

## Repeated Ingestion of an Unusual Foreign Body together with the Insertion of a Foreign body in the Bladder

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### Abstract

**Background and objectives:** Pieces of food or other material maybe accidentally ingested and entrapped in the alimentary tract. In rare cases, this material may be ingested by the patient purposely, and leads to some problems. In addition to ingestion of foreign body, they may perform some unusual behavior such as the insertion of wire into the bladder.

**Methods:** The patient is a 37-year-old man that referred to hospital with dysphasia and odynophagia following the ingestion of a big peach nucleus. After diagnostic interventions, he was investigated by Esophagoscopy. After that, he said that he ingested a big nail cutter. X-Ray examination showed that this nail cutter was in stool.

**Results:** Immediately he said that he chewed a Fluor cent lump and ingested some of it. In the past, he inserted an electrical wire to the bladder by himself after sometimes it is extracted frame the bladder by urologist. Finally, the patient referred to psychiatric ward for continuing the treatment.

**Conclusion:** When patient ingest foreign body unduly, evaluation of psychologic dimensions is mandatory, and for the treatment team a psychiatrist is necessary.

**Keywords:** Foreign body- esophagoscopy- esophagus

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## Introduction

The Foreign body may be swallowed intentionally or unintentionally. Intentional swallowing is more common in patients with mental disorders; the foreign body in the esophagus can be turned into a serious emergency, which is more important for sharp objects [1]. In the elderly people, due to the absence of the teeth and the lack of complete sensation for swallowing reflexes, and possible disturbances of esophagus movements, the possibility of the foreign body being such in the esophagus is greater; however, the foreign body is not intentionally swallowed. Mentally retarded people and children may be more likely to do this due to lack of adequate pain and lack diagnostic power [2]. Different types of foreign objects may be swallowed, most of which are: coins (64.8%), bone (30.6%), clothes button, pins, lock pin, dentures (3.2%), and pieces of meat (7.9%). There are five sections in the esophagus where a foreign body may be gut sucked. In 95% of the cases, it is located in the muscle of the cricopharyngeal region in the upper sphincter of the esophagus. In 1.6%, two foreign bodies were simultaneously observed [3-4]. Patients swallowing foreign bodies refer to various symptoms, such as nausea and vomiting, dysphagia, odynophagia, or other associated complications [5]. In the cases of foreign body suspicion, after history, the diagnostic measures should be performed including lateral neck and chest radiographs, assessing with Barium swallow and CTscan for neck and stomach. Phagoscopy is also used in the case of a strong suspicion of a foreign body as a diagnostic and therapeutic action [6].

The foreign body can cause serious complications, such as rupture and infections

of surrounding soft tissue, mediastitis, abscess, fistula to the adjacent viscera, aortic or lung vascular lesions and peritonitis. Some of the complications are due to the movement of the foreign body in the esophagus, and the rupture of the esophagus or abdominal viscera. Of course, the nature of the foreign body is also important. For example, the swallowing of disc-shaped batteries leads to necrosis and tearing of the esophagus due to the presence of potassium hydroxide or sodium [7]. Aorta rupture and esophageal fistula to bronchial are the late complications of an external object. Therefore, attention to untreated foreign objects is important [4].

Foreign body swallowing should be treated according to its nature and material and its shape. It was proven that if an external body reaches the stomach and duodenum, it passes the rest of the gastrointestinal tract without problems unless it is large enough to block the output of the stomach [8-9]. In the cases of non-cutting and small objects, when the foreign body passes through the esophagus and enters the stomach and intestines if it does not cause any complications, it is best to take care of them until it leaves the digestive system, since nearly 86% will be repelled spontaneously [10]. In other cases where the foreign bodies are large, sharp, or dangerous, or the patient is not available for control or is accompanied by psychological problems, the patient should be admitted to removing the object [11]. In cases where the patient swallows a foreign body repeatedly, or when the foreign body swallowing is associated with unusual behaviors, it is necessary to consider the psychological aspects of the patient. These include eating unusual non-food items such as nails or inserting the objects into other ducts, such as a urethra. Insertion of foreign objects into the urinary

system is relatively rare and the bladder is the most common place for the insertion of external bodies, which is commonly observed in children and patients with mental disorders [12]. Sometimes it may be iatrogenic. The iatrogenic condition often occurs due to the ergogenic colitis actions including sling in women or after the radial prostatectomy and artificial sphincter and penis prosthesis in men. Detection of this practice is possible based on accurate history and proper imaging examination. Understanding the motivation of individuals to enter foreign bodies to the bladder is often difficult. In most cases of patients with psychological problems, it is caused by sexual pleasure [13]. Considering the importance of repeated ingestion of unusual foreign objects and its accompanying with some abnormal behaviors, such as inserting the metal wire into a urinary tract, we reported the case in the following.

