



IMAGES IN THORAX

Stomach versus lungs: the case of a giant hiatal hernia

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A 92-year-old man presented in extremis with respiratory failure. His chest X-ray (CXR) (figure 1A) showed right lower zone opacification and an intrathoracic gastric bubble. Emergency CT showed a giant paraoesophageal hiatal hernia containing his stomach, spleen and transverse colon (figure 1B,C). Nasogastric drainage failed to decompress the stomach; which had undergone volvulus.

He underwent laparoscopic reduction of volvulus and gastropexy (figure 1D,E). The stomach was pinned subdiaphragmatically with percutaneous gastrotomies. He improved and was discharged (predischage CXR- figure 1F). He remains well a year later.

Hiatal herniae can be defined as protrusions of the stomach and occasionally other abdominal viscera through an abnormally wide opening in the right crus of the diaphragm.¹ Four types have been described: sliding (type I, where the cardia slides upwards into the mediastinum), paraoesophageal (type II, bulging of the anterior wall or more of the stomach into the mediastinum with preservation of the gastro-oesophageal junction), combined (type III, which combines features of I and II) and giant paraoesophageal (type IV, where more than half of the stomach and occasionally other abdominal

organs are located in the mediastinum). Gastric volvulus can cause sudden deterioration in patients with long-standing giant paraoesophageal herniae.² If left untreated, these patients can also suffer from severe reflux, occult gastrointestinal blood loss due to linear gastric ulcers (Cameron ulcers), intrathoracic incarceration, strangulation or perforation.³⁻⁴ Typically, younger and fitter patients tolerate such a hernia until the stomach perforates, resulting in profound sepsis with dyspnoea and chest pain. Atypical presentations include seizures (induced by electrolyte disturbances from persistent vomiting), respiratory failure, aspiration pneumonia and acute postprandial heart failure (from cardiac compression).¹⁻⁵⁻⁶ For these reasons, elective repair is recommended.⁷ However, as in this case, laparoscopic surgery can be life-saving as an emergency procedure even in the frail and elderly.⁸

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Competing interests None.

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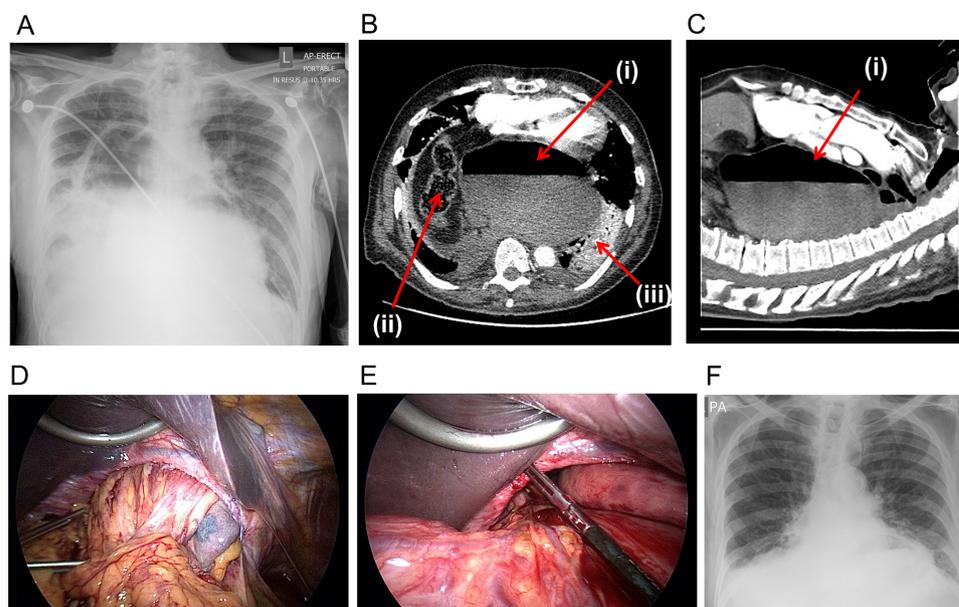


Figure 1 (A) Plain chest radiograph showing the presence of a stomach bubble within the thoracic cavity. (B) and (C) CT images showing the presence of stomach, labelled (i); transverse colon, labelled (ii); and spleen, labelled (iii) in the thoracic cavity. (D) and (E) Laparoscopic reduction of gastric volvulus and gastropexy. (F) Predischage chest radiograph.

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