

RETRIEVAL AND MANAGEMENT OF FOREIGN OBJECTS FROM PRIMARY TEETH: A CASE SERIES

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ABSTRACT

Aim: This case series aims to describe the retrieval and management of foreign objects from primary teeth. **Case description:** Open carious teeth within the oral cavity may serve as sites for the insertion of foreign bodies, potentially resulting in pain, swelling, and abscess formation and may also be potential aspiration hazard. Such cases often reflect inadequate dental supervision or neglect by caregivers. This case series consists of 3 cases with children of 8 to 9 years of age having pain due to lodgment of the foreign object in the open carious lesion aim to highlight and discuss the occurrence of foreign bodies in the oral cavity of children and the retrieval of such objects. **Results:** Successful management of the pain and the complications due to foreign object lodgment in tooth. **Conclusion-** Successful management requires thorough case history, careful clinical and radiographic examination to accurately identify the foreign body's nature, size, and location. With proper diagnostic skills, the object can be safely retrieved; if retrieval is not possible, extraction of the tooth may be necessary.

KEYWORDS: foreign object in teeth, foreign object lodged in teeth, foreign body.

INTRODUCTION

Injuries to both hard and soft oral tissues may result from the common childhood habit of placing foreign objects in the mouth. The presence of foreign bodies, such as metal screws, staple pins, darning needles, pencil leads, beads, and toothpicks, lodged within exposed pulp chambers of carious or traumatically injured primary and permanent teeth has been well-documented in the literature.^[1] The likelihood of foreign object impaction within teeth is increased when the pulp chamber is exposed, either as a result of traumatic injury or extensive carious lesions.^[2] Open carious teeth within the oral cavity may serve as

sites for the insertion of foreign bodies, potentially resulting in pain, swelling, and abscess formation.^[3] The management and removal of foreign bodies from the teeth of children remains a complex and demanding aspect of pediatric dental care.^[4] Foreign bodies can be readily removed when confined to the pulp chamber; however, once displaced apically, their retrieval becomes considerably more complex.^[5] The presence of a foreign object poses a significant risk to the patient, as it may be inadvertently ingested, leading to potential complications.^[3] A detailed case history, along with thorough clinical and radiographic examinations, is

crucial for determining the nature, size, and location of the foreign object and establishing an accurate diagnosis.^[6] Such cases often reflect inadequate dental supervision or neglect by caregivers. This case series aim to highlight and discuss the occurrence of foreign bodies in the oral cavity of children.

Case Description

The following cases were observed at the Department of Pediatric and Preventive Dentistry in People's Dental Academy, Bhopal between year 2025 and 2026.

Case 1

An 8-year-old girl reported with the chief complaint of a plastic bead stuck in the upper left tooth back region for 18-20 hours. The tooth involved was upper left primary

first molar. Mother reported that the patient was playing at home with a bead and it got stuck in the tooth. The patient was having pain while biting. Parents noticed a bead-like object stuck on the upper left tooth and tried to remove it but failed. Intraoral examination revealed open access cavity in relation to tooth 64, with a round, black-coloured, bead-like object with a diameter of 2-3 mm was found to be fully lodged in the access cavity of same tooth.

The treatment plan involved the removal of a foreign body from the access cavity of 64 followed by pulpectomy. The bead was removed from the tooth using a dental explorer and spoon excavator. After removal of the bead, pulpectomy was done.

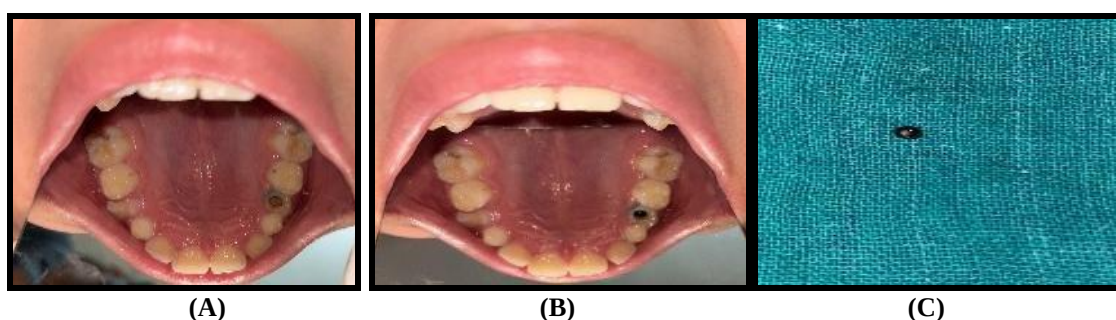


Figure 1(A) a round, black-coloured, bead-like object with a diameter of 2-3 mm was found to be fully lodged in the access cavity of tooth 64. **(B)** Object retrieved from the cavity. **(C)** post operative image.

