

Unusual cause of dysphagia: Endodontic canal file in the posterior wall of hypopharynx

Ismail Demir¹, Yuksel Toplu², Ayse Ozcan Kucuk³

¹Malatya Yeşilyurt State Hospital, Clinic of Otorhinolaryngology, Malatya, Turkey

²Inonu University Turgut Ozal Medical Center Department of Otorhinolaryngology, Malatya, Turkey

³Mersin University Faculty of Dentistry, Department of Dental and Maxillofacial Surgery, Mersin, Turkey

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Dear Editor

Foreign bodies of the upper respiratory tract are common clinical problems especially in children. On the other hand, oropharyngeal foreign bodies are more frequently seen in patients over 20 years of age (1). Although rare, swallowing or aspiration of foreign bodies, such as brackets, orthodontic wires, burs, piece of amalgam, teeth and dental clamps, is recognized as a complication that can occur during dental treatments (2-4). The incidence of aspiration or swallowing dental foreign bodies varies considerably in the literature. Food materials constitute the majority of the foreign bodies found in the trachea of children (5). Loose dentures, broken orthodontic appliances and dental instruments are the second most commonly ingested objects seen on adults (6). In a review article, the incidence of swallowing or aspiration dental foreign bodies ranges 3.6% to 27.7% of all foreign bodies (7).

Accidental swallowing is more common than aspiration, and usually does not cause any clinical signs or symptoms (8). Accidental swallowing or aspiration of dental foreign bodies might create a medical emergency that can lead to serious problems if they are lodged in the airway or gastrointestinal tract. However, the majority of foreign bodies pass through the gastrointestinal tract without complications (9). Besides, 10–20% of cases require nonsurgical intervention, while 1% or less may require surgery (8). In this case, a rare endodontic canal aspiration, which is not noticed until pain in the throat during swallowing, will be presented.

A 16-year-old male patient was admitted to our clinic with the complaint of stinging in the throat and sore throat after eating. In the story taken, it was stated that he felt

swallowing a sharp needle-like and pointed foreign body after eating hamburgers. The patient did not describe an unusual condition before this event. As the patient did not have any symptoms of respiratory distress, no immediate treatment was considered. His ear- nose-throat examination was normal. No foreign body was found in the endoscopic examination. Anteroposterior and lateral radiographs were taken from the patient because of the suspicion of lost foreign body.

A sharp needle-like foreign body was detected on the posterior wall of the hypopharynx and operation decision was made (Figure-1). The operation was performed under general anesthesia and the foreign body was removed from the posterior wall of the hypopharynx with scopy. Interestingly, it was realized that the removed foreign body was not a needle; it was an endodontic canal file that dentists used during the root canal treatment (Figure-2). When he was asked whether he received dental treatment after the operation, he reported that he had received endodontic treatment at a private dental clinic 5 months before. The patient had difficulty during the procedure, coughed a few times but did not realize that he swallowed this material. It was thought that the dentist performed the procedure without using a rubber cover and did not realize that there was no large canal used during the root canal treatment. The patient, having no problem in follow-up after the removal of the foreign body, was discharged without complications the following day.

Swallowing and aspiration of foreign bodies is common, usually with children, mentally retarded, impaired, psychotic, alcoholic individuals, prisoners, and patients with an excessive gag reflex. Accidental swallowing and aspiration of dental instruments is a potential

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Corresponding Author: Ismail Demir, Malatya Yesilyurt State Hospital, Clinic of Otorhinolaryngology, Malatya, Turkey

E-mail: dmr_dr029@hotmail.com

complication that may occur during any dental procedure (3). In the literature, several cases of various dentistry tools that were accidentally swallowed were reported. In a study, the incidence of accidental endodontic ingestion was found to be 0.12 in the 100.000 root canal treatment (2). Therefore, use of rubber dams during all intraoral dental procedures is recommended (3,6,8). In our case, it is interesting that the patient was asymptomatic for so long, and that he thought he swallowed something while eating a hamburger and also the dentist did not recognize the absence of a large dental file used during a root canal treatment. The very first step in managing such cases is accurate determination of the foreign body lodgment site. This can be done through plain radiographs, computerized tomography, or magnetic resonance imaging. Upper and lower gastro-intestinal endoscopy and bronchoscopy can be used diagnostically as well as therapeutically.

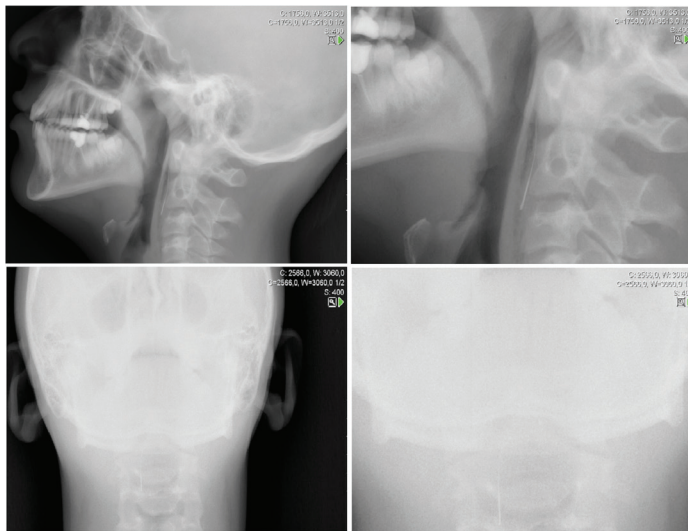


Figure 1. Radiological image

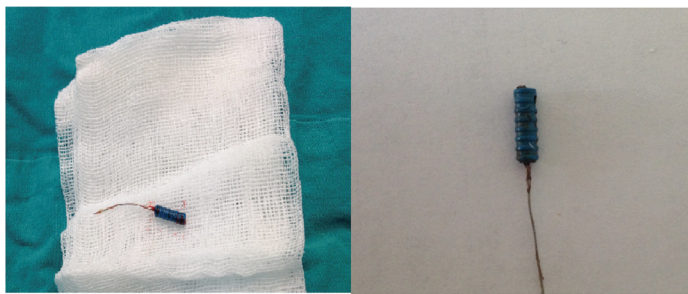


Figure 2. Endodontic canal file

Dentists and ear-nose-throat doctors must be aware of the risk and associated complications of accidental swallowed or aspiration of dental instruments during root canal treatments. The use of rubber dam, gauze glands and objects connected to dental wire during the procedure can easily prevent swallowing and aspiration of foreign bodies (8).

Furthermore, it prevents the occurrence of such cases where dentists count the instruments after each procedure.

In conclusion, anamnesis should be detailed in foreign body aspiration, which is frequently encountered by clinicians and it should be kept in mind for the dental and dental related treatments.

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Ismail Demir ORCID: 0000-0002-4362-795X

Yuksel Toplu ORCID:0000-0002-5444-557X

Ayşe Özcan Kucuk ORCID: 0000-0002-8289-8066

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