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CASE REPORTS

Unusual nasal foreign body detected by panoramic dental radiography: case report

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Abstract

This report describes an undetected nasal foreign object in a child discovered in a dental radiograph and the subsequent removal of the object. A metal tack was lodged in the patient's right nostril. The case is presented to inform other dentists of this phenomenon.

Introduction

Insertion of foreign objects into the nose is common in children; reports of foreign objects in the nose are numerous. These objects include peas, beans, nuts, pencils, sponges, toys, washers, screws, beads, nails, pebbles (Ransome 1979), wood (Forrest 1987), buttons (Damm and Ziegler 1985), and paper (Lovewell 1984). Das (1984) reported that foreign bodies in the nose are found almost exclusively in children, especially in the age group 2–4 years.

Boredom, curiosity, whims to explore body openings, habit, imitation, and mental retardation have been noted as the etiology of foreign objects in the nose. It has been speculated that objects are placed in the nasal cavity to allay irritation from pre-existing diseases or conditions of the nose such as rhinitis (Das 1984).

This report describes an undetected nasal foreign object that was discovered during a dental panoramic radiographic review.

Case Report

A five-year-old Caucasian female was brought by her mother to a dental clinic for a routine initial dental appointment. Her medical history revealed that she had been born with spina bifida and hydrocephaly. A ventriculoperitoneal shunt was placed surgically soon after birth. Follow-up surgery was at three years of age for a shunt revision. The patient was reported to be mildly mentally retarded.

Clinical examination revealed that the maxillary left primary lateral incisor was missing. The patient's mother reported that the tooth had never erupted, had not been extracted, and had not been lost due to trauma. A subsequent panoramic radiograph revealed the patient had bilateral congenitally missing maxillary permanent lateral incisors, plus a missing maxillary left primary lateral incisor.

The panoramic radiograph revealed an unusual radiopaque-appearing object in the area of the patient's right nasal cavity (Fig 1, see next page). A maxillary occlusal radiograph was exposed to delineate the object (Fig 2, see next page). On the occlusal radiograph the object appeared to be a thumb tack, and the patient denied knowledge of the presence of the tack. The mother stated there were no symptoms which would indicate its presence.

The patient was referred to an otorhinolaryngologist for evaluation and removal of the foreign nasal object. His exam revealed that the tack was located in the anterior portion of the right nasal passage. The point of the tack was wedged into the nasoseptal mucosa. The head of the tack was against the inferior turbinate and anchored backward so that the tack was in a fixed position. An attempt was made by the physician in his office to remove the tack. This was unsuccessful due to excessive hemorrhage, making visualization of the tack impossible.

The patient underwent outpatient surgery under general anesthesia for removal of the tack. Following suctioning to remove scabs and crust from the tack, grasping forceps were used to push the tack out of position and remove it from the nose. Granulation tissue in the area was cauterized with silver nitrate to control bleeding. The patient tolerated the procedure well and was placed on an antibiotic and Neosporin[®] ointment. She was discharged home the day of the procedure.



Fig 1. Panoramic radiograph demonstrating foreign object in nasal cavity.

Gross examination of the foreign object revealed a metal tack that appeared slightly corroded, but was otherwise unremarkable.

Discussion

The insertion of foreign objects by children into their noses is quite common. If left for long periods of time, these objects may lead to inflammation, infection, ulceration, and necrosis of the nasal mucous membrane, cartilage, or bone (Ransome 1979). Parents and health practitioners should be aware of this phenomenon.

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Fig 2. Maxillary occlusal radiograph of tack.

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AIDS research programs established

Eighteen AIDS treatment research programs based in the communities where the impact of the AIDS epidemic is severe will be established, the U.S. Department of Health and Human Services announced.

The new Community Programs for Clinical Research on AIDS will receive \$9 million from the National Institute of Allergy and Infectious Diseases. The programs will enlist many communitybased physicians and their patients in studies of AIDS drugs and will serve many people who, until now, have not been included in clinical trials of promising experimental AIDS therapies, including blacks, Hispanics, women, and IV drug users.

Doctors in private practice, community hospitals, and at large inner city hospitals will be involved.

Until now, federally funded clinical trials of experimental AIDS therapies have been conducted by investigators at the National Institutes of Health or at 46 university-based research hospitals.