Case 2

A 9-year-old boy presented to the Department with a chief complaint of a broken pen tip lodged in the upper right posterior tooth region since previous night. The patient reported history of food impaction in the same region and attempted to remove it using a pen, during which the pen tip fractured and got embedded in the tooth. The patient experienced pain following the incident.

Intraoral examination revealed deep mesio-occlusal caries in relation to tooth 55. A foreign object, identified as a pen tip measuring approximately 6–8 mm in length, was observed lodged in the palatal aspect of the same tooth.

Radiographic examination revealed tooth 55 was grossly carious with evidence of physiological root resorption. The radiograph also confirmed the presence of the foreign object in the aspect of the same tooth.

Considering the extent of caries and the physiological root resorption, extraction of tooth 55 along with removal of the foreign body was planned under local anesthesia. The broken pen tip was successfully retrieved using a tweezer, followed by atraumatic extraction of the tooth. The procedure was uneventful, and no postoperative complications were observed.

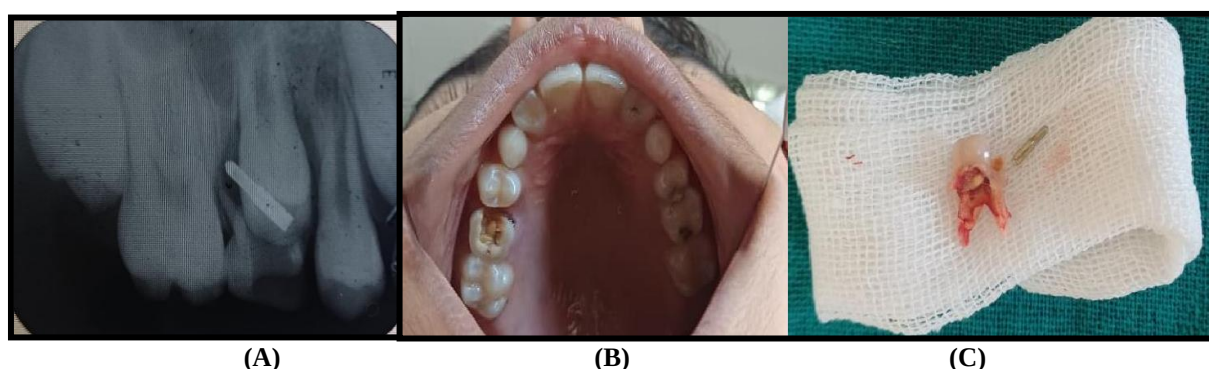


Figure 2(A) An IOPA radiograph showing presence of the foreign object wrt grossly carious tooth 55 with evidence of physiological root resorption. **(B)** A foreign object, identified as a pen tip seen in the carious cavity of tooth 55. **(C)** Extraction of the tooth along with the retrieval of the pen tip.

Case 3

An 8-year-old boy reported to the department, with the chief complaint of a plastic crystal stuck in the lower right back tooth region for 1 day. The mother reported that the patient was playing with her saree and he took the loose end in his mouth, the crystal of the embroidery got stuck in the tooth and the patient tried to remove it using pin but failed. The parents went to the nearby clinic but the dentist was unable to retrieve the crystal. The patient came to the department and on intraoral examination a deep disto-occlusal carious cavity was present in relation to 84. A yellowish-brown coloured translucent 5-6 mm crystal like object was seen in the carious cavity of the same tooth.

The initial treatment plan involved the removal of the foreign body, followed by pulpectomy as pulpal involvement and furcal radiolucency was evident on the IOPA radiograph, but the object was stuck firmly inside the tooth, so final treatment plan involved the extraction of 84. The extraction of 84 was done on the same day under local anaesthesia. Followed by the irrigation of the extraction socket with betadine solution to reduce the infection. Post operative instructions were given and patient was prescribed post operative analgesics and antibiotics. Follow up call was done after 15 days in which the patient was free from any signs and symptoms.

