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An atypical tension pneumothorax

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Introduction

Eosinophilic oesophagitis is a rare and chronic inflammatory disorder, with spontaneous oesophageal rupture reported in a handful of anecdotal case reports. We present an unusual case of delayed tension pneumothorax following occult oesophageal rupture, posing a significant diagnostic conundrum.

Abstract

A 29-year-old man with eosinophilic oesophagitis and asthma presented with chest pain and vomiting. Several hours later he developed loin to groin pain, pyrexia and renal angle tenderness. A urine dipstick was positive for blood and his inflammatory markers were significantly elevated. A chest X-ray (CXR) was unremarkable. Computed tomography (CT) urography excluded a calculus; however, it demonstrated left-sided consolidation with a small effusion. He was treated with antibiotics empirically. Over the next 48 hours, his inflammatory markers continued to rise. He developed sudden-onset dyspnoea and pleuritic chest pain associated with tachycardia and tachypnoea. A repeat CXR revealed a tension pneumothorax, requiring immediate needle decompression followed by chest drain insertion. This immediately drained 900 mL purulent fluid with a pH of 7.2. CT of the thorax revealed a gas and fluid collection in the mediastinum, possibly secondary to oesophageal rupture communicating with the pleural space. A barium swallow test demonstrated a leak at the gastroesophageal junction and he was transferred for surgical closure of the rupture.

Discussion

Although a tension pneumothorax can develop instantaneously at the time of oesophageal rupture, this case highlights the importance of considering oesophageal rupture as a cause of tension pneumothorax in any patient with a hydropneumothorax with persistent non-haemorrhagic drainage. ■

Conflicts of interest

None declared.

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