



FOREIGN BODY IN A DECIDUOUS MAXILLARY SECOND MOLAR- AN UNSUAL CLINICAL FINDING. A CASE REPORT

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ABSTRACT

Children often insert strange objects in their teeth either as an attempt to relieve pain or in a subconscious habit. Clinicians encounter such findings during a routine examination where the patient has pain or an infection as a sequela of the foreign body insertion. These foreign bodies not only cause discomfort to the patient but it can also lead to various complications and serve as a nidus of infection. Although accidental insertion of the foreign body is the main etiological factor, self-harming behaviour patterns and dental neglect should also be ruled out during clinical analysis of the patient. This case report describes about a 12-year-old female patient who came into the operatory with pain in the upper left back tooth region of the jaw. Clinical and radiographic examination revealed a plastic pearl bead impacted in the crown of maxillary deciduous second molar. The pearl was then retrieved by creating a space around the impacted pearl and then retrieval was done with a spoon excavator. Following the retrieval process, Indirect pulp capping was done ending the treatment with composite restoration.

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INTRODUCTION

There have been several reports describing the insertion of foreign objects into the exposed pulp chambers and canals by the patient. Foreign bodies which are inserted in the tooth have ranged from radiolucent objects, like tooth picks, broomstick or toothbrush bristle to radiopaque materials like paper pins, needles, screws, beads and pencil leads.^[1,2,3] These incidents of foreign body insertion are generally from the persistent habit of putting things in the mouth which are generally not reported to the parent in the fear of punishment and end up being a clinical finding once the patient comes into the operatory with a complaint of pain or swelling. Foreign objects that are confined to the pulp chambers and root canals may not cause any major complications and are retrieved by simple endodontic procedures, but in some instances these foreign bodies could get pushed beyond the apex and get lodged in the surrounding tissue that may lead to complications and medical emergencies as well.

These incidents require a complete clinical, psychological and radiographic analysis in order to rule out any self-harming behaviour pattern or dental neglect. Radiographic analysis helps in localizing the foreign object along with determining the size, shape, position and the association with the adjoining tissues and dentition. Proper psychological counselling should be done for both the patient and the parent to prevent this persistent habit to lead to any further harm.

Here we present the case of a 12-year-old girl who had a pearl bead embedded in her deciduous maxillary second molar and how a simple restorative procedure was done to retrieve the bead from the tooth and restore the tooth to its present state.

CASE REPORT

A 12-year-old female reported to the department of paediatric and preventive dentistry with a chief complaint of pain in the upper left back tooth region of the jaw in the last 2 days. The pain as the patient described was sharp shooting in nature and intermittent in progression. The pain aggravated on chewing food or biting of anything and was relieved on its own. An intraoral examination revealed a cariously infected deciduous maxillary second molar. The caries had completely destroyed the occlusal surface of the tooth. (Figure-1). An intraoral periapical radiograph revealed a round radiopaque bead lodged in the crown of the deciduous maxillary second molar which obliterated the floor of the pulp chamber. (Figure-2). A clinical history revealed that the patient is the daughter of a tailor who often plays with the tailoring instruments and has a habit of putting things in the mouth. On that day, the bead lodged into the tooth while playing. The patient did not report the incident initially due to the apprehension of punishment. As the patient started experiencing pain, the incident was revealed to the parent. As the bead was lodged into the tooth, space was made around the tooth using a small round bur (BR-45) to create a space for the appropriate path of removal of the bead. A spoon

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excavator was then used to remove the bead through the occlusal surface of the tooth. (Figure-3). Once the bead was removed, thorough irrigation was done using saline. Caries excavation from the internal walls and floor of the cavity was done using the (BR-45) small round bur. Soft caries was then removed with a spoon excavator revealing the affected dentin. Tooth was isolated and dried for application of DYCAL™ (Dentsply Sirona) in the complete cavity. The treatment was completed with composite restoration. Patient was followed up for 2 weeks.