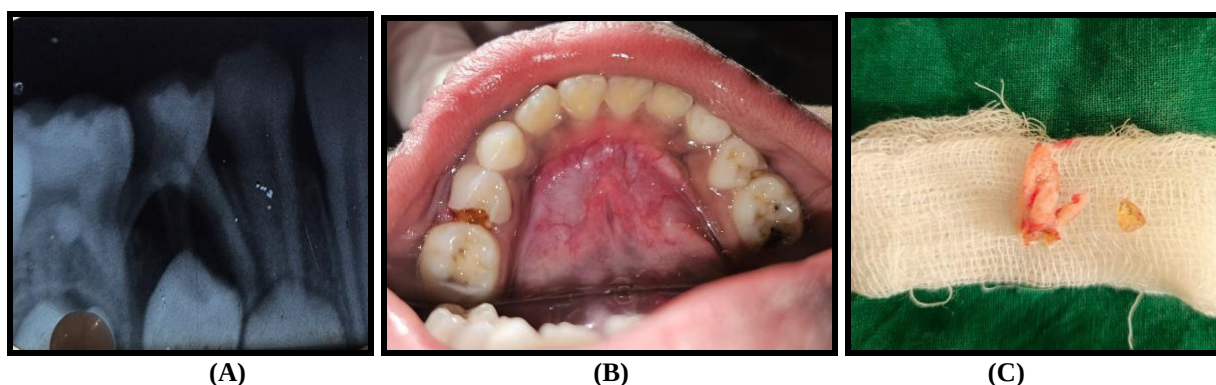


Figure 3 (A) An IOPA radiograph showing deep proximal caries and large periapical radiolucency wrt 84 and no bone covering the succedaneous tooth. (B) A yellowish-brown coloured translucent 5-6 mm crystal like object seen in the carious cavity of tooth 84. (C) Extraction of the tooth along with the retrieval of crystal.

DISCUSSION

Children have a natural tendency to place objects into their oral cavity, which predisposes them to accidental ingestion or aspiration. Such incidents often cause significant anxiety and concern for parents and caregivers. Furthermore, sharp or pointed foreign objects carry a significantly higher risk of trauma to the oral cavity as well as the gastrointestinal and respiratory tracts, and their retrieval—even with endoscopic techniques—may be accompanied by added procedural risks and complications.^[3] Injury to both hard and soft oral tissues may result from a child's habitual insertion of foreign objects into the mouth. This behaviour particularly occurs when the pulp chamber is exposed to the oral environment, either due to traumatic injury, carious involvement, or when the access cavity is intentionally left open for drainage during endodontic procedures.^[6] Children often use readily available objects such as toothpicks, safety pins, stapler pins, pens, pencils, wires etc to remove food particles entrapped in open pulp chambers, large carious lesion and fractured teeth which sometimes leads to lodgment of these objects in the teeth.

The removal of foreign objects from the teeth of pediatric patients constitutes a particularly challenging component of clinical practice in pediatric dentistry. In our department, children came with foreign objects located within the large carious cavity and pulp chamber, which

were often removed with relative ease; however, once pushed apically into the canal, retrieval would have become considerably more complicated. Although the child is usually aware of the act, it is rarely disclosed to parents unless symptoms such as pain or swelling develop. Parental dental neglect contributes to this behaviour and frequently results in long-term sequelae before the foreign object is detected.^[8]

The consequences of implanted or embedded intraoral foreign objects include infection, pain, abscess formation, cyst development, swelling, and tumour-like lesions.^[9] Chronic maxillary sinusitis and actinomycosis secondary to intraoral foreign bodies have also been reported in the literature.^[10] In deciduous teeth, foreign objects may perforate the pulpal floor and interfere with the development of permanent successor, potentially leading to odontoma formation, impaction, or dilaceration.^[9] In the absence of timely intervention, foreign body reactions, granuloma formation, and non-healing pathology may develop over a prolonged period.^[6]

