Esophagopericardial Fistula with Pyopneumopericardium Secondary to Esophageal Carcinoma

Yi-Tso Cheng¹, Kok Chin Chong² and Ming-Jen Tsai¹,³

Key words: pyopneumopericardium, esophagopericardial fistula


A 41-year-old man, who received preoperative concurrent chemoradiotherapy (totally 3,200cGy was administered) from one month previously due to lower third esophageal cancer, presented to the emergency department with chest pain, diaphoresis, and fever for 1 day. Physical examination revealed fever (38.4°C), tachycardia (120 bpm), hypotension (90/52 mmHg), and engorged jugular vein but normal chest radiography, electrocardiogram, and plasma cardiac enzymes. Computed tomographic angiography for possible aortic dissection revealed pneumopericardium (Picture 1, white arrow), which was suspected to be secondary to esophagopericardial fistula (Picture 1, arrowhead). Prone position chest computed tomography with oral water-soluble contrast administration confirmed the existence of esophagopericardial fistula (Picture 2, arrowheads). Emergency pericardiotomy was performed and 350 mL purulent pericardial effusion was drained. However, the patient died 10 days later due to deterioration of clinical condition.

Esophagopericardial fistula is a life-threatening complication of benign, malignant or traumatic esophageal disease. Once pneumopericardium is recognized, esophagographic studies should be performed to demonstrate a possible fistula (1). Early diagnosis and treatment, including pericardial drainage, antibiotic therapy and subsequent operative closure of the fistula, are important for the management of esophagopericardial fistula (1). Patients with esophageal cancer presenting with chest pain, hypotension, and fever should be suspected of invasion of local vital organs by the cancer.

The authors state that they have no Conflict of Interest (COI).

Reference