Figure 1 Intraoral occlusal view of the maxilla revealing a foreign body impacted in the deciduous second molar



Figure 2 IOPA showing a round opacity



Figure 3 The plastic pearl which was stuck in the tooth

DISCUSSION

Self-oral exploration, play while eating, imitation of peers or older siblings having similar behaviour, and trying to relieve chronic irritation along with fear of dentistry are factors that may prompt children to place foreign objects in the mouth.^[4] Children are inquisitive by nature and as part of their development, they explore their surroundings with the use of tactile sensation. Injury to both soft and hard tissues may occur as a consequence of child's habit of putting foreign objects into the mouth. Such behaviour occurs when pulp chambers are exposed to the oral cavity either as traumatic injuries or

carious exposure or if the tooth is left open for drainage during the root canal procedure^[5]

Within the oral cavity, foreign bodies may be embedded in the soft or hard tissue. Objects impacted within the periodontium are a potential source of infection and may lead to edema, haemorrhage, and abscess formation. Also, foreign bodies in deciduous teeth can lead to the perforation of the pulp chamber floor space and might cause trauma to the developing permanent dentition, depending on development. Trauma to the tooth in the initial stages of tooth formation i.e., odontogenesis, can destroy the permanent tooth bud or may result in disorganization of the tooth germ, forming an odontoma. A force of lesser magnitude may result in a geminated and/or a hypoplastic successor tooth.^[6] The most common foreign bodies placed in the mouth are coins, toys and toy parts, sharp objects, batteries, bones, and food.^[4] The paediatrics population endangers itself with this behaviour because the objects may be accidentally ingested or aspirated. A literature review has revealed an increased incidence of intentional placement and subsequent swallowing of foreign objects in children with severe personality disorders^[7] Complications associated with these foreign bodies include aspiration of foreign bodies which may lead to asphyxia, acute dyspnoea, cardiac arrest, and laryngeal oedema.^[8] Various radiographic methods can be used to localize foreign objects such as parallax views, triangulation techniques, radiovisiography, and computerized axial tomography scan.^[9] In this present case, a routine intraoral periapical radiograph was used for the localization of the foreign body and the proper treatment planning.

Although various instruments are used in retrieval of foreign bodies from a tooth such as ultrasonic instruments, mosquito hemostat, modified Castroviejo's needle holder, and Stieglitz forceps.^[10] This present case had a fairly easy treatment plan and tooth was restored without any complications.

The management of a foreign body impaction in a tooth depends on the location, accessibility, stage of tooth formation, restorability of the tooth, and the patient's age and level of cooperation.^[11] In the present case the tooth was restored with indirect pulp capping and composite restoration.

CONCLUSION

In conclusion, the case report highlights that a dentist should have a good rapport with the patient and should know the proper history about the persistent habits that the patient might be having. Also a good clinical examination could determine the behaviour patterns of "mouthing" foreign objects and prevent mishaps such as injury to the soft tissues, aspirations and asphyxiation of foreign bodies.

References

1. Adekoya-Sofowora CA, Nasir WO. A case of broomstick in the root canal extending beyond the apex causing epistaxis. *Nigerian Dental Journal* 2007;15:39-42.
2. Subba Reddy VV, Mehta DS. Beads. *Oral Surg Oral Med Oral Pathol* 1990;69:769-70.
3. Aduri R, Reddy RE, Kiran K. Foreign objects in teeth: Retrieval and management 2009;27:179-83.
4. Kay M, Wyllie R. Pediatric foreign bodies and their management. *Curr Gastroenterol Rep*. 2005;7(3):212-8.

5. Lakhani B, Garg S, *et al.* Self-insertion of Foreign Objects in Teeth. *Int J Clin Pediatr Dent* 2019;12(2):145–149.
6. Incidental Radiographic Discovery of a Screw in a Primary Molar: An Unusual Case Report in a 6 Year Old Child Farhin Katge, SajjadMithiborwala, and Thejokrishna Pammi Case Reports in Dentistry Volume 2013, Article ID 296425, 3 pages
7. Gitlin DF, Caplan JP, Rogers MP, Avni-Barron O, Braun I, Barsky AJ. Foreign-body ingestion in patients with personality disorders. *Psychosomatics*. 2007;48(2):162–6
8. Nagaveni NB, Umashankara KV. Unusual habit ending as a foreign body lodgement: A report of case series. *J Cranio Max Dis* 2012;1:119-25
9. McAuliffe N, Drage NA, Hunter B. Staple diet: A foreign body in a tooth. *Int J Paediatr Dent* 2005;15:468-71.
10. Jadhav GR, Mittal P, Shah D, Dharmani U. Management of self-inflicted dental injuries with various nonsurgical techniques: Case series. *Saudi Endod J* 2016;6:148-52.
11. Incidental discovery of a screw in a deciduous molar Urvashi Sharma • Pawandeep Kaur Sandhu Virk Received: 5 June 2010 / Accepted: 13 October 2010 / Published online: 10 November 2010 Japanese Society for Oral and Maxillofacial Radiology and Springer 2010

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