

Unusual foreign body presenting as a palatal tumor: case report

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Abstract

This report describes an infant who presented with a half shell of a pistachio nut adherent to the palatal mucosa. Initial clinical examination suggested the possibility of a palatal tumor. The case is presented so that others are made aware of this phenomenon and potential hazard.

Insertion of foreign particulate matter and objects into the mouth is an everyday occurrence with infants and children. Fortunately most are not aspirated nor of sufficient toxicity to cause serious harm. For example, McDonald and Avery (1987) reported that electrical burns to the mouth occur most frequently in children between 6 months and 3 years of age, due to insertion of, or chewing on live electrical wires.

Recently, in a letter to the editor of the *American Journal of Diseases of Children*, Sussman (1986) presented a report of an infant who had ingested the half shell of a pistachio nut. The shell had become lodged on the palate and appeared as a tumor. Sussman was attempting to alert the medical community of this unusual

presentation. A similar case presented at our institution for evaluation and treatment.

Case Report

A 9-month-old black female was brought by her parents to the School of Dentistry at Temple University. They had discovered a raised hard mass on the infant's palate. A raised flesh-colored mass could be seen easily on the palate (Fig 1). Digital palpation revealed the mass to be bony hard. A radiograph was obtained but was noncontributory.

The clinical differential diagnosis included a benign bony growth such as a torus or osteoma, and a possible malignancy such as an osteosarcoma or a chondrosarcoma. The possibility of an odontogenic tumor or a hamartoma also was considered.

The infant was admitted to St. Christopher's Hospital for Children for evaluation and removal of the mass. Physical examination and past medical history were unremarkable. The oral surgeon then was able to dis-

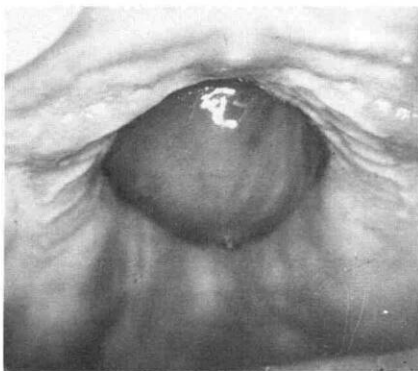


FIG 1 (left). A pistachio nut shell lodged in the palatal vault.

FIG 2 (right). Appearance of shell following removal.



lodge the mass which was the half shell of a pistachio nut (Fig 2).

Discussion

As pointed out by Sussman (1986), a vacuum-like seal resulting in adherence of the shell to the hard palate can be produced easily. The red dye, which is added to color some pistachio shells, disappears in 15-20 min after being placed in the oral cavity, thus giving the shell a tan flesh-tone appearance. There is a distinct possibility of infants aspirating pistachio shells which could be life threatening. Parents should be alerted to this phenomenon to ensure adequate protection against the possibility of infants ingesting similar objects.

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McDonald RE, Avery DR: Dentistry for the Child and Adolescent, 5th ed. St. Louis; CV Mosby Co, 1987, p 565.

Sussman SJ: A half shell of a pistachio nut that simulated a tumor (letter to the editor). *Am J Dis Child* 140:1100, 1986.

Children's caries incidence declines

Half the school children in the United States have no tooth decay, according to a new government study conducted by the National Institute of Dental Research (NIDR).

Almost 40,000 children nationwide were surveyed by the NIDR during the 1986-87 school year. Institute epidemiologists compared the survey's results to those of a 1979-80 survey.

American children have 36% less dental caries than they did at the beginning of the 1980s, researchers found. That decline follows a similar drop in the prevalence of tooth decay during the 1970s.

What we're seeing is the beginning of the end for a disease that has plagued mankind throughout history," said Dr. Harald Loe, director of NIDR.

Not only are fewer children getting cavities today, but those who do are getting fewer of them. In 1980, children had an average of almost 5 decayed, missing, or filled surfaces on their permanent teeth (out of 128 possible surfaces in youngsters with a full set of permanent teeth). In 1987, children had an average of only 3 decayed, missing, or filled tooth surfaces.

The average number of decayed or filled surfaces on the baby teeth of 5-9 year olds also dropped from more than 5 in 1980 to fewer than 4 in 1987.

Institute officials believe the widespread use of fluoride — in many community water supplies, toothpastes, and other forms — is mainly responsible for the decline in dental caries.