#### **Reported case:**

A 37-year-old man who was unmarried, unemployed, addicted and with six siblings referred to the emergency of the hospital for severe dysphagia and odynophagia. On his arrival, he complained of severe pain and state that he has swallowed peach core got stuck in his esophagus. Due to severe pain and discomfort, there was no more accurate description. After the lateral radiography of the neck, it was found that there is a relatively large "object" at the beginning of the esophagus (radiography 1). The Esophagoscopy was performed for the candidate patient and the peach core was removed from the esophagus under a general anesthesia. After that, the patient stated that, in addition to peach, he had swallowed a metal object (nail clipper) before. On abdominal radiography, his claim was approved. Due to the exertion of the object

from the stomach and entering the intestines, conservative measures were taken and it was excreted after several days without any complications (radiography 2). Then, the patient again stated that he had eaten the fluorescent bulbs and had no complications after several days of admission and conservative measures. Due to the patient's numerous problems and a 15-year history of addiction (Cannabis-Crack), he was applied for psychological counseling. In a psychological counseling description, the patient stated that he had a depression and mental illness, and he thought he would be calm by inserting foreign objects into the urethra. He did not regret and stated that he would "use drugs if the drugs were available to him." Following consultation, it was decided to transfer the patient to the psychiatry ward for psychiatric care considering the digestive system conditions after medical and surgical procedures. Moreover, in reviewing his medical records, using hospital documentation and an expert's opinion, it was determined that he had entered a metal object in his urethra 8 months ago remained in the bladder for 3 months. The patient referred to the urologist due to dysuria and hematuria and after various examinations, it was revealed that there was a metal object in the bladder that was hardly removed through cystoscopy (Radiographs 3 and 4).



Considering the numerous problems of the patient and the repetition of these unusual actions, he was admitted to the psychiatric ward to continue the treatment

## Discussion

Swallowing foreign objects intentionally or unintentionally may occur in children and adults. Different types of foreign objects may be swallowed, however, in children, swallowing of the coin is more common. The foreign object passes through the stomach and excreted in many cases without any intervention [13]. The results of some studies indicate that many foreign objects (80%-90%) spontaneously exit from the digestive system within 7-10 days, 10% to 20% will need an endoscopy to remove, and about 1% of the cases will require surgery as well [14, 15]. Perforation can occur in less than 1% of cases of foreign body ingestion, which is usually more common in the esophagus. Other areas where perforation may occur include pylorus, duodenum, jejunum, ileocecal region and other areas with congenital anomalies [16]. The degree of success in the ingestion of foreign body objects depends on the size and nature of the foreign body. The patient is not merely important due to the fall of the foreign body in the esophagus, however, the ingestion of a large and non-corrosive foreign body such as the great core of peach and nail clipper, and its repetition by eating the luminescent bulb

glass, as well as the insertion of a metal object into a urethra duct and history of drug use, make it important. In the report of Lohiya et al., a patient was introduced who swallowed a large lemon and esophagectomy was used to remove it [18]. Schrom T and Amms also reported a 45-year-old man who swallowed a 14-cm metal object and esophagoscopy rigid was used to remove it. Considering the intentional nature of the action and the psychological problems the patient was referred to the psychiatric ward [19]. Misra also reported a 26-year-old man who had swallowed a large number of metal needles, leading to rupture of the stomach and duodenum, referring with the generalized peritonitis [20]. Gunduz and Turedi also introduced a 30-year-old man who had referred due to fatigue, weight loss, and abdominal pain. After examining, it became clear that there were metallic objects in the abdomen that the patient was swallowed for psychological problems [17]. Swallowing foreign bodies can even lead to complications in delay without memories of swallowing. Komninos reported a 56-year-old woman who referred due to the abdominal pain with irritable bowel syndrome sign and with no memory of the foreign body swallowing. After several examinations, it

was found that there was an unusual external object in the bowel which was recovered after treatment [21]. The insertion of an external object into the urethra may also be intentional or accidental. There are several reports in the medical articles indicating the foreign body insertion in the bladder by the person himself/herself. The insertion of objects such as magnets, paper clips, telephone wires, electric wires, screwdrivers, thermometers, metal balls, fork, serum set and even animals such as snake and fish have been reported [12]. Passuro G reported a 44-year-old woman who intentionally inserted the pencil into urethra, which could be due to masturbation or a mental disorder [22]. The mentioned patient swallowed the unusual foreign objects with the insertion of an external object into the urethra and had drug use, declaring that she was relieved by these acts. It is clear that the psychological problem is the dominant aspect of the action and the psychiatric issues must be taken into account in her treatment.

### **Conclusion**

In cases where the patient has repeated ingestion of foreign objects together with other abnormal behaviors, in dealing with intentional ingestion of unusual cases, considering the importance of diagnostic and therapeutic aspects, the patient's statements are not sufficient and it is recommended to examine his/her entire digestive system to diagnose the cases not reported by the patient. Such patients should be treated for their psychological problems as well in order to prevent such incidents..

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