

Unusual Foreign Object - An Incidental Radiographic Discovery

Purnachandrarao Naik*

Reader, Department of Oral Medicine and Radiology, Sibar Institute of Dental Sciences, Guntur, Andhra Pradesh, India

***Corresponding Author:** Purnachandrarao Naik, Reader, Department of Oral Medicine and Radiology, Sibar Institute of Dental Sciences, Guntur, Andhra Pradesh, India.

Received: March 18, 2019; **Published:** April 29, 2019

Abstract

Foreign objects in the primary dentition are found more frequently by the dentist as they habitually place these objects in their mouth but in adults it is found to be rare. Among them few foreign objects more frequently encountered in dentistry are needles, pins, broken instruments etc. These objects will act as a channel for pulpal irritation and source of periapical infections. So, recording detailed history, clinical and radiographic examination is necessary for the dentist to conclude about the nature of foreign object.

Keywords: Foreign Objects; Radiographic Discovery

Introduction

Foreign objects in the primary dentition are found more frequently by the dentist as they habitually place these objects in their mouth but in adults it is found to be rare.

Case Report

A 26-years old female patient reported with a complaint of pain in her left lower back tooth region for the past 10 days, history of pain revealed gradual, intermittent, throbbing type, non-radiating, aggravating during night times and relieved by taking self-medication. Past medical, dental histories were non-contributory. Intra oral examination revealed a large carious lesion on the occlusal surface of lower left second molar. The involved tooth had deep periodontal pocket with slight mobility, and on percussion of tooth slight tenderness was noticed.

Then the patient was subjected to a routine intra oral periapical radiograph, and radiographic examination revealed, a well-defined radio-opaque structure which was cylindrical in shape measuring 1.5 X 7 mm in diameter was noticed in the pulp chamber and extending into the digital root canal. Involved tooth also showed diffuse radiolucency along with lateral surface of digital root also extending to the furcational area (Figure 1).



Figure 1

Finally, patient was questioned regarding the presence of radio-opaque structure in the pulp canal, then patient revealed that few days past she had used safety pin in her carious tooth to confiscate the food remains which was the cause for irritation. Considering the clinical picture and irreversible damage in the radiograph the tooth was advised for extraction followed by prosthetic replacement (Figure 2-4).



Figure 2



Figure 3



Figure 4

Discussion

Lodgment of foreign objects in pulp chamber and root canals are considered to be usual in pediatric patients because of imitation of peers performing a similar behavior and panic of dentist but in adults because of attempts to relieve long standing irritation [1]. As per the review of literature there are plentiful reports describing the many foreign objects that have been interleaved in the exposed pulp chambers and habitually in the anterior region [2]. Anterior region is more common as it is in reachable zone when compared to posteriors as it is inaccessible, as our case which was reported in the posterior teeth [3]. Prabhakar, *et al.* reported embedment of a screw in a permanent mandibular first molar [2,3]; while Nadkarni, *et al.* described a needle fragment in the palatal root canal of a permanent maxillary first molar [4].

Radiographic investigations have got paramount diagnostic value in cases with different foreign objects. Diverse radiographic techniques are in hand currently to know the exact location, size and sometimes the nature of a foreign object [5]. According to the feasibility, a simple SLOB (Same Lingual opposite Buccal) technique to advanced CBCT (Cone Beam Computed Tomography) imaging could be utilized by the oral health care professionals [6]. The discernibility of diverse materials on plain film radiographs depends on their ability to attenuate X-rays; foreign bodies may be visualized, depending on their inherent radiodensity and proximity with the tissue in which they are embedded [7].

Retrieval of foreign objects is however mandatory if the tooth is under restorable condition as they are the source for secondary infection. In our case the tooth was beyond the restorability and predicting the poor prognosis, it was indicated for extraction [8,9].

Conclusion

This case report emphasis the necessity of dental surgeons to establish good rapport with patients, so that the history of foreign body implanted is not ignored. Oral health care professionals should be attentive to the presence of foreign bodies and educational campaigns must be conducted for accentuating the dangers of inappropriate use of teeth.

Bibliography

1. Aduri R, *et al.* "Foreign objects in teeth: Retrieval and management". *Journal of Indian Society of Pedodontics and Preventive Dentistry* 27.3 (2009): 179-183.
2. Prabhakar AR, *et al.* "Foreign body in the apical portion of a root canal in a tooth with an immature apex: a case report". *International Endodontic Journal* 41.10 (2008): 920-927.
3. T Lucavechi, *et al.* "Selfinjurious behavior in a patient with mental retardation: review of the literature and a case report". *Quintessence International* 38.7 (2007): e393-e 398.
4. Nadkarni UM, *et al.* "Retrieval of a foreign object from palatal root canal of a permanent maxillary first molar: a case report". *Quintessence International* 33.8 (2002): 609-612.
5. N Mcauliffe, *et al.* "Staple diet: a foreign body in a tooth". *International Journal of Paediatric Dentistry* 15.6 (2005): 468-471.
6. L Pomarico, *et al.* "Images in paediatrics: unusual foreign body detected on routine dental radiograph". *Archives of Disease in Childhood* 90.8 (2005): 825.
7. Srivastava N and Vineeta N. "Foreign body in the periradicular area". *Journal of Endodontics* 27.9 (2001): 593-594.
8. Nehme WB. "Elimination of intracanal metallic obstruction by abrasion using an operational microscope and ultrasonics". *Journal of Endodontics* 27.5 (2001): 365-367.
9. Kay M and Wyllie R. "Pediatric foreign bodies and their management". *Current Gastroenterology Reports* 7.3 (2005): 212-218.

Volume 18 Issue 5 May 2019

©All rights reserved by Purnachandrarao Naik.