Outside the scope of our practice: an unexpected thoracoscopy and pleurocentesis during gastroscopy

A 56-year-old man described 2 weeks of regurgitation of ingested liquids, dyspnea, and chest pain. He had undergone laparoscopic esophagectomy with cervical anastomosis 1 year previously for esophageal adenocarcinoma; this had been complicated by a stricture at the esophagogastric anastomosis that required serial endoscopic dilations. Shortly after admission, a computed tomography (CT) scan demonstrated a dilated, fluid-filled intrathoracic stomach. There was obstruction to the passage of oral contrast at the level of the intrathoracic duodenum, and a left-sided pleural effusion was seen (Fig. 1).

At gastroscopy, 1L of fluid was aspirated from the intrathoracic stomach. There was an angulated deformity of the intrathoracic junction of the first and second part of the duodenum in association with a perforated ulcer on the posterior duodenal wall (Fig. 2a). The gastroscope was inserted through this perforation and into the left pleural space, from which 2L of turbid fluid were aspirated (Fig. 2b). Fibrinopurulent exudate (Fig. 2c) was seen on the surfaces of the lung and dia-
Intrathoracic leakages are well described post-esophagectomy [1, 2], as well as post-gastrectomy [3], usually due to breakdown of the anastomosis. In this unusual case, perforation occurred 1 year post-operatively through an ulcer in the intrathoracic duodenum, such that the pleural space was accessible with a gastroscope, which therefore enabled pleurocentesis and lavage to be performed. While therapeutic insertion of flexible endoscopes into the pleural space via percutaneous drainage tubes has been described [4], we report the first case in the literature where this has occurred via the upper gastrointestinal tract.

**Video 1**

This video taken during gastroscopy begins with views of the left pleural space containing turbid fluid and fibrinopurulent exudate. At time 0:28, the gastroscope is withdrawn through the perforated duodenal ulcer back into the intrathoracic stomach, before being re-inserted into the pleural space at 1:00.

**References**


**Corresponding author**

Sern Wei Yeoh, MBBS
48 Liverpool Street
Hobart
Tasmania
Australia
Fax: +61-3-62227809
syeoh58@hotmail.com