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CASE REPORT : FISH BONE CORPAL IN ESOPHAGUS

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ABSTRACT
Esophageal foreign bodies are sharp or blunt objects or food that gets stuck and wedged in the esophagus due to being swallowed either intentionally or accidentally. Cases of esophageal foreign bodies can occur in adults and children. Types of foreign bodies that are ingested in children and adults are different. In adults 95% of cases are due to food bolus impaction, the most ingested species are cuts of meat, bones, and dentures. In children, generally small toys and coins. The estimated annual incidence of food impaction is 13.0 per 100,000. A 53-year-old male patient arrived complaining of constant, worsening swallowing pain that has persisted for the past four days. The discomfort was initially experienced above the throat, but after attempting several traditional procedures to remove the bones, the pain was felt to shift to the region below the throat. Before going to the hospital, Patient has a history of consuming tuna bones. A fishbone was found in the esophagus area after an esophagoscopy was done.
Keywords: *Foreign body, esophagoscopy*

INTRODUCTION

The terms "ingested foreign body" refer to both impaction of food boluses and true foreign body ingestion (i.e., non-food). Foreign body ingestion is a common occurrence and causes about 4% of urgent endoscopies. True foreign body ingestion is mostly encountered in the pediatric population with 75% of cases occurring in children less than 5 years of age. Common culprits include coins, buttons, plastic things, batteries, and bones. Contrarily, food bolus impaction primarily affects adults and is almost always unintended (95% of the time). The most typical swallowed true foreign bodies are steakhouse syndrome , animal bone, toothpick, and fish bone disorders. True foreign body ingestion (coins and dentures) is uncommon in adults. Intentional ingestion of foreign bodies has been observed in psychiatric patients, prisoners, and drug dealers. Eosinophilic esophagitis (10% in adults, up to 50% in children), motility disorders, stenosis, and diverticula are all common underlying esophageal conditions. The majority of foreign bodies that are swallowed will pass naturally. However, 10% to 20% of cases require endoscopic removal, while less than 1% require surgical removal or treatment of complications.[1-5]

Aero Esophageal foreign bodies are classified based on the organs involved, which include the tracheobronchial tree, oropharynx, and esophagus or other digestive tract. According to one study, 90% of aero esophageal foreign bodies are retained in the air esophageal tract, while the remaining 10% pass spontaneously. Retained foreign bodies were discovered in the pharyngoesophageal tree in 86.2% of cases and the tracheobronchial tree in 13.7% of cases. Foreign bodies can become lodged in the esophagus's physiological narrowings in the upper, middle, and lower esophagus, but the most common area is the upper physiological narrowing, specifically the entrance to the esophagus at the level of the cricopharyngeus muscle.[6]

In regions where people frequently consume fish, fish bones are a fairly prevalent source of foreign body ingestion. The clinical presentations of fish bone foreign body disease in the esophagus range from moderate disease that can heal on its own to severe disease that can be fatal.[7]

In the management of cases of esophageal pharyngeal foreign bodies, there are several treatment options available, including inpatient or outpatient observation, pharmacological therapy, rigid endoscopy, flexible endoscopy, extraction with Foley catheters or forceps, as well as busination and esophagoscopy.[8]

CASE REPORT

A 53-year-old male patient presented to the RSU Cut Meutia emergency room with complaints of swallowing pain since 4 days ago; the pain is constant and worsens with swallowing. The pain was initially felt above the throat, but after attempting alternative

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traditional methods to remove the bones, the pain was felt to move below the throat. The patient has a history of ingesting tuna bones four days prior to being admitted to the hospital. The Patient developed a fever the day after swallowing the bone, which was relieved by fever-reducing medications. Because of the pain, the patient also complained of a loss of appetite. The history of the same complaint was denied. Patient general physical examination appears to be within normal limits. A throat examination revealed a hyperemia in the pharyngeal area. The results of the laboratory examination show that the level of leukocytes has increased to 16.06 thousand per uL. The lateral neck X-ray (Figure 1) shows no sign of a foreign body, thus an esophagoscopy was done to determine the cause of the complaint. Fish bones measuring 5x4x2 cm were discovered in the esophageal region, 25 cm from the incisors (Figure 2), and bone extraction was performed. The patient was then diagnosed as having a fish bone foreign body in the esopFhagus.

Figure 1. Lateral photo X-ray

Figure 2. Fishbone image after extraction

DISCUSSION

A 53-year-old man who had been complaining of swallowing pain for four days went to the emergency room at RSU Cut Meutia. The ache is constant and gets worse when swallowing. After being treated using traditional techniques, the pain that was initially felt in the upper throat area shifted to the lower throat region. Prior to checking into the hospital, the patient has a history of consuming tuna bones.

