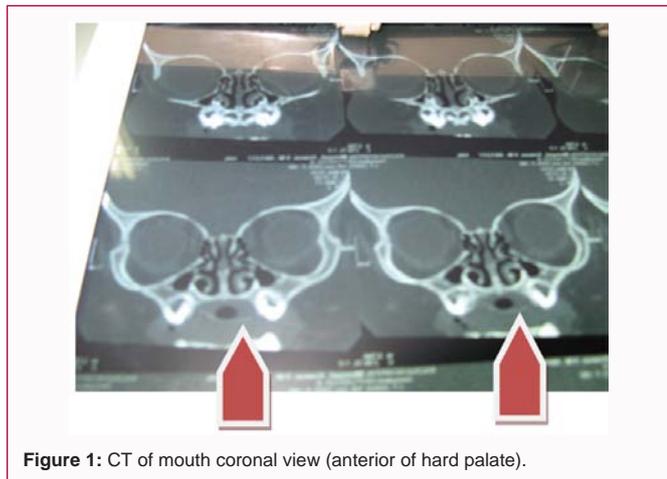


Figure 1: CT of mouth coronal view (anterior of hard palate).

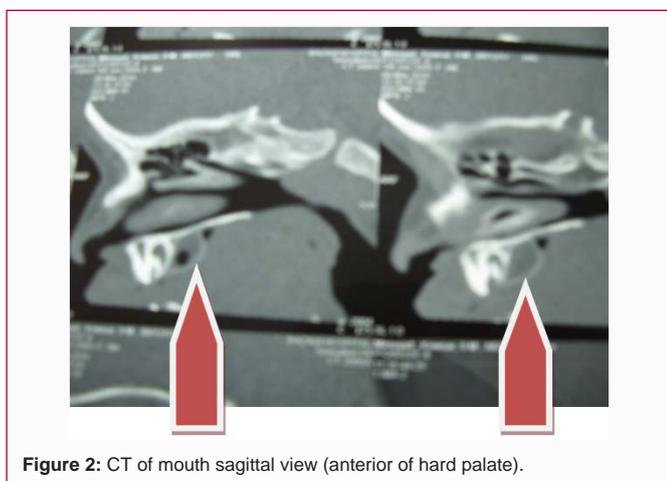


Figure 2: CT of mouth sagittal view (anterior of hard palate).



Figure 3: Picture of pistachio.



Figure 4: Picture of pistachio.

head 44/5 cm and height was 73 cm. Review of system was normal. Dimensions of mass in the oral cavity examination were 2.5 cm × 0.5 cm in the anterior midline of the palate. It was Yellow in color and hard consistency on palpation and not removable. Wound wasn't seen in location of foreign body. The differential diagnosis we noticed was included foreign body, such as a candy, congenital or malignant tumors, of the oral cavity. Noticed to the first differential diagnosis patient was sent home and asked parent to come back tomorrow. After attending in the next day mass was in the same size and at the same location. On mass reexamination there was removed with a little pressure. Which was pistachio shell with little bleeding occurred in the location of the lesion that stopped soon (Figure 3, 4). And the child was discharged from clinic.

Discussion

Foreign bodies in the hard palate are uncommon findings but must be noticed as differential diagnosis of palatal lesions especially in children. Various things reported as foreign body include candy nut shells, clothing buttons, rubber, screw head and false fingernails. There was a similar case report in Indian, a nine month old female child admitted to hospital with history of a chronic ulcer over the hard palate, which was noticed incidentally by parents three months back. Patient was admitted for biopsy under general anesthesia, after scrapping the lesion and removal of slough, foreign body was seen imbedded into the tissue with granulations covering the edges, it was a circular transparent plastic disc (Bindi) used by Indian woman on forehead but in our case there wasn't non healing ulcer on location and in our case with good physical examination we could save child from operation and general anesthesia [5]. Another case report was from college of medicine the University of Illinois at Chicago, USA was about a 10-month-old male infant presented with an asymptomatic mass of the anterior hard palate. And look like our patient the lesion appeared suddenly approximately six weeks before the visit. The infant was sent to the operating room for an incision biopsy but he was lucky because similar to our patient before making an incision they could recognized, a periosteal elevator was used to palpate the lesion. The elevator was wedged between the mass and the hard palate mucoperiosteum, dislodging the adherent structure. Once removed, it was clear that the lesion was a foreign body (fingernail) because the mother frequently allowing the infant to suck on her fingers and she loosed a fingernail. Two weeks later another case was about the impaction of a plastic screw head cap in the palate of an infant in Great Britain [3,6]. In one case for 18-month-long period of

were not seen and lesions were associated with oral cavity. Follow up study was recommended in CT report (Figure 1, 2).

The surgeon recommended biopsy and surgery. The infant was referred to a neonatologist for consultation.

There weren't any problems in the past medical history, pregnancy, delivery and the neonatal period. Child's weight at birth was 3,200g. The child was used breast feeding Iron and multivitamin and used supplementary food from 5 months of old. The child's immunization was complete. In examination baby weight was 8,500g,

impaction of foreign body has been reported [7]. Surprisingly, despite this long period of impaction, the foreign material did not lead to any tissue necrosis or perforation.

Conclusion

In the hard palate tumor like lesions we must not forget foreign body in differential diagnosis in pediatric age patients.

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