

Case Report

A unique case of esophageal perforation caused by prickly pears

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Abstract

This is a report of a previously healthy 20-year-old male presenting with the sensation of a foreign object being stuck in the throat and difficulty speaking after the ingestion of 2 prickly pears. Tests were performed, confirming an esophageal perforation which was managed medically. The patient was discharged after 7 days in hospital with no complications.

Keywords

Perforation, esophageal, Boerhaave's, syndrome

Introduction

Esophageal perforation is a condition which is potentially life threatening and requires immediate monitoring and treatment.

It is most commonly caused iatrogenically, but other causes include spontaneous perforation (Boerhaave's syndrome), foreign body ingestion and trauma.¹

The esophagus lacks a serosal layer and is therefore more vulnerable to life threatening complications. Once a perforation (i.e., full-thickness tear in the wall) occurs, retained gastric contents, bile, saliva, and other substances may enter the mediastinum, resulting in mediastinitis.² This article describes a unique case of esophageal perforation caused by the ingestion of peeled prickly pears.

Case Report

A previously healthy 20-year-old male was referred to accident and emergency a few hours after eating 2 peeled prickly pears. The patient described a foreign body sensation in his throat with dyspnea, dysphagia and odynophagia. There was no history of alcohol ingestion. He had attempted to eat a piece of bread to dislodge the foreign body, to no effect.

On examination parameters were stable and the chest was clear. He was referred to ENT casualty where a flexible nasal endoscopy did not reveal any abnormalities. A soft tissue x-ray of the neck revealed subcutaneous emphysema.

A CT scan with water-soluble contrast of the neck was subsequently performed, revealing surgical emphysema of the skin up to the base of the skull and the presence of pneumomediastinitis due to a small perforation.

The patient was admitted for observation and was kept nil by mouth, with intravenous fluids, co-amoxiclav and metronidazole. The patient's parameters were stable for 3 days. On the fourth day he was allowed sips of water, progressing to a normal diet. On the seventh day he was discharged.

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A repeat chest x-ray showed no abnormalities.

He was followed up at ear, nose and throat outpatients 2 weeks later. The oesophageal perforation healed without further complications and the pneumomediastinitis was successfully treated conservatively. A repeat chest X-ray showed the absence of the pneumomediastinitis and blood results showed normal results.

Discussion

Prompt diagnosis and treatment of esophageal perforation is critical for immediate patient care.³ A delay of greater than 24 hours in diagnosis and treatment of an esophageal perforation is associated with a higher mortality rate.

The frequency of esophageal perforation varies, but in the United States it is approximately 3 in 100,000 people.⁴ The majority of perforations are

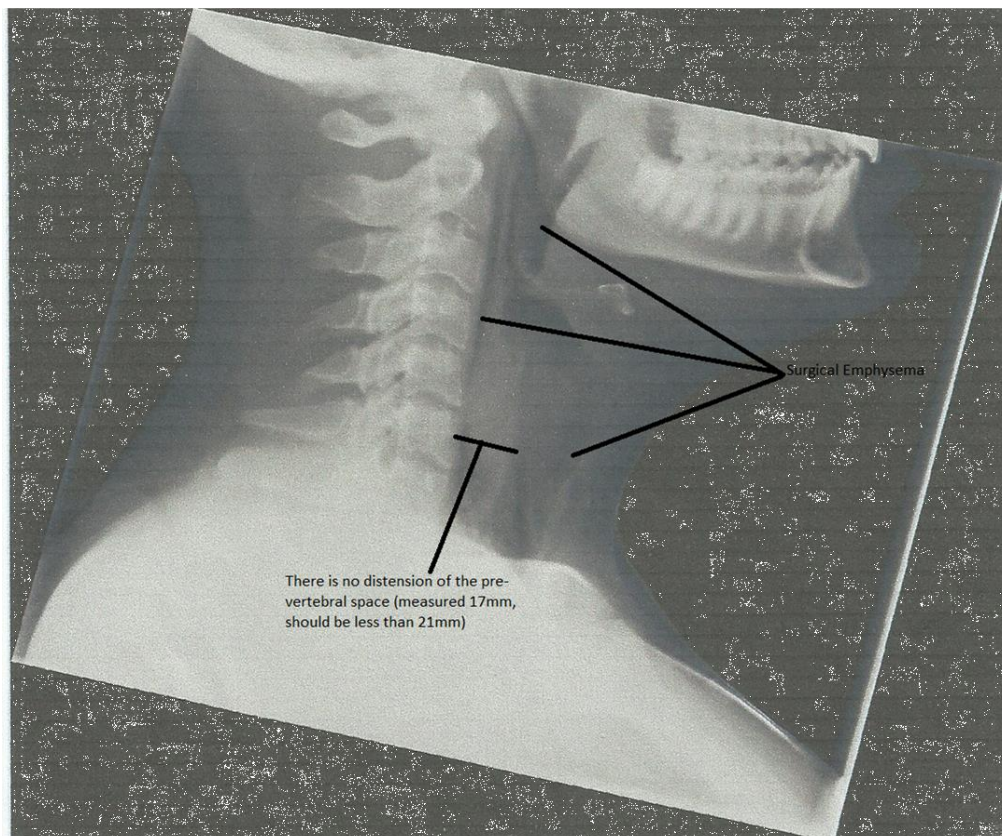
caused by medical instruments during a procedure, although other causes include trauma to chest and esophagus, tumours and previous surgery.⁵

What makes this case unique is the etiology of this perforation being an innocuous, edible fruit. The location of the perforation may depend on the cause.

