

Foreign Body in Root Canals of Two Adjacent Deciduous Molars: A Case Report

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ABSTRACT

Children often tend to have the habit of inserting foreign objects in the oral cavity unknowingly for relief of dental pain. Sometimes, children do not reveal to their parents due to fear. These foreign objects may act as a potent source of infection and painful condition. The discovery of foreign bodies in the teeth is a special situation, which is often diagnosed accidentally. Detailed case history, clinical and radiographic examinations are necessary to come to a conclusion about the nature, size, location of the foreign body and the difficulty involved in its retrieval. Here is a case report, where foreign object was accidentally lodged in the carious deciduous molars by a child.

Keywords: Foreign body, Deciduous molars, Root canals.

How to cite this article: Dhull KS, Acharya S, Ray P, Dhull RS. Foreign Body in Root Canals of Two Adjacent Deciduous Molars: A Case Report. *Int J Clin Pediatr Dent* 2013;6(1):38-39.

Source of support: Nil

Conflict of interest: None

INTRODUCTION

Foreign bodies inside tooth are diagnosed accidentally on clinical or radiographic examination of the tooth which may be associated with infection, pain, swelling and recurrent abscesses as a sequelae to the pulpal exposure and lodgment of the foreign body.¹ The presence of foreign objects retrieved from the root canals and pulp chambers of the permanent teeth have been reported,² the presence of foreign objects found in the deciduous teeth is an uncommon situation.³

CASE REPORT

An 8-year-old girl reported to the Department of Pedodontics and Preventive Dentistry, Institute of Dental Sciences, Bhubaneswar, Odisha, India, with a chief complaint of pain in the deciduous right mandibular first molar tooth (Fig. 1). Patient gave a history of pain from the past 1 month. The patient was quite apprehensive and did not allow for clinical examination, so was sent for intraoral periapical (IOPA) radiographs. Radiographic examination of the tooth revealed a radiopaque object overlapping the image of the tooth and a furcal abscess (Fig. 2). Same side lingual opposite side buccal (SLOB) rule was performed to confirm whether the foreign object was lying in the root or in the adjacent soft tissues. It was observed that the pin was lodged in the distal canal of primary mandibular first molar and distal canal of primary mandibular second molar (Fig. 2).

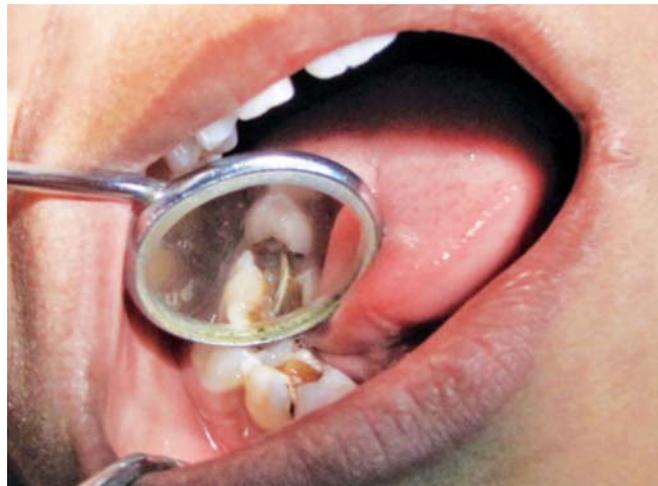


Fig. 1: Clinical picture showing the lodged foreign object in adjacent deciduous molars



Fig. 2: IOPA radiograph showing radiopaque object in the canals of adjacent deciduous molars

An ultrasonic scaler was used to clear the debris from the root canal orifices and also to facilitate loosening of the pin. When the ball pin was adequately visible clinically, it was engaged with a tweezer and removed (Figs 3 and 4). Since the teeth were nonrestorable, so decision was made to extract the teeth under local anesthesia.

