Stomach versus lungs: the case of a giant hiatal hernia

Elaine Soon,1,2 Craig Vickery,3 Thomas Pulimood1

1Department of Medicine, West Suffolk NHS Trust, Bury St Edmunds, Suffolk UK
2Department of Medicine, Addenbrookes’ Hospital, Cambridge, UK
3Department of Surgery, West Suffolk NHS Trust, Bury St Edmunds, Suffolk UK

Correspondence to Dr Elaine Soon, Department of Medicine, Box 157, Level 5, Addenbrookes’ Hospital, Cambridge, CB2 0QQ, UK; e_soon@hotmail.co.uk

Received 19 February 2014
Revised 11 April 2014
Accepted 24 April 2014

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 gastrostomies. He improved and was discharged (predischarge CXR- figure 1F). He remains well a year later.

Hiatal herniae can be defined as protrusions of the stomach and occasionally other abdominal visera 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

Contributors ES, CV and TP cared for the patient and wrote and critically revised the manuscript.

Competing interests None.

Patient consent Obtained.

Provenance and peer review Not commissioned; internally peer reviewed.

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) Predischarge chest radiograph.
REFERENCES