In some cases, esophageal perforation may be managed surgically, although contraindications exist. These include a cervical perforation that cannot be assessed (but can be drained), an esophageal malignancy and also diffuse mediastinal necrosis.²

In this case, however, while pneumomediastinitis was present, the tear was small enough for the esophagus to heal on its own, resulting in the decision to continue with conservative management of the patient.

Figure 1: X-Ray of neck, lateral



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Figure 2: Soft Tissue X-Ray, PA

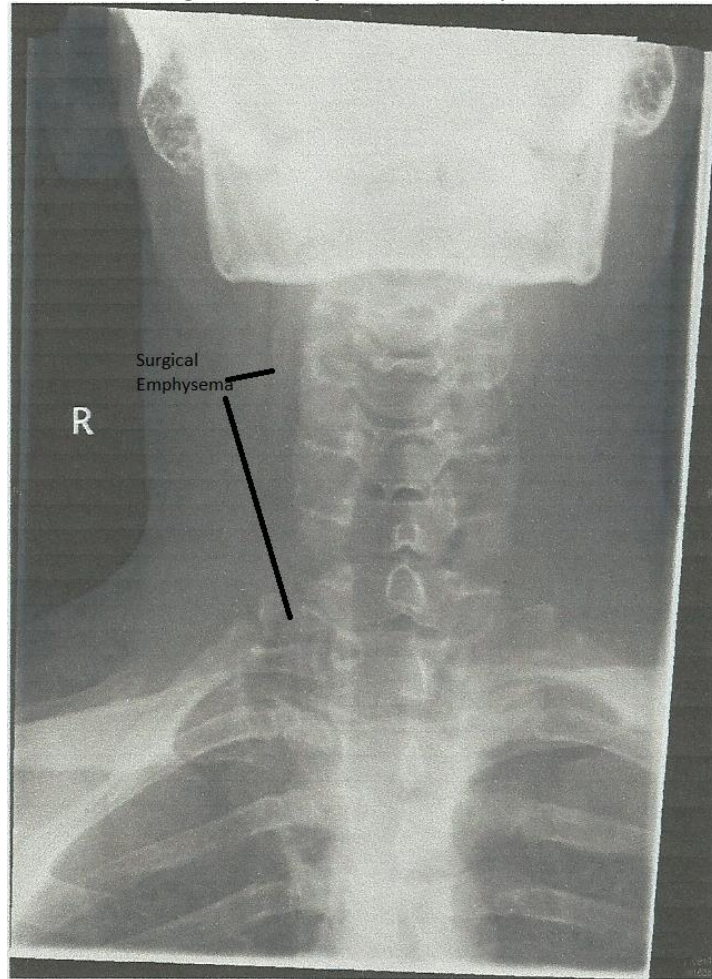
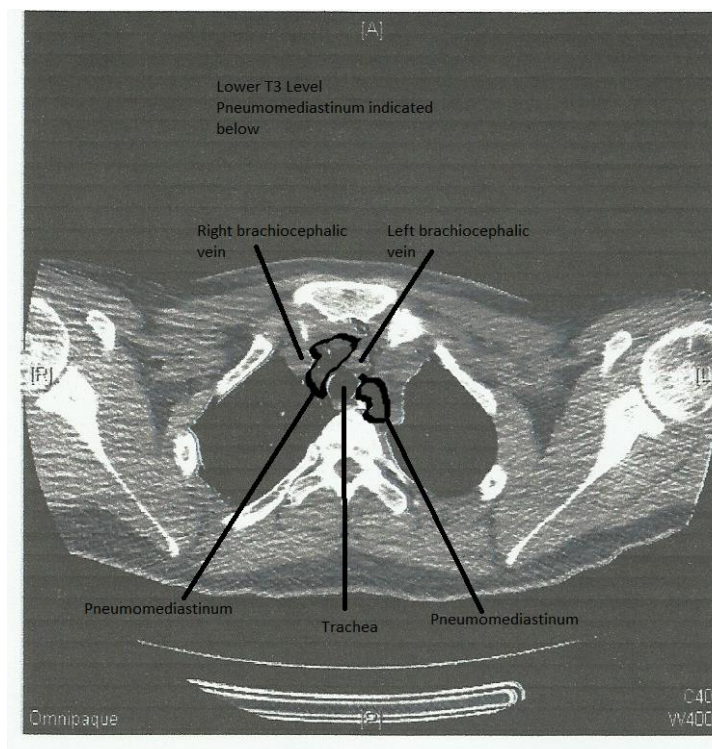


