Case Report

Esophageal Foreign Body - a case of foreign body in the esophagus of a 48-year-old man

Abstract

Foreign body in the esophagus is a common emergency presentation. The approach towards a patient with a foreign body in the esophagus comprises a thorough history and systematic examination followed by relevant investigations. However, there is considerable debate over the most appropriate treatment option for such patients. This review aims to develop a comprehensive approach towards patients presenting with foreign body ingestion by developing clinical practice guidelines. These guidelines address not only the initial evaluation of the patient but also the various management alternatives and their advantages, limitations and applicability in various scenarios, based upon a review of the literature.

Keywords: Foreign bodies; Esophagus; Review literature; Endoscopy; Observation

Introduction

The majority of patients who seek treatment for a foreign body in the esophagus do so after accidentally ingesting a familiar object, and they often have little symptoms and are in stable health [1] [2]. While most foreign objects easily pass through the digestive tract, sharp, pointed, and elongated objects have a higher risk of perforation, vascular invasion, and other problems. The diagnosis of foreign body ingestion is frequently made using the patient's or an observer's account of the incident. Children and adults with cognitive impairment, however, might not be able to provide an accurate history, so a high index of suspicion must be maintained in these populations [5]. The large range of signs and clinical manifestations, along with the wide range of potential complications, can make this a difficult condition to evaluate and manage [3][4]. The diagnosis of foreign bodies in the esophagus is typically done based on clinical history, physical examination and supported by other studies such as x-rays, CTs and/or endoscopy – which may play a dual function (both diagnostic and therapeutic), as it is the first-line modality in extracting foreign bodies within the GI tract [6].

Case presentation

In this case, the clinical history provided a rather straightforward route to diagnosis. The patient, a 48-year old male, reported to the out-patient clinic with a history of swallowing a table spoon in an attempt to scratch an itchy throat about 10 hours prior to presentation. It is noteworthy that the patient had formed the habit of regularly scratching his throat with cutlery, as highlighted by his brother who came along with him to the hospital. He however had not had any prior occurrence of accidental ingestion of any foreign body. At presentation, he was calm and not in any significant respiratory distress. He only complained of mild retrosternal discomfort. The reason for the 10-hour delay in presentation was that the incident happened the night before, and he did not want to rush to the hospital until the following morning, as there were no pressing symptoms. Examination findings were unremarkable.

He had posteroanterior and lateral chest x-rays done immediately which showed a spoon-shaped radio-opaque object in the retrosternal area extending from the level of the T5 vertebra to the level of the T11 vertebra.

