Pyopneumopericardium after total gastrectomy

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A 42-year-old man with no cardiac history underwent total gastrectomy with a Roux-en-Y reconstruction for a cardial adenocarcinoma classified pT3N0Mx. During the postoperative period, the patient experienced sharp and steady chest pain, with burning and inhibition of deep breaths, associated with fever, oxygen requirement and atrial fibrillation as shown on the electrocardiogram (Fig. 1). Transthoracic echocardiography showed pericarditis without cardiac tamponade. A chest computed tomography (CT)-scan revealed pneumopericardium (Fig. 2A), hydropneumopericardium (Fig. 2B, arrows) and pleural effusion (Fig. 2B, dashed arrows). Simultaneously, ingestion of water-soluble medium via the nasogastric tube did not visualize any fistula. Nevertheless, according to the clinical, echocardiographic and radiologic findings and the previous surgery, an anastomotic leakage was suspected. The oesopericardial fistula was confirmed endoscopically. Pericardial surgical drainage was performed, removing purulent fluid with food fragments, and a covered stent was placed endoscopically over the fistula. Prolonged antibiotic therapy was administered. The patient remained well at 2 months, at which point the endoscopic control visualized good cicatrization of the fistula (Fig. 2C).

Pyopneumopericardium is a rare complication of oesogastric surgery, and cardiologists could be confronted with this uncommon pericarditis. Only of the combination of
Figure 1. Electrocardiogram (recorded when the patient experienced chest pain), showing rapid atrial fibrillation with no signs of ischaemia or other cardiac rhythm disorders.

Figure 2. Scout view of a thoracic CT-scan where hypodensity is visualized around the cardiac outline delimited by arrows, corresponding to (A) pneumopericardium. (B) Thoracic CT-scan slice; light arrows indicate hydropneumopericardium; dashed arrows indicate pleural effusion. (C) Endoscopic view of the inferior oesophagus; the arrows delimit the area where the fistula has developed and identify the cicatrisation of the fistula after application of a covered stent.

Clinical data, echocardiography, chest computed-tomography scan and endoscopy allowed the diagnosis. Therapeutic management involves a collaborative association of different medicosurgical specialists, including cardiologists.

Conflict of interest statement

Nothing declared.