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Letter to the Editor

# Approach to esophageal foreign bodies in a district hospital; Two different cases

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**Dear Editor,**

Esophageal foreign bodies are an urgent clinical problem which is relatively common in patients in the pediatric age group. It is rarely seen to accidentally ingest a food bolus or bone fragments during a meal, in teenagers and young adults. People who have a habit of putting different objects into their mouths can suddenly swallow foreign objects during conversation or distraction. In the geriatric age group, unconscious movements such as accidental ingestion of different objects with intent to eat, swallowing food without chewing, swallowing teeth sets, spoons and forks are examples of esophagus foreign bodies. Some psychiatric patients already exhibit many behaviors that intentionally or unconsciously swallow many objects themselves. Regardless of age group, it is important to make early diagnosis and intervene appropriately in time. Of course, the form and size of the foreign body and the suitability of the tools in use are also important for a successful intervention. The experience of the endoscopy expert is also important in itself. Here we present our experience with two different foreign bodies in two different age groups we encountered at Viransehir State Hospital, a district hospital in Sanliurfa, Turkey.

A 54-year-old male patient was admitted to our emergency department with a complaint of retrosternal pain and stinging sensation. There was no abnormal finding on the physical examination of the patient, indicating that he had inadvertently eaten the bone during eating. Laboratory values were normal. An endoscopy made in an emergency condition showed a bone fragment attached to the esophagus at about 25 cm from the incisor teeth. The bone piece caught with biopsy forceps was taken out. There were no abnormal findings in the clinic and laboratory values of the follow-up of the patient for 2 days. The patient was discharged without any problems (Figure 1).

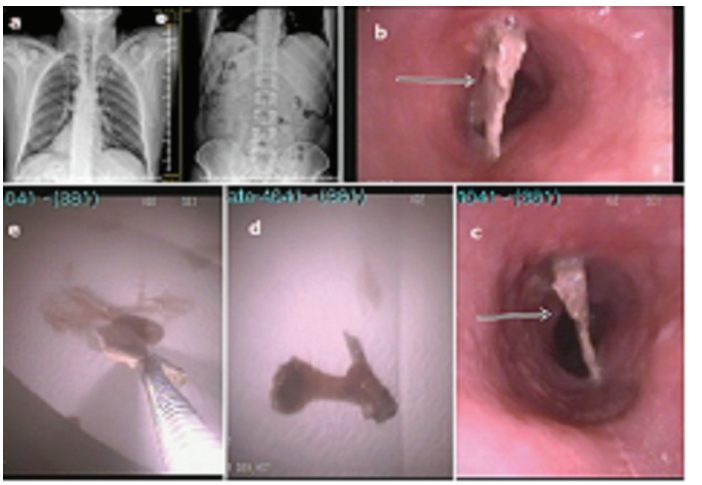

**Figure 1 a.** Plain radiographs; the swallowed bone piece is not selected because it is a superposition, **b.** Endoscopic view, **c.** and **d.** Removal of the bone piece by forceps

A 14-year-old male patient was admitted to emergency service with retrosternal pain complaint and coin swallowing story. The x-ray showed a round, opaque object in the middle of the esophagus. On the endoscope, it was seen that a coin of about 3 cm at about 25 cm from the incisor teeth remained attached to the esophagus. We tried to catch it with a biopsy forceps, but the coin went into the stomach, after a few attempts the coin disappeared between the undigested foods in the stomach. Immediately after the procedure, the x-ray was taken again and it was seen that the coin was already in the small intestines.

The patient was offered a potato diet. The patient who did not come to the control was called by phone. We learned that, about 36 hours after the foreign body was swallowed, it was thrown together with the stool (Figure 2).