DISCUSSION

Frequently, foreign bodies are found in the oral and nasal cavities of children and are discovered by the dentist during routine examinations. These objects may be the result of the child's own action and may cause pain, edema and tooth fracture. Different types of foreign objects were reported to

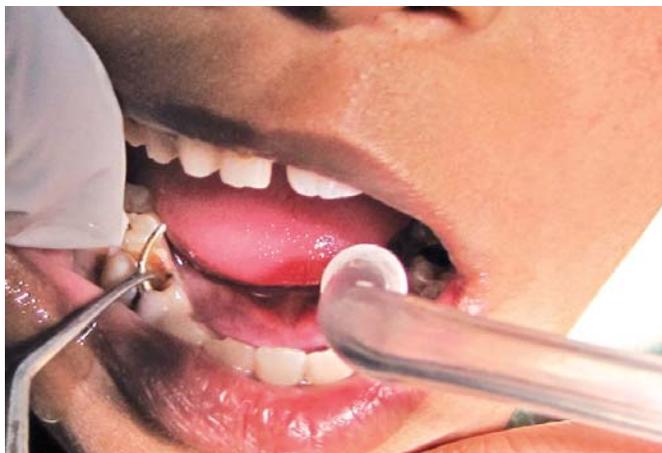


Fig. 3: Pin being removed with the tweezers



Fig. 4: Pin after removal

be lodged in the root canals and the pulp chamber, which ranged from pencil leads,⁴ darning needles,² metal screws,⁵ to beads⁶ and stapler pins.⁷ Grossman⁸ reported retrieval of indelible ink pencil tips, brads, a tooth pick, adsorbent points.⁸ A radiograph can be of diagnostic significance especially if the foreign body is radiopaque. McAuliffe⁷ summarized various radiographic methods to be followed to localize a radiopaque foreign object as parallax views, vertex occlusal views, triangulation techniques, stereo-radiography and tomography. Vertex occlusal view is no longer favored because of relatively high radiation exposure to the lens of the eye and because the primary beam is aimed toward the abdomen. Removal of foreign objects from the root canal is often a very difficult procedure. The procedure is even more complicated, if the foreign body is unusual.

Though, the presence of foreign objects retrieved from the root canals and pulp chambers of the permanent teeth have been reported, the presence of foreign objects found in the deciduous teeth is an uncommon situation. This case discusses the presence of foreign object in the root canals involving two deciduous teeth. Timely diagnosis and management of foreign object embedded in the tooth should

be done to avoid further complications like ingestion,⁹ chronic maxillary sinusitis if embedded in upper teeth.¹⁰

CONCLUSION

The above case report discusses the management of teeth with impacted foreign objects in the tooth. The pin was embedded in two adjacent mandibular deciduous molars which is unusual. There is a definite need for a proper classification of foreign bodies in and around the teeth and a treatment algorithm to be followed in such clinical situations.

REFERENCES

1. Nernst H. Foreign body in the root canal. *Quintessence Int* 1972; 23:26.
2. Aduri R, Reddy RE, Kiran K. Foreign objects in teeth: Retrieval and management. *J Indian Soc Pedod Prev Dent* 2009;27(3): 179-183.
3. Holla G, Baliga S, Yeluri R, Munshi AK. Unusual objects in the root canal of deciduous teeth: A report of two cases. *Contemp Clin Dent* 2010;1(4):246-248.
4. Hall JB. Endodontics-patient performed. *J Dent Child* 1969;36(3):213-216.
5. Prabhakar AR, Basappa N, Raju OS. Foreign body in a mandibular permanent molar: A case report. *J Indian Soc Pedod Prev Dent* 1998;16(4):120-121.
6. Subba RVV, Mehta DS. Beads. *Oral Surg Oral Med Oral Pathol* 1990;69:769-70.
7. MacAuliffe N, Drage NA, Hunter B. Staple diet: A foreign body in a tooth. *Int J Paediatr Dent* 2005;15(6):468-471.
8. Grossman JL, Heaton JF. Endodontic case reports. *Dent Clin North Am* 1974;18(2):509-527.
9. Dhandapani RG, Kumar S, O'Donnell ME, McNaboe T, Cranley B, Blake G. Dental root canal treatment complicated by foreign body ingestion: A case report. *Cases J* 2009;2(1):117.
10. Costa F, Robiomy M, Toro C, Sembronio S, Politi M. Endoscopically assisted procedure for the removal of a foreign body from the maxillary sinus and contemporary endodontic surgical treatment of the tooth. *Head Face Med* 2006;2:37.

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