Case Report

A case of the long time presence of a large foreign body in esophagus without complication

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Abstract

Dentures are common accidentally ingested foreign bodies (FBs), especially in the aged population. It is usual for a FB to be swallowed in adults and lodge in the esophagus; however, it is unusual for a denture to remain in esophagus for a period of 9 months without any complication. We present, a 57-year-old deaf mute man swallowed his denture with the chief complaint of dysphagia and odynophagia only after 9 months. Although multiple attempts for removing the denture by rigid esophagoscopy were done, it entered the stomach, so gastrotomy was performed and the patient recovered uneventfully. In all cases with suspicion of esophageal FB, rigid esophagoscopy seems necessary, but in some unusual cases, large FBs may be remained in esophagus for a long time without perforation.

Key Words: Chronic foreign body, dysphagia, esophagus

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INTRODUCTION

Ingested foreign bodies (FBs) in the esophagus are common problem. In the older age group, the most common FB is the denture. Most cases are successfully treated by esophagoscopy. However, extraction of impacted dentures is often problematic. We report an interesting case of an impacted radiolucent FB in the esophagus of a 57-year-old patient with chronic FB in his esophagus without complications.

CASE REPORT

A 57-year-old deaf-mute man presented to Surgery Department with progressive dysphagia and odynophagia. On investigating his history, it was revealed that the patient had swallowed a part of his denture 9 months prior to the presentation. He did not follow his problem because of not having any complaint and was well till 3 days prior to the presentation. There was no significant upper respiratory symptom unless wheezing. The chest X-ray (CXR) showed widening of mediastinum [Figure 1a]. In endoscopy, the denture was at 25 cm from incisors in the esophagus.

The computed tomography showed the FB in the esophagus with thickening of esophagus wall at the T3–T4 level above the carina [Figure 1b]. The rigid esophagoscopy under general anesthesia was performed. Despite multiple attempts, it was not possible to remove the denture by esophagoscope, since the denture had been penetrated to the

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esophageal wall. In the next day, the esophagogram showed the horseshoe shaped filling defect in the distal part of esophagus lower than its previous position [Figure 2].

The rigid esophagoscopy was done for the 2nd time, but it failed again, and the denture was entered the stomach. Because of the large size of FB, removing it from the stomach by fiberoptic esophagoscopy was unsuccessful. So finally the denture was removed by mini-laparotomy and gastrotomy [Figure 3]. The patient recovered well and was discharged on the 6th day.

DISCUSSION

Although FB ingestion is a frequently encountered problem among the children, it is also common in the adults.[1] In the older age group, dentures are common accidentally ingested FBs, because of gradual loss of sensation of laryngopharynx and oral cavity in denture users.[2] With an increase in the denture-wearing population, there is an increase in the incidence of impacted dentures.[3]

The incidence of complications correlates with the duration of FB impaction.[4] Patients with acute FB ingestion usually have gastrointestinal symptoms including nausea, vomiting, and dysphagia; however, with chronic ingested FB, respiratory symptoms such as cough, fever, stridor, and apnea are mainly seen.[5] Once the impacted esophageal FB is diagnosed, it should be removed as soon as possible. According to the previous studies, tracheoesophageal fistula, respiratory symptoms, erosion, perforation, aortoesophageal fistula, and esophageal diverticulum are the results of delayed diagnose of FB.[6] In the cross-sectional study of 103 patients with FB ingestion, Khan *et al*. reported that the rate of complications was higher in adults (37.1%) than in children (8.8%) and FB ingestion by children is usually asymptomatic and uncomplicated.[7,8] The majority of adults can describe the location of FBs, especially more proximal ones, helping physicians diagnose sooner,[9] and it is rare for FBs to be remained in the esophagus for a long time without complications. [10,11] In the present case, not having any complication in spite of 9 months the presence of FB in the esophagus is remarkable.

Radiolucent FBs may be more difficult to diagnose and can be easily missed if the patient presents with minimal symptoms, and a high degree of suspicion should be maintained when dealing with such cases.[12] Here at the beginning, although the patient had described the denture ingestion, it was missed in

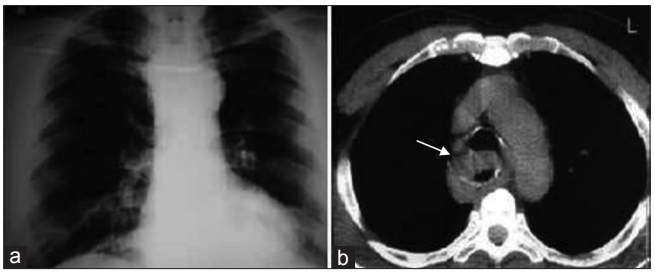

Figure 1: (a) Mediastinal widening in the chest X-ray. (b) Crescent-shaped foreign body in the thick wall esophagus in the thoracic computed tomography-scan

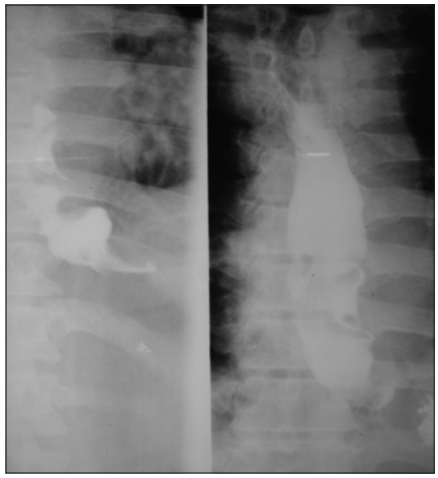

Figure 2: Horseshoe-shaped filling defect in lower esophagus in esophagogram after first esophagoscopy

Figure 3: Retrieved partial denture removed from esophagus

the CXR due to its radiolucent nature. In the majority of cases, 80–90% of ingested FBs pass through the gastrointestinal tract without any intervention and complication.[13] Therefore, the excretion of denture was suggested because in the most cases, FB passes through the gastrointestinal tract without any complication.

Review of the literature reveals some long lasting esophageal FBs in children but in our literature review

there was only one previous article reporting a chronic FB in an adult patient.[5,9] Here being deaf muted, made it difficult to take a comprehensive history and caused taking a long time to diagnose.

The management of FB ingestion varies based on the object ingestion, its location, size, and duration of lodging in the esophagus. The outcome of esophagoscopy for removal of suspected esophageal FBs is dependent on the FB characteristics. Removing sharp FBs can be dangerous and challenging. The main problem with such cases is penetration of FBs into the esophagus wall due to standing the FB for a long time so when we want to remove the FB by rigid esophagoscopy method taking precaution is important to prevent perforation. Rigid esophagoscopy is relatively safe procedure for removal of FBs. However, in this case, in spite of multiple attempts, rigid esophagoscopy was failed. In these conditions giving up endoscopic procedures is suggested to prevent probable further damages[13] and if endoscopic procedures fail, surgery should be performed.

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Conflicts of interest
There are no conflicts of interest.

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