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