EMERGENCY CASEBOOK

An unusual cause of chest pain: foreign body in the oesophagus

N Koyuncu, S Yilmaz, S Soysal

Emerg Med J 2007;24:e1 (<http://www.emjonline.com/cgi/content/full/24/1/e1>). doi: 10.1136/emj.2006.035923

This article reports on two patients with unsuspected oesophageal foreign body ingestion, with chest pain as the main symptom. The patients had extensive cardiac evaluation to rule out myocardial ischaemia. Further evaluation showed an impacted oesophageal foreign body. Oesophageal foreign bodies should be considered as factors in chest pain.

We report on two patients presenting with chest pain as the main symptom, who had unsuspected foreign body ingestion.

CASE REPORTS

Case 1

A 41-year-old man had chest pain for 2–3-h. He had ingested alcohol 2–3 h before the pain began, and he had nausea that began simultaneously with chest pain. He had a history of gastro-oesophageal reflux disease and heavy alcohol use. He denied any specific event that may have given rise to these symptoms. On arrival, the patient's vital signs were normal. Results of cardiac evaluation were negative. Physical examination showed an epigastric tenderness, but was otherwise unremarkable. Initial electrocardiographic examination was normal. Laboratory data, such as creatine kinase isoenzyme MB and troponin I obtained on admission, were normal. The chest radiograph showed normal findings. After 12 h under observation, he continued to have symptoms, and came to the emergency department of Bayindir Hospital for further evaluation. Abdominal ultrasonography was normal. The patient underwent an oesophagogastroduodenoscopy (OGD), which showed a foreign body in the oesophagus, oesophagitis with linear exudates in the distal part of the oesophagus and pancreatitis. A 4.5 cm×1.5 cm CD Rom piece was in the middle of his oesophagus (fig 1). After the foreign body was removed from the oesophagus by OGD, the patient did well, with no recurrence of chest pain. He was discharged home after 24 h on oral proton pump inhibitor treatment.

Case 2

A 57-year-old woman had chest pain and dysphasia for 1 week. A week before she was examined by her gynaecologist and was given some drugs for a gynecologic problem. The patient had a history of odyphagia and chest pain that began simultaneously after she took those drugs. She was able to swallow fluids, but was avoiding solids because of the severity of the associated odyphagia and chest pain.

The patient's vital signs were normal. Results of cardiac evaluation were negative. Physical examination and initial electrocardiography were normal. Laboratory data such as creatine kinase isoenzyme MB and troponin I were normal. A chest radiograph showed normal findings. Abdominal ultrasonography was normal. Owing to continued symptoms, we performed an OGD, which showed a foreign body in the

oesophagus—a pill blister was in the distal part of the oesophagus (fig 2). She had taken her medicine with the blister. After the foreign body was removed from the oesophagus by OGD, the patient was relieved of her symptoms

Figure 1 CD Rom piece in the middle of the oesophagus.

Figure 2 Pill blister in the distal part of the oesophagus.

Abbreviation: OGD, oesophagogastroduodenoscopy

and she was discharged home on oral proton pump inhibitor treatment.

DISCUSSION

Oesophageal foreign bodies are common in children and specific groups of adults, such as prisoners, those with mental retardation, or psychiatric illnesses, and those dependent on alcohol.¹ The paediatric age group accounts for about 80% of all cases. Children most often ingest coins, toys, crayons and ballpoint pen caps; adults tend to have problems with meat and bones.² Most objects pass spontaneously, but 10–20% of cases require some intervention, and only 1% demand surgical treatment.³ Foreign bodies in the oesophagus can result in serious complications depending on the shape and size of the object.

Chest pain is a common symptom among those visiting the emergency department. It is a common manifestation in both cardiac and non-cardiac conditions. Accurately discerning the correct diagnoses and treatment of the patient with chest pain remains one of the most difficult tasks for the emergency physician. Oesophageal disorders are the most common causes of non-cardiac chest pain.⁴

The paediatric age group accounts for about 80% of all oesophageal foreign bodies, followed by edentulous adults, prisoners and patients with psychiatric problems. In the first case, the patient had ingested alcohol. Chest pain began 2–3 h after ingestion of alcohol. No history of ingesting any foreign body was reported. After the foreign body was removed by OGD, the patient was evaluated for the foreign body ingestion. He did not remember ingesting the foreign body. In the second case, the patient had a history of odynophagia that began simultaneously with the chest pain. Although the patient was eating solid foods, she felt chest pain and odynophagia simultaneously. We performed OGD because of the patient's history and because she continued to have the symptoms. The patient had ingested the pill with blister. The patient assumed that she had to take the pills with the blister. This diagnostic approach might be late because the risk of oesophageal perforation increases 24 h after the time of foreign body ingestion as a result of transmural ischaemia, ulceration and necrosis.⁵

We discuss two patients presenting with chest pain secondary to swallowing foreign bodies. These patients elucidate the importance of considering oesophageal disorders such as a foreign body impact as a cause of chest pain.

In conclusion, when children and specific groups of adults, such as prisoners, people with mental retardation or psychiatric illnesses, and those dependent on alcohol, present to the emergency department with chest pain, the emergency physician must think of oesophageal foreign bodies, and when we write a prescription for a patient, we should not forget to tell him how to use the drug.

Authors' affiliations

N Koyuncu, Bayındır Medical Center, Department of Emergency Medicine, Ankara, Turkey

S Yilmaz, Department of Emergency Medicine, Kocaeli University School of Medicine, Kocaeli, Turkey

S Soysal, Department of Emergency Medicine, Yeditepe University School of Medicine, Istanbul, Turkey

Competing interests: None declared.

Informed patient consent was obtained.

Correspondence to: Dr S Yilmaz, Department of Emergency Medicine, Kocaeli University School of Medicine, 41380, Kocaeli, Turkey; emdsercy@yahoo.com

Accepted 7 March 2006

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