

# Neglected and Impacted Foreign Body (Pickled Mango Seed) in the Upper Cervical Oesophagus: A Case Report



Satinder Pal Singh<sup>1\*</sup>, Laika Chopra<sup>2</sup>, Kulwinder Singh Sandhu<sup>3</sup> and Jagdeepak Singh<sup>4</sup>

<sup>1</sup>Senior Resident, Govt. Medical College, Amritsar, India

<sup>2</sup>Junior Resident, GMC, Amritsar, Punjab, India

<sup>3</sup>Assistant Professor, GMC, Amritsar, Punjab, India

<sup>4</sup>Head of Department ENT & Head Neck Surgery, Punjab, India

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\*Corresponding author: Satinder Pal Singh, Senior Resident, Govt. Medical College, Amritsar, India

## Abstract

Various oesophageal foreign bodies pass through the gastrointestinal tract without causing complications; therefore, endoscopic or surgical treatment is required only in a few cases. In this case report, the oesophageal foreign body namely a mango pickle seed has been identified in a tertiary center and successfully removed using rigid endoscopy. The peculiarity of this case exists in the type, shape and size of the foreign body, the age of the patient and the presence of high risk category.

**Keywords:** Oesophagus, Foreign body, Dysphagia, Odynophagia, Oesophagoscopy

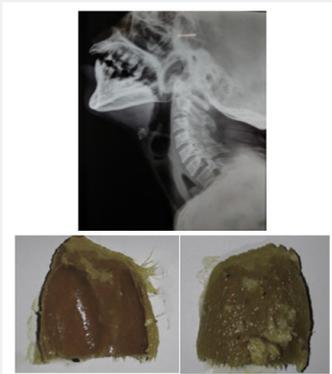
## Introduction

Foreign bodies (FBs) in the oesophagus are not so uncommon and are considered to be a serious clinical condition, both in adults and children, due to the possible complications (oesophageal perforation, mediastinitis, fistulization, airway obstruction) with a high mortality and morbidity [1,2]. Therefore, rapid and accurate diagnosis, together with subsequent treatment is necessary: in 20% of cases, endoscopic or surgical removal is promptly required [2,3]. The challenges come from patients who are unable or unwilling, for example, infants, children, mentally-impaired, psychiatric, prisoners, to provide a history of the object ingested or when it occurred [4,5].

## Case Report

A 35-year-old female mentally retarded presented to the Emergency ENT Department of the Government Medical College, Amritsar on 24 August 2018, complaining of dysphagia and odynophagia associated with regurgitation of food since three

weeks. Lateral soft tissue neck x-rays revealed the presence of a radio-opaque ingested foreign body (6 x 2.5 cm) located in the upper cervical oesophagus. Further confirmation was done after asking questions from her mother regarding the ingestion of the foreign body. The patient was admitted in ENT ward and stabilized with antibiotic, anti-inflammatory, antacids and iv fluids. Next morning the patient was shifted to the operation theatre and a rigid oesophagoscopy approach, under general anaesthesia, was performed. During the examination, using 50 cm Negus oesophagoscope (12 x 16 mm diameter) the FB was found in the upper cervical oesophagus after passing cricopharyngeus and removed using foreign body holding forceps without any injury to the surrounding structures. Foreign body was identified as a mango pickle seed with approximate size of 6cm x 3cm. The patient was kept nil per oral for 24 hours and Ryle's tube was inserted. The patient was discharged after 5 days of intravenous antibiotic and steroids. Postoperative period was uneventful (Figure 1).



**Figure 1:** X-ray soft tissue neck showing lateral view (horizontal arrow showing foreign body in upper cervical oesophagus) and F.B. pickled mango seed showing front and back sides after removal.

### Discussion

Different kind of foreign bodies (FB) ingested were well documented by Karnley and Bindary, 1990. Severity of symptoms depends upon size, type, site and period for which foreign body has been lodged. FB passes through the gastrointestinal tract uneventfully and no medical/surgical treatment is necessary. Endoscopic treatment or surgical interventions are necessary in 20% and 1% of cases, respectively [1,3,6]. Oesophageal FBs are more commonly in pediatric age group of 6 months to 3 years, and in adults particularly prisoners, alcoholics, edentulous and psychiatric patients. Our patient belongs to these high risk categories [1,7,8]. Majority of ingested objects as FB in the oesophagus are food materials such as seeds, nuts, bones, meat bolus, or others like coins, pins and toys [7]. In old aged patients, accidental ingestion of artificial dentures is more common [1]. The patients with oesophageal foreign bodies present with symptoms of dysphagia, odynophagia, diffuse chest pain, sensation of pressure in the throat, laryngeal irritation, forceful coughing, gagging and airway obstruction [9,10]. It is essential to keep in mind that high risk categories may present initially with vague symptoms and later on presents with serious complications [1]. FB frequently lodges at three anatomical constrictions of oesophagus: the cricopharyngeal ring, the aortic arch narrowing or the oesophago-gastric junction [9,11]. In our patient, FB was present in the upper cervical oesophagus, the site which offers greater difficult for flexible endoscopy,3 so it requires a multidisciplinary approach.

Long standing FBs in the oesophagus can lead to mucosal inflammation, ulceration and perforations and serious complication such as mediastinitis, deep neck abscess aspiration, pleural empyema, scarring, obstruction and fistulization [6,7,11]. To confirm the diagnosis of FB of the upper digestive tract, Plain films (neck and chest X-rays) are a very important diagnostic tool, especially in defining the location of the FB [6]. A barium-swallow X-ray study could be useful in cases of non-radio-opaque FB, but due to possible barium aspiration and/or

irritation of the damaged oesophageal mucosa, this procedure is no longer used.1-3 CT scans can be used to confirm the presence and to study the location of FB, or to evaluate any eventual damage to the neighboring structures [2,3]. In our case, chest X-rays already confirmed the presence and the localization of the FB, and, therefore, no other radiological procedure was necessary. Various factors such as patient's age, his/her clinical condition, the type, size, shape, size and number of FBs help in deciding the final treatment plan [5,6]. Nowadays, endoscopy is the preferred method for FB removal [5]. Rigid endoscopy is the treatment of choice for the management of sharp and penetrating FB. Direct instrumental wounds and perforations are the major risks during oesophagoscopy manoeuvres [11]. In our case, flexible endoscopy was unsuccessful in the removal manoeuvres mainly due to the size and shape of the FB; only the rigid oesophagoscopy approach was successful. Only for those cases where an endoscopic removal of FB has failed, a laparoscopic approach is obligatory [7].

### Conclusion

FBs in the oesophagus will continue to be a common emergency. The initial line of attack towards a patient with an oesophageal FB demands urgent assessment of respiratory status and establishment of an airway. The uniqueness of this case presented exists in the shape, size, and type of the FB, age of the patient and the presence of high risk category. A multidisciplinary approach is required for the removal of FB and in this case, rigid endoscopy under general anaesthesia has been the safer and more successful method for FB extraction.

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