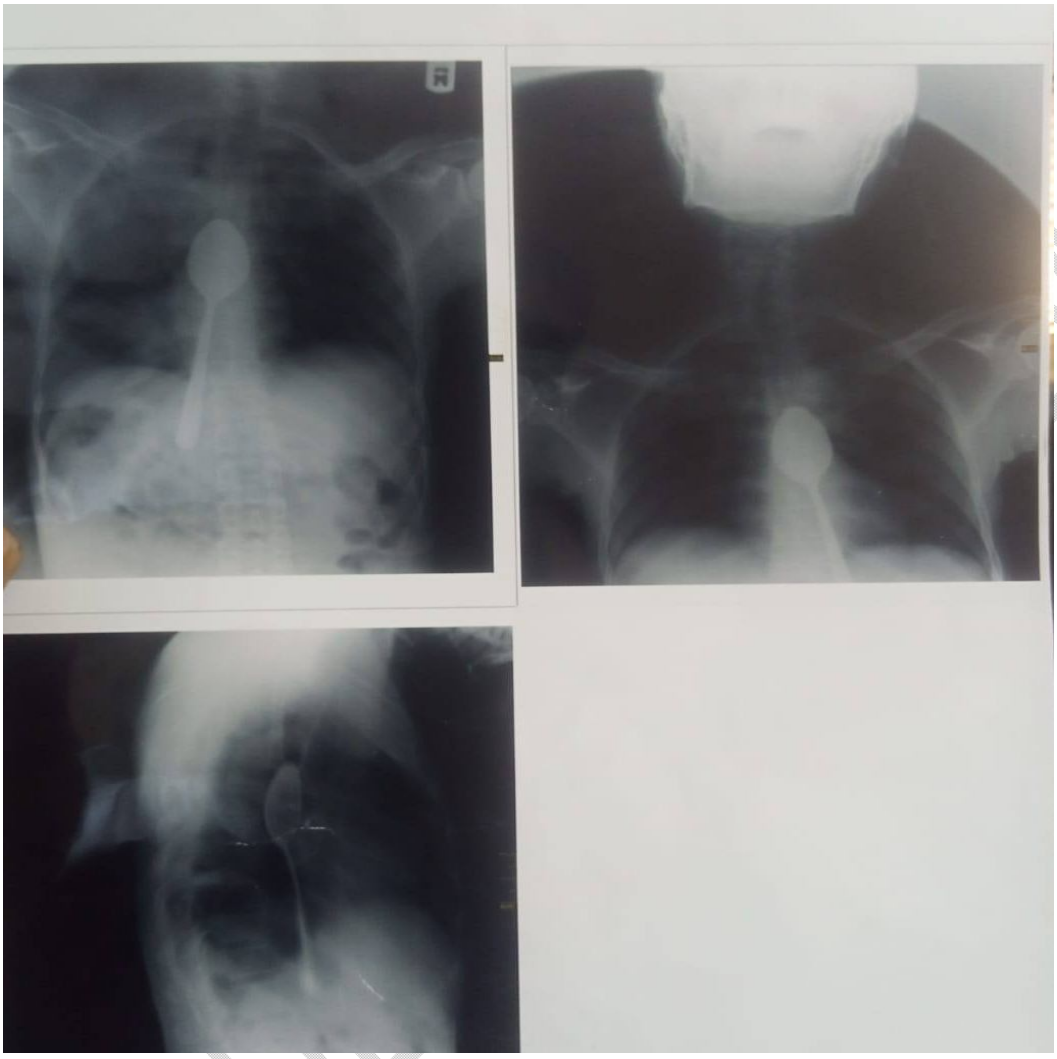

Fig.1. PA and lateral Chest X-Ray images showing a spoon-shaped radio-opaque object in the retrosternal area of a 48-year old male, following accidental ingestion of a table-spoon

This along with the clear clinical history confirmed our diagnosis of a table spoon in the oesophagus.

Discussion

The American Society for Gastrointestinal Endoscopy and the European Society for Gastrointestinal Endoscopy (ESGE) guidelines strongly recommend using conventional X-rays to detect the presence, location, size, configuration, and the number of ingested FBs if the ingestion of radiopaque objects is suspected or if the type of object is unknown [7]. Conventional X-rays are usually the first line imaging modality for ingested FBs (in the upper gastrointestinal tract), especially in low-resource settings such as ours, because of their relative affordability and accessibility. They are, however, limited by their low sensitivity and high specificity, especially for smaller FBs like fish bones, and are therefore not the recommended investigation to rule out the absence of such FBs in the upper GI tract [8]. CT images, on

the other hand, provide clearer information about the precise location of ingested FBs and are able to detect the presence of complications. Furthermore, studies have shown that the sensitivity and specificity are quite satisfactory, ranging from 85.7% to 100%, and from 66.7% to 100%, respectively [9] [10]. Despite these benefits, their use is less frequent because of the high financial burden to the patient and the relatively high risk of radiation exposure.

For foreign bodies that are lodged higher up the upper GI tract – the oropharynx and hypopharynx – laryngoscopy may be employed for diagnosis without the need for further imaging. However, it may become necessary to proceed with conventional X-ray if the FB is not detected and symptoms persist, as highlighted in several studies [11] [12].

Significance of the study

This study seeks to create a comprehensive strategy for treating patients who come with foreign body ingestion by developing clinical practice recommendations. These guidelines are not limited to the initial evaluation of the patient but also the diverse management options and their benefits, drawbacks, and suitability in different contexts.

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