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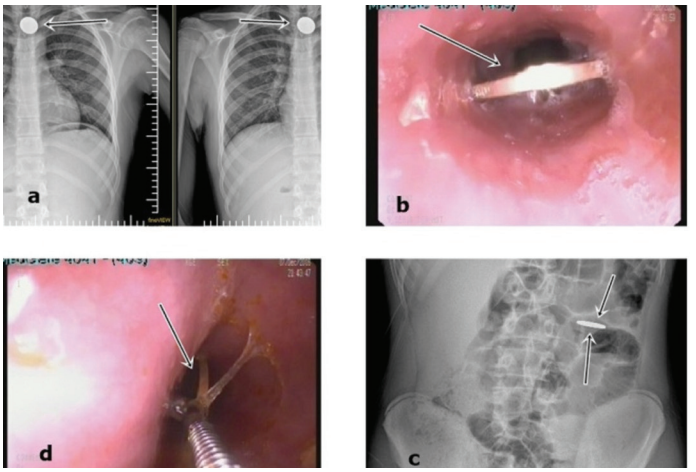


**Figure 2 a.** A plain radiograph taken at the time of application **b.** and d) Endoscopic view **c.** A plain radiograph taken after endoscopy, the coin appears in the small intestine

The majority of foreign body swallowing cases occurs in the pediatric age group. About 80-90% of swallowed foreign bodies spontaneously pass through the digestive tract. However, about 10-20% of them require endoscopic removal, surgery is needed to remove foreign bodies or treat their complications in less than 1% of the cases (1,2). The most common foreign bodies in children are coins, whereas in adults food bolus is most common (3). Direct radiographs can identify most radiopaque foreign bodies, but food bolus content may not affect the impaction; also fish or chicken bones, wood, plastic, most glass, and thin metal objects are not easily visible (4). Just as in our cases, metallic coin is clearly visible in the plain radiograph, but the chicken bone fragment is indistinguishable. This shows how important anamnesis is in putting the diagnosis of the case.

Clinical symptoms are significantly affected by the shape of the ingested foreign body, the duration between the event and presentation and the age of the patient (5). In our patient who swallowed the bone fragments, retrosternal severe stinging sensation was the dominant complaint, while in the other patient swallowing a coin, there was a little retrosternal pain and fullness. Although the condition of the bone-swallowing patient was more serious he seemed comfortable, but the younger patient was more agitated and fearful. Both of our patients presented within 2 hours or less after the event.

In the literature, many methods of removing foreign bodies have been described, such as balloon extraction, advancement of a boogie, and flexible or rigid endoscopes. The choice of method depends on both the available instruments and the experience of the surgeon or gastroenterologists (6). But, there is an increasing choice of endoscopic maneuvers, because of avoidance of surgery; in addition, endoscopic removal have technical facility, excellent visualization, the chance of simultaneous diagnosis of other diseases, and a low rate of morbidity (4). We also opted for an endoscopic approach, but only biopsy forceps was available, so we could grab the bone piece and take it out, but not the coin.

Complications related to foreign body ingestion are rare, but associated morbidity can be severe and life-threatening (6). Significant factors leading to complications include delayed presentation (24 hours after the onset of symptoms), sharp foreign body presence, mental illness, dentures and multiple objects (4). If the foreign body becomes impacted in the esophagus due to delayed presentation, it may cause serious sequelae such as esophagitis, mucosal ulceration and hemorrhage, obstruction, perforation, mediastinitis, secondary collections, neck abscess, fistula formation or rarely, death (4,6).

Despite our limited technical capabilities, we intervened at the earliest and we did the best we could. We did not have a control endoscopy for the older patient, but found no abnormal findings on the patient's clinical follow-up and laboratory examinations. The fact that the coin was thrown through the stool also made us very relaxed concerning the younger patient.

Esophageal foreign bodies can be seen in adults as well as being a situation mostly encountered in children which rarely can cause life-threatening complications. The anamnesis has a very important place in diagnosis, but further radiographic examinations should be done if necessary. Endoscopic maneuvers as well as being the most important approach, technical possibilities and personal experience are essential factors for a successful treatment.

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