

Case Report

Unusual Foreign Bodies in the Oral Cavity: A Report of Three Cases

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Abstract: Forgotten foreign bodies are often encountered in the oral cavity. These objects may become a potent source of pain and infection. The aim of this article is to present three unusual cases of forgotten dental instruments after surgical operation.

Keywords: foreign bodies, elevator, tooth extraction

INTRODUCTION

Foreign bodies are often encountered in the orofacial region by oral and maxillofacial surgeons (1). The size and the type of object, anatomical relationship of the foreign body to vital structures, the difficult access may present challenge to the surgeon (2). Examples of foreign bodies were metallic objects (3), restorative materials like amalgam, wooden stick (4), broken instruments, obturation materials and needles (5). Diagnosis of these cases is often made accidentally on radiographic examination (6) or may be associated with pain and sign of inflammation with purulent discharge (7). Their identification and removal from the tissue is often necessary (8).

The aim of this paper is to present three unusual cases of foreign body and consequences and suggests approaches in the face of these events.

CASE-1

A 55-year-old female patient attended to our clinic with a chief complaint of pain in left mandibular angle region since last three weeks. Patient's medical history was not contributory. Her past dental history included impacted third molar surgery. After all required radiographic investigations, a well-defined radiopaque foreign body was detected in region of mandibular third molar (Figure-1). Patient was operated under local anesthesia and a metallic object measuring approximately 7 mm was retrieved (Figure-2). It was estimated that the elevator was broken during impacted third molar surgery and it was missed out in the tissues. The postoperative course was uneventful and the patient was asymptomatic in the 3 month period of follow-up.

CASE-2

A 25-year-old female patient was admitted to department of Oral and Maxillofacial Surgery with a complaint of painful swelling over her right cheek since ten days. Well-bordered radiopaque foreign body was detected in lower right third molar region by radiographic examination (Figure-3). It was learned from patient's history that her impacted right mandibular third molar were extracted before two weeks. The region was operated and a broken round bur piece was seen. This piece was removed under local anesthesia. The healing was uneventful and the patient was free of pain. It was thought that the bur was broken during surgery.

CASE-3

21-year-old man was reported to our clinic with complaints of pain in the lower jaw. It was learned that the patient had a traffic accident and mandible fracture occurs one year ago. After the accident the patient has been operated. Then one of the two reconstruction plates used in the lower jaw has been removed because of infection. We saw a radiopaque foreign body at the level of mandible left premolar tooth root in panoramic radiograph (Figure-4). There was also a fistula in the mouth. second premolar tooth root canal treatment was performed. Following apical resection broken drill bur was removed (Figure-5). After two months of follow-up the patient was free of symptoms.

DISCUSSION

Foreign body impaction in the oral and maxillofacial region may result from trauma or may be iatrogenic (8). Foreign objects may produce chronic inflammatory reactions and become a potent source of pain and infection (9). Piece of elevator or bur can be

oxidized. The oxidization could be one of the main reasons of the pain and infection. Foreign bodies are considered a misadventure and is associated with several legal problems. Their identification and removal is often necessary (8).

The possible causes of burs, elevators and other dental instruments breakage during surgical procedures include stress, defective manufacturing, metal fatigue of instruments, rust or poor handling (10). Clinicians should avoid excessive and incorrect sterilization. Use of the autoclave without the anticorrosive pretreatment negatively affects the integrity of stainless steel dental instruments (11). Sterilization with dry heat (180 °C) can be the cause of the breakage of dental instruments.

Forgotten or missed foreign body is a common problem in patient. The removal of foreign bodies may present challenge to the surgeon. The search of a foreign body in a large area increases the risk of damage to adjacent anatomical structures. Foreign objects should be identified and localized. Plain radiographs, computed tomograms, ultrasound, magnetic resonance images are useful to confirm the presence of foreign body, determine the location, assess the size and shape (12).

Dentists must pay attention especially when instruments are used in poorly visible areas. Checkup of instruments and materials is also essential. After surgery using routine postoperative screening radiographs help us in conclusion.



Fig-1: Panoramic radiograph showing the radiopaque foreign body



Fig-2: Piece of broken being elevator



Fig-3: Broken round bur



Fig-4: Mandible fracture and foreign body



Fig-5: Pieces of broken drill bur

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