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Case Report

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Foreign Body Impaction in the Esophagus

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Abstract

A 69-year-old female with no significant past history presented to the emergency room with throat pain and difficulty swallowing. On the day of her visit, she took her daily pills without putting on her glasses. Immediately, she felt something get stuck in her throat. In the emergency room, an X-ray of the neck showed an ovoid soft tissue structure near the cervicothoracic junction. Subsequent endoscopy revealed a pill in its blister pack lodged in the upper esophagus. The pill was extracted using biopsy forceps. This case describes foreign body impaction in an otherwise healthy individual and highlights the significance of early recognition and immediate endoscopic intervention to prevent complications.

Keywords

Foreign body, Endoscopy, Impaction

Introduction

Foreign body ingestion commonly brings patients to the emergency room. Patients usually present with dysphagia, throat pain, a sensation of something being stuck in the throat, choking, chest pain, hypersalivation, nausea, and vomiting. Those at higher risk of foreign body impaction include older adults, individuals with mental illnesses, individuals addicted to drugs or alcohol, incarcerated individuals, and individuals with esophageal structural abnormalities [1]. In adults, the most commonly ingested foreign bodies are food boluses, usually meat [2]. A thorough history and complete examination are crucial for diagnosis. We report a foreign body impaction in an otherwise healthy individual.

Case Report

A 69-year-old female with no significant past history except hypertension, hyperlipidemia, and seasonal allergies presented to the emergency room with throat pain and difficulty swallowing. On the day of her visit, she woke up early in the morning. Without putting her glasses on, she took her daily pills from her pill case. Immediately, she felt something get stuck in her throat. In the emergency room, an X-ray of the neck showed an ovoid soft tissue structure (6 mm x 16 mm) between the prevertebral soft tissues and the trachea near the cervicothoracic junction (Figure 1). She was then brought to the endoscopy suite, intubated, and an endoscopy was performed. The endoscopy revealed a pill in its blister pack lodged in the upper esophagus behind the cricopharyngeal muscle (Figure 2). Using biopsy forceps, the pill was gradually retrieved into the throat and manually

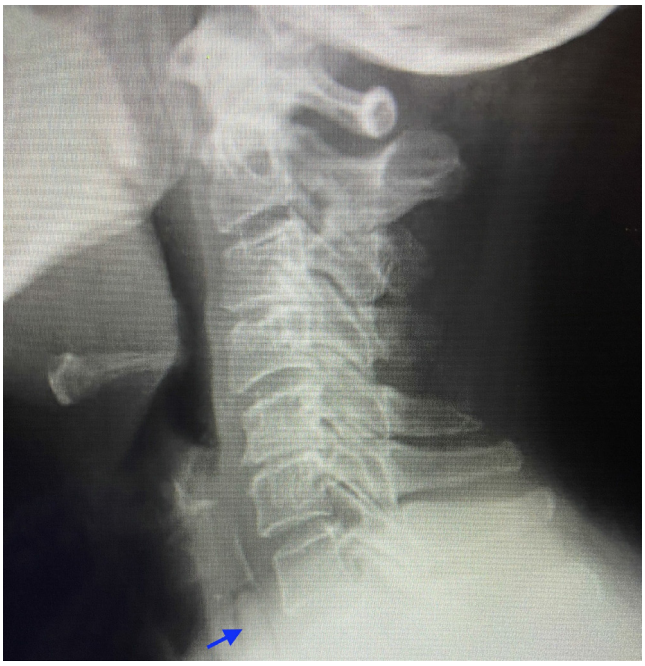

Figure 1: X-ray of the neck showing an ovoid soft tissue structure (6 mm x 16 mm) between the prevertebral soft tissues and the trachea near the cervicothoracic junction.