The most common causes of foreign body ingestion differ between children and adults. Non-food foreign object ingestion is more common in children than in adults, especially between the ages of 6 months and 6 years. The most common object is coins in children. Adults who ingest foreign bodies are more likely to be elderly, have psychiatric conditions, have developmental disabilities, drunk, or convicts seeking secondary gain.[9] Fish bones are a common source of foreign body ingestion in areas where people eat a lot of fish. The clinical manifestations of fish bone foreign body disease in the esophagus range from mild disease that heals spontaneously to severe fatal disease.[7]

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Wallah et al. discovered 75 cases of pharyngeal esophageal foreign bodies in the Department/ KSM ENT-KL RSUP Prof. Dr. R. D. Kandou Manado over a three-year period from January 2014 to December 2016; 19 cases (25%) were pharyngeal foreign bodies and 56 cases (75%) were esophageal foreign bodies. This finding is consistent with our previous case report in which the fish bones were found in the esophagus. Foreign bodies can become lodged in the esophagus in the physiological narrowing areas of the upper, middle, and lower esophagus, but the most common area is in the upper physiological narrowing, namely the esophageal entrance at the level of the cricopharyngeus muscle[10].

The study also describes in terms of gender, most of the cases were found in males, namely 43 cases (57.3%), with 12 cases (63.2%) of pharyngeal foreign body cases and 31 cases (55.4%) esophageal foreign body cases . In the case of a pharyngeal foreign body, the highest incident occurred at the age of more than 51 years as many as 8 cases (42.1%). For cases of esophageal foreign bodies, the highest incidence was at the age of 0-10 years with 18 cases (32.1%)[10].

According to J.Kim et alstudy .'s on the clinical picture and management of ingested fish bones in the upper digestive tract, out of 286 samples, 198 were found in the oral cavity and laryngopharynx, 66 in the esophagus, and the rest were not found. The average age of the 66 patients with a bone in the esophagus was 60.4 years. The most common type of fish bone is mackerel.[11]

The patients' clinical symptoms varied, with dysphagia and odynophagia being the most frequently reported symptoms. Other symptoms that may be present include a history of foreign object ingestion, persistent foreign body sensation, chest pain, hypersalivation, vomiting, and regurgitation. Respiratory symptoms such as stridor, coughing, and choking are common in younger children with chronic FB impaction lasting more than one week.[12] The patient in this case report, complained of painful swallowing and fever.

The patient first complained of pain located above the throat, but after trying an alternative method of eliminating fish bones by using bananas and rice balls, the patient's pain shifted downward. Fish bones may migrate into the surrounding tissues as a result of forced swallowing, most frequently into the soft tissues of the neck.[13]

Laboratory tests revealed leukocytosis, or an increase in leukocytes, indicating an infection in the body. The patient also has fever, which is another sign of infection, and this condition can be caused by fish bones impacting the upper digestive tract and causing inflammation. Leukocytosis can occur acutely and often transiently or chronically in response to an inflammatory stressor/cytokine cascade due to an infectious process.[14-15]

No foreign body images were found on X-rays of the chest and lateral neck because the type of foreign body, fish bone, cannot be detected on X-rays. A non-contrast CT scan (Table 1) is recommended for evaluating foreign bodies in the form of fish bones.[11,16,17]

Tabel 1. Classification of foreign bodies according to their radiodensity[17]

Radiodensity	Foreign Body
Can Mostly be identified on radiography	True foreign body (i.e.nonfood objects)
Cannot (regularly) be identified on radiography	Steak bone
	Food bolus
	Fish or chicken bones
	Wood
	Plastic
	Glass
	Thin metal objects

In the management of cases of pharyngeal esophageal foreign bodies, there are several treatment options available, including inpatient or outpatient observation, pharmacological therapy, rigid endoscopy, flexible endoscopy, extraction with Foley catheters or forceps, and the busination method. Although esophagoscopy is the most common, each technique has advantages and limitations, so treatment choices are determined by local and personal preferences, as well as existing operational standards.[17-20] In this case, an esophagoscopy was performed to extract a fish bone that had become lodged in the patient's esophagus.

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Tabel 2. Timing of endoscopic intervention in foreign body ingestions: emergent is preferably within 2 hours, but at latest within 6 hours; urgent, within 24 hours; nonurgent, within 72 hours.[18]

Object type	Location	Timing
Battery	Esophagus	Emergent
	Stomach/small bowel	urgent
Magnet	Esophagus	urgent
	Stomach/small bowel	urgent
Sharp-pointed Foreig body	Esophagus	Emergent
	Stomach/small bowel	urgent
Blunt and small foreign body <2-2,5 cm diameter	Esophagus	Urgent
	Stomach/small bowel	Nonurgent
Blunt and small foreign body >2-2,5 cm diameter	Esophagus	Urgent
	Stomach/small bowel	Nonurgent
Large foreign body >5-6 cm	Esophagus	Urgent
	Stomach/small bowel	Urgent
Food bolus	Esophagus	Emergent (urgent if without or without complete obstruction

SUMMARY

Adults are more often than children to ingest foreign bodies in the form of food due to accidental causes, and only 10–20% of cases require endoscopy.

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