

Unusual objects in the root canal of deciduous teeth: A report of two cases

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Abstract

Accidental foreign body ingestion or aspiration is a common problem in children. Children often have a habit of inserting objects into their mouth. Some of these objects can be accidentally ingested or even aspirated which can be frightening and a stressful experience. But the presence of foreign objects in the teeth are rare. The foreign objects in the teeth may act as a potential source of infection and pain. In most of the cases, children avoid informing their parents due to fear of punishment. This paper presents two cases of foreign objects embedded in the deciduous teeth. In both the cases, parents were not aware of foreign body ingestion by their children.

Keywords: Root canal, deciduous teeth, foreign body, unusual objects

Introduction

The occurrence of foreign bodies such as metal screws,^[1] staple pins,^[2,3] darning needles,^[4] pencil leads,^[5] beads^[6] and tooth picks lodged in the exposed pulp chambers of carious or traumatically injured deciduous and permanent teeth has been reported. Most often, these cases are diagnosed accidentally on radiographic examination of the tooth which may be associated with infection, pain, swelling and recurrent abscesses as a sequelae to the pulpal exposure and lodgement of the foreign body.

Clinical and radiographic examinations are necessary to confirm the presence, size, location and the type of the foreign object. Two cases of foreign objects found within the pulp chambers of the deciduous teeth with their management are presented here.

Case Reports

Case 1

A 10-year-old girl reported with a chief complaint of pain and

pus discharge from the upper front tooth on the right side. Patient gave a history of pain since 10 days and pus discharge from the tooth since last 2 days.

On clinical examination, there was discoloration and open



Figure 1: Photograph of discolored deciduous maxillary canine on the right side

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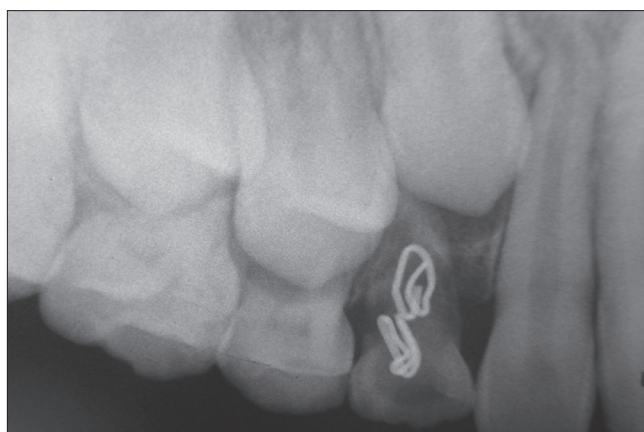


Figure 2: Radiograph showing the foreign object in the tooth



Figure 3: Photograph showing the metallic object in the extracted tooth



Figure 4: Two staple pins and pieces of aluminum foil recovered from the tooth



Figure 5: Photograph showing decayed maxillary incisors



Figure 6: Radiograph showing the foreign object in the tooth resembling the head of sewing needle



Figure 7: Head of sewing needle recovered from the tooth

pulp chamber in relation to right maxillary deciduous canine (53) [Figure 1]. Radiographic examination of the tooth revealed a radio-opaque object resembling twisted pieces of metal wire lodged within the pulp chamber and root canal of

53 [Figure 2]. The tooth was extracted under local anesthesia [Figure 3]. On removal of the foreign objects in relation to the tooth, it was found that there were two staple pins and a small piece of aluminium foil [Figure 4]. The child, who had previously denied placing anything within the tooth, later confessed that she had placed the objects to remove food particles and to get relief from pain.

Case 2

A 5-year-old male child was brought to the department by their parents with a complaint of pain in relation to decay in the upper front teeth. Clinical examination revealed that the deciduous right maxillary central incisor (51) was grossly decayed with open pulp chamber [Figure 5]. Intraoral periapical radiographs of the maxillary anterior region examination revealed the presence of a radio-opaque foreign object within the pulp chamber and root canal of 51 [Figure 6].

The tooth was extracted under local anesthesia and the object was retrieved from the canal, which was found to be the broken head of a sewing needle [Figure 7].

Discussion

As children often tend to have the habit of inserting foreign objects in the oral cavity, there are more chances of finding foreign objects in their teeth. Sometimes, children do not reveal to their parents due to fear. In such cases, the presence of foreign body is detected on routine radiographs. These foreign objects may act as a potent source of infection and painful condition. Grossman,^[7] Gelfman,^[8] and Harris^[9] reported retrieval of indelible ink pencil tips, brads, a tooth pick, adsorbent points, tomato seed, pins, wooden toothpick, a pencil tip, plastic objects, toothbrush bristles and crayons from the root canals of anterior teeth left open for drainage.

McAuliffe^[2] has suggested various radiographic methods to be followed to localize a radio-opaque foreign object, such as Parallax views, Vertex occlusal views, Triangulation techniques, Stereo Radiography and Tomography. The Steglitz forceps have also been described for use of removal of silver points from the root canal. There is a description of an assembly of a disposable injection needle and thin steel wire loop, formed by passing the wire through the needle being used. This assembly was used along with a mosquito hemostat to tighten the loop around the object.^[10]

In the cases reported here, the foreign objects were in the primary teeth. In the first case, the patient first denied of inserting anything in the tooth but on further questioning she admitted of inserting staple pins, foils and papers in the tooth. As the prognosis was poor, the tooth was extracted. On removal of the foreign objects from the extracted tooth, we found two staple pins and a piece of aluminum foil.

In the second case, the child came with a complaint of

pain in the primary central incisor. On routine radiographic examination, broken head of sewing needle was found. Again here, the parents were not aware of the fact that child had inserted sewing needle in the tooth. But the parents were not willing to come again and were insisting for the removal of the tooth. Thus, this tooth was also extracted under local anesthesia.

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. Timely diagnosis and management of foreign object embedded in the tooth should be done to avoid further complication.

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