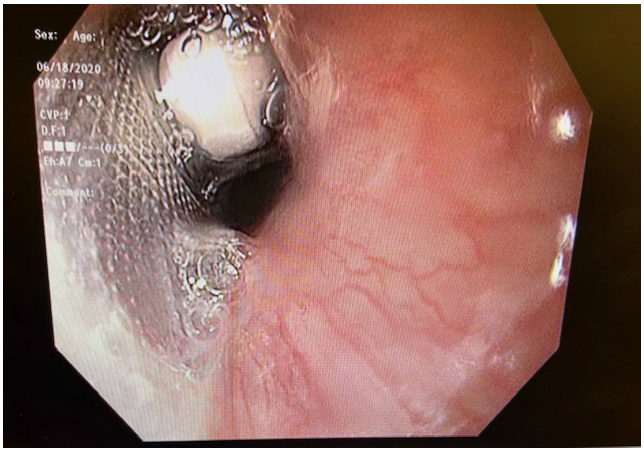

Figure 2: Endoscopy showing a pill in a blister pack lodged in the upper esophagus behind the cricopharyngeal muscle.

extracted. Subsequent evaluation of the esophagus showed no tears, strictures, or rings. The lower esophagus showed mild inflammation from possible acid reflux. A biopsy was obtained from the body of the esophagus and the gastroesophageal junction. The pathology came back as mild reflux carditis. There were no signs of allergic eosinophilic esophagitis. After the patient recovered from anesthesia, she was sent home. She had no immediate post-procedural complications.

Discussion

The United States reports on average 100,000 cases of foreign body ingestion every year [3]. Ninety-five percent of cases are accidental [4]. The majority of cases of esophageal obstruction in adults are caused by food (usually meat) bolus impaction [2]. The annual incidence of food bolus impaction is thirteen per 100,000 [5]. Those at higher risk of impaction include older adults, individuals with mental illnesses, individuals addicted to drugs or alcohol, incarcerated individuals, and individuals with esophageal structural abnormalities. [1] Foreign bodies most commonly get lodged in narrow sites in the esophagus – the upper esophagus, near the aortic arch, and the esophageal hiatus. Approximately fifty percent of individuals with esophageal food impactions have eosinophilic esophagitis [6]. In eighty to ninety percent of cases of foreign body ingestion, the foreign body passes through the digestive system spontaneously [7]. Ten to twenty percent of cases require endoscopic intervention [8].

Individuals with foreign body impaction most commonly present with dysphagia. They may also present with throat pain, a sensation of something being stuck in the throat, choking, chest pain, hypersalivation, nausea, and vomiting. Odynophagia is usually due to an esophageal spasm but may also indicate perforation. Inability to swallow foods and drooling indicate esophageal obstruction. Complications, including obstruction, perforation, and fistula formations, are rare [2].

A thorough history and physical exam are crucial for diagnosis. It is important to note that the area of discomfort may not always be the site of impaction and that inability to swallow liquids and drooling indicate esophageal obstruction and require immediate endoscopic intervention.

There are many tools that can be used for endoscopic foreign body removal based on the type, shape, and site of impaction of the foreign body. For individuals in respiratory distress, endotracheal intubation may be necessary before endoscopy. Overtubes are commonly used to protect the airway and esophageal mucosa when attempting to remove elusive or sharp objects. Overtubes also make piecemeal removal of food boluses and the removal of multiple objects more efficient. Food boluses are commonly pushed toward the stomach with the aid of glucagon to relax the esophagus. If this is not possible, grasping devices are used to retrieve the bolus into the throat. Batteries can form a closed circuit with the esophageal wall and produce electricity, leading to necrosis and perforation. They should thus be removed immediately. Ingestion of multiple magnets also requires immediate endoscopic intervention as the magnetic attraction can trap parts of the digestive tract and cause perforation.

In conclusion, foreign body ingestion is a common diagnosis that presents in the emergency room. This case describes a foreign body impaction in an otherwise healthy individual. It highlights the significance of early recognition and immediate endoscopic intervention to prevent complications.

Conflict of Interest

The authors declare no conflict of interest.

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