Figure 3: T3 level CT scan



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Figure 4: T1 level CT scan

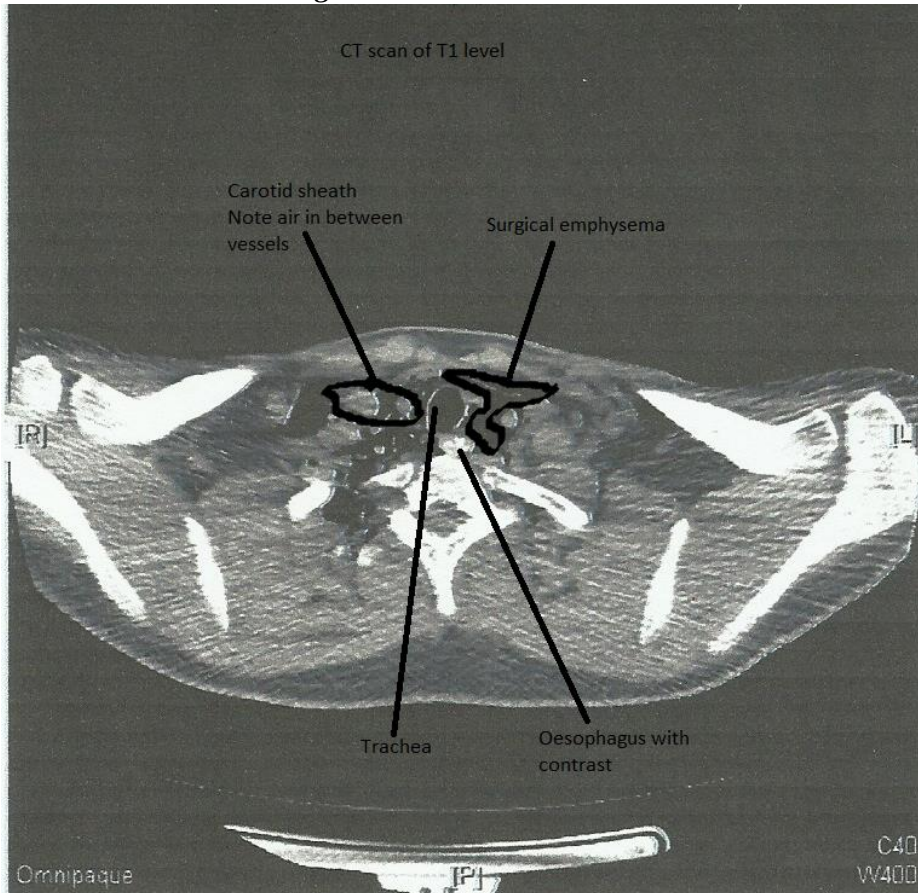
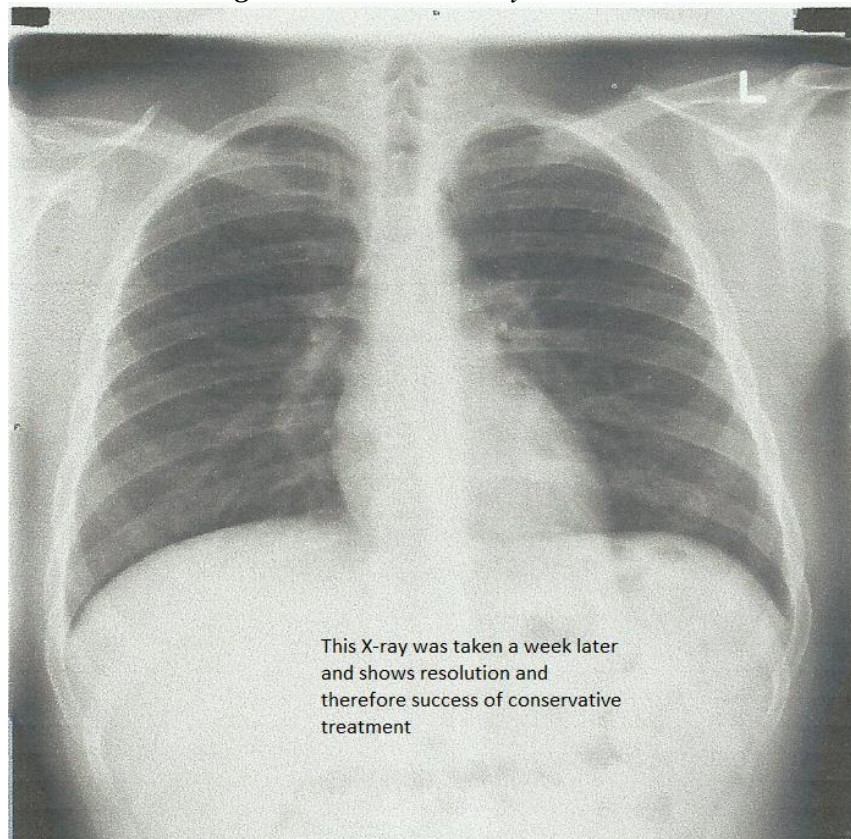


Figure 5: Normal X-Ray, PA



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