Oesophageal perforation: a rare complication of minor blunt trauma

G L A Cumberbatch, M Reichl

Abstract
Oesophageal perforation following blunt trauma is rare and accounts for less than 10% of all oesophageal ruptures. Review of published reports revealed only two cases of isolated oesophageal perforation after minor blunt trauma, and these were as a direct result of the Heimlich manoeuvre.

This paper describes a case of perforation of the oesophagus as an isolated injury following blunt minor trauma. (J Accid Emerg Med 1996;13:295–296)

Key terms: minor blunt trauma; oesophageal perforation.

Review of published reports revealed only two cases of isolated oesophageal perforation after minor blunt trauma, and these were as a direct result of the Heimlich manoeuvre. We present a case of perforation of the oesophagus as an isolated injury following blunt minor trauma.

Case report
A 26 year old man presented to our accident and emergency (A&E) department complaining of neck swelling and dyspnoea, following a blow to the interscapular region of his back during a rugby match. He initially felt "winded" and immediately stopped playing, arranging his own transport to the hospital. On arrival he also complained of dysphagia and a change in his voice.

He had no significant past medical history. On examination he was apyrexial, had a pulse rate of 62/min, a respiratory rate of 24/min, a blood pressure of 139/65 mm Hg, and oxygen saturation of 99% on air. He had obvious surgical emphysema extending from the root of his neck down to the nipple line bilaterally. The rest of the physical examination was unremarkable.

Chest radiography (fig 1) revealed marked subcutaneous surgical emphysema, a pneumomediastinum, and a very small apical pneumothorax. Lateral cervical spine x ray (fig 2) showed a large volume of air in the prevertebral space, with anterior displacement of the prevertebral fascia.

A clinical diagnosis of ruptured oesophagus was made. Iohexol (Omnipaque) swallow was arranged urgently and confirmed a perforation in the upper one third of the oesophagus.

He was admitted to the surgical ward and treated conservatively, with intravenous anti-

Figure 1 Erect chest x ray with subcutaneous air and a pneumomediastinum.
more difficult following blunt trauma, as often the presenting features are those of the associated injuries, for example pneumothorax, haemothorax, or flail chest.

A previous search of published reports on perforation of the oesophagus by blunt external trauma reviewed 63 cases and detailed the mechanism of injury, associated injuries, clinical findings, and outcome. In all but two cases the mechanism of injury was significant trauma, mostly due to road traffic accidents and falls. These two exceptions were cases of trauma from the Heimlich manoeuvre; no cases were caused by minor sports injury.

The study showed that patients had a variety of symptoms, namely dysphagia, dyspnoea, hoarseness, neck pain or swelling, and chest or abdominal pain. Physical signs were absent or appeared only as neck or chest wall surgical emphysema. Radiography of the chest revealed subcutaneous air, pneumomediastinum or pneumothorax, while lateral cervical spine x-ray showed air posterior to the prevertebral fascia.

Our patient had most of these clinical features and hence the diagnosis was made relatively easily. However, if surgical emphysema had been absent or not noticed the diagnosis would have been easily missed. This case shows the importance of suspecting a ruptured oesophagus when there are suggestive clinical features, even in the absence of severe blunt trauma to the chest or abdomen.

We are grateful to Gabbie Valentine for help in the preparation of the manuscript.


Uncomplicated penetrating colonic injury

T O Oshodi, D Bowrey

Abstract
The case of a patient with an air gun pellet injury to the right colon is reported. This was treated conservatively, and the pellet was passed per rectum 12 hours after the injury. Gunshot wounds to the abdomen do not necessarily warrant immediate laparotomy. Sieving of bowel motions may identify if the foreign body has been passed.

Key terms: gunshot wound; colon penetration

Gunshot abdominal injuries are uncommon in the United Kingdom but account for 47% of cases of abdominal trauma in the USA. The treatment of such injuries was controversial until recently. We report a patient with an air gun pellet injury to the right colon treated conservatively, and the passage of the foreign body per rectum 12 hours after the injury.

Case report
A 44-year-old obese man presented two hours after he was accidentally shot with an airgun from a distance of 8 feet. Clinically he had a small entry wound in the mid right flank without signs of peritonism. Plain abdominal x-ray (figure) showed the airgun pellet lodged within the abdomen. Full blood count, including amylase, and urine analysis were normal. He was placed on antibiotics and...