Most foreign object aspirations occur in children of age less than five years, with approximately 65% of related deaths occurring in infants under one year of age.^[6] Literature reviews indicate that such incidents are more frequently reported in children who habitually place foreign objects in their mouths, especially while studying

or watching television.^[11] In pediatric dentistry, foreign objects are often diagnosed incidentally during routine clinical and radiographic examinations, largely due to children's fear of punishment and lack of awareness.^[12]

Various techniques and instruments have been recommended for the successful removal of foreign objects from the pulp chamber and root canal system, including ultrasonic instruments, the Masseran kit, modified Castroviejo needle holders, and the use of ethylenediaminetetraacetic acid as a lubricant. In some cases, periapical surgery may be required to facilitate removal.^[13]

The literature suggests that the likelihood of discovering foreign objects in the oral cavity is higher in children than in adults. This highlights the need to promote dental awareness, emphasize the importance of early dental visits, and establish a dental home. Such measures enable early diagnosis and prompt intervention, thereby minimizing potential complications.^[6]

CONCLUSION

The presence of foreign objects within the tooth structure in pediatric patients poses a significant clinical challenge for the pediatric dentist. Successful management of such cases requires a thorough case history, careful clinical examination, and the judicious use of appropriate radiographic techniques to accurately identify the nature, size, and location of the foreign body. With proper diagnostic skills and clinical expertise, the foreign object can be safely retrieved without compromising the integrity of the tooth or surrounding tissues.

Preventive strategies play a crucial role in reducing the incidence of such cases. Parents and caregivers should be educated about keeping small objects out of children's reach and their activities should always be conducted under close parental supervision. As there is a huge risk of aspiration of such small objects by the child, leading to airway obstruction or toxic reactions in case of ingestion. Accordingly, young children should not be provided with small play objects, to minimize the risk of accidental injury due to foreign material insertion into the oral cavity, aspiration or ingestion.

REFERENCES

1. Lakhani B, Garg S, Saraf BG, Tomer E, Singh N, Sheoran N. Self-insertion of foreign objects in teeth. *Int. J. Clin. Pediatr. Dent*, 2019; 12(2): 145-47.
2. Kalyan SR, Sajjan G. Endodontic management of a foreign body. *Contemp Clin Dent*, 2010; 1: 180-82.
3. Ashqar NM, Ali FM. Unusual foreign object in a tooth: A case report and review of literature. *Clinics and practice*, 2019 11; 9(1): 1114-17.
4. Palit MC, Agrawal J, Saha S. Radiographic revelation of foreign body in primary tooth: a rare case report. *J Dent App*, 2015; 2: 251-253.
5. Aduri R, Reddy RE, Kiran K. Foreign objects in teeth: retrieval and management. *JISPPD*, 2009 1; 27(3): 179-83.
6. ArticLakhani B, Garg S, Saraf BG, Tomer E, Singh N, Sheoran N. Self-insertion of foreign objects in teeth. *Int. J. Clin. Pediatr. Dent*, 2019; 12(2): 145-147.
7. Passi S, Sharma N. Unusual foreign bodies in the orofacial region. *Case reports in dentistry*, 2012; 2012(1): 1-4.
8. Srivastava VK. Self-inserted foreign objects inside root canal of fractured incisors: an unusual behaviour. *J Indian Dent Assoc*, 2014; 8(8): 31-35.
9. Katge F, Mithiborwala S, Pammi T. Incidental radiographic discovery of a screw in a primary molar: an unusual case report in a 6 year old child. *Case reports in dentistry*, 2013; 2013(1): 1-3.
10. Goldstein BH, Sciubba JJ, et al. Actinomycosis of the maxilla: review of literature and report of case. *J Oral Surg* 1972; 30: 362-366.
11. Chand K, Joseph S, Varughese JM, Nair MG, Prasanth S. Endodontic management of an unusual foreign body in a maxillary central incisor. *J Conserv Dent*, 2013; 16: 474-476.
12. Lehl G. Foreign body in a deciduous incisor: a radiological revelation. *J Indian Soc Pedod Prev Dent*, 2010; 28: 45-46.
13. Aduri R, Reddy RE, et al. Foreign objects in teeth: retrieval and management. *J Indian Soc Pedod Prev Dent*, 2009 1; 27(3): 179-180.