Case Report

JRAD Journal of Research and Advancement in Dentistry

J Res Adv Dent 2016;5:1:379-381.

Pins in Bin is Better Than in a Tooth: A Case Report

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ABSTRACT

Background: Young patients visiting their doctors with dental problems sometimes are a victim of their own habits. Such habits are self inflicted injury which can range from fingernail biting to extreme self mutilation and can be diagnosed by a detailed case history. The presence of foreign bodies in the teeth is one of such examples. Here we discuss a case report of wedged stapler pins in the root canal of a central incisor and its removal.

Keywords: Masochistic habit, Foreign body, Fractured tooth.

INTRODUCTION

It has been observed that children often have a habit of inserting various foreign objects into their mouth. The presence of such objects in the teeth is one of such circumstances also referred as factitious/self induced injury, self-mutilating injuries and injuries due to masochistic habits resulting in the infliction of physical damage, hurt and pain upon oneself [1,2]. These injuries can be premeditated, accidental or can be caused by an uncommon habit. Children often have a habit of inserting various foreign objects into their mouth which may result in fatal ingestion or even aspiration. The occurrence of metal screws [3], staple pins [4], darning needles [5], pencil leads [6], beads [7] and tooth picks [8] lodged in the exposed pulp chambers of carious or traumatically injured deciduous and permanent teeth are such examples which have been reported earlier. The following case report describes a young patient with the bad habit of playing with stapler pins; which got stuck in the root canal of a fractured central incisor. Successful retrieval of those pins is the topic of discussion here.

CASE REPORT

A 12 year old boy reported to the Department of Pedodontics and Preventive dentistry with the chief complaint of pain in relation to right central incisor since three months. Past dental history revealed he had fractured his both upper permanent maxillary central incisors (Fig 1), due to fall one year back and did not receive any dental treatment. Intraoral examination showed fractured 11 and 21 with exposed pulp chamber in relation to 11. An Intra oral periapical radiograph was advised, which showed fractured 11 (class III) and 21 (class II). Some radiopaque foreign bodies were also seen present in the root canal and periapical region of 11 (Fig 2). Detailed case history revealed that post trauma the patient had developed a habit of playing with the stapler pins by inserting them into the broken tooth and cleaning the open orifice with the same. Initially he is used to do it to remove the food impaction, but later it became more of a habit which he used to enjoy. Therefore, it was confirmed that those foreign bodies were stapler pins. The procedure included the removal of those pins by first widening the the root canal orifice by making a conventional access opening and then careful instrumentation was done by using shepherds hook explorer and tweezers to

Received: June. 15, 2015: **Accepted**: Nov. 18, 2015
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pISSN 2278-0076
eISSN 2321-9270

Fig 1: Fractured his both upper permanent maxillary central incisors.

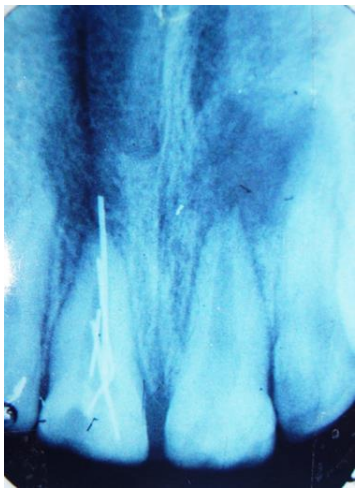

Fig 2: Radiopaque foreign bodies were seen present in the root canal and periapical region of 11.

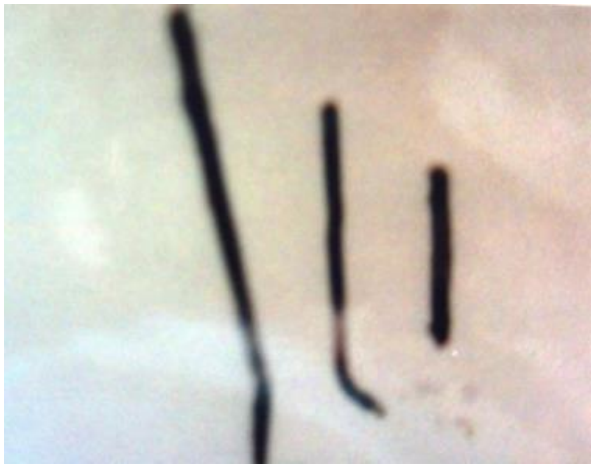

Fig 3: Removed embedded pins.

remove the embedded pins (Fig 3). Copious irrigation with normal saline was done simultaneously. Due to the corrosion of the pins the irrigation was seen as black and grayish black discoloration. The pins retrieved were seen black in colour. Post removal a dressing of unsetting calcium hydroxide was done and the patient was kept under antibiotic coverage. On the later appointments when the tooth became asymptomatic it was obturated with conventional root canal treatment of 11 and full crown restoration was advised for both 11 and 21.

DISCUSSION

Usually it has been observed that a fractured teeth leads to undue attention. Children tend to develop a habit of probing it most of the times which results in ungainly games leading to bad habit like inserting various foreign objects like toothpicks, pencil tips or even pins which are easily available to them. Grossman[8], and Gelfman[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. These injuries can be premeditated, accidental or can be caused by an uncommon habit. Such condition may lead to infection which can cause pain, abscess or even septicaemia.

Most often, such cases are diagnosed by careful interpretation of detailed case history. A simple radiograph may also help if the object is radioopaque. 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 has been observed by Mcauliffe[4]. Nehme[10] advocated the use of operating microscope along with ultrasonic filing to eliminate intracanal obstructions using ultrasonic instruments[11], the masserann kit[12], modified castroveijo needle holders[13] which have been used for the removal of foreign objects lying in the pulp chamber or canal. Ethylenediaminetetraacetic acid has been suggested as a useful aid in lubricating the canal when attempting to remove the foreign object. The steglitz forceps have also been described for use of removal of silver points from the root canal[14]. Walvekar[15] *et al*, have stated that if the foreign object is snugly bound in the canal, the object may have to be loosened first; it should then be removed with minimal damage to internal tooth structure to prevent the root

perforation. In the case reported here the patient had the habit of playing with his fractured right central incisor by inserting stapler pins in its open access, which accidentally got stuck in the root canal and he was unable to retrieve, but because of the fear of getting scolded by his parents he did not inform anyone which became the reason for his pain and discomfort. Timely diagnosis and treatment of the traumatized tooth could have been prevented the any of such habit and its consequences. The technique employed in our case in our case was simplified by gaining proper access to the pins through the root canal and then its retrieval. Same method has been described by Fros and Berg[13] and McCullock[16] in which considerable amount of internal tooth structure was removed to gain access to the foreign object.

CONCLUSION

The above case report discusses the management of teeth with impacted foreign objects in the tooth by a simple nonsurgical procedure. The removal of stapler pins from the root canal was accomplished by using commonly used instruments like shepherd's hook explorer and tweezers. Such cases can be easily avoided if there is timely treatment of the traumatized teeth, parents' awareness and their sympathetic approach towards children with such habits. Communication and prompt consultation to the dental surgeon may be helpful in avoiding any of such condition and its sequel of its complication.

CONFLICT OF INTEREST

No potential conflict of interest relevant to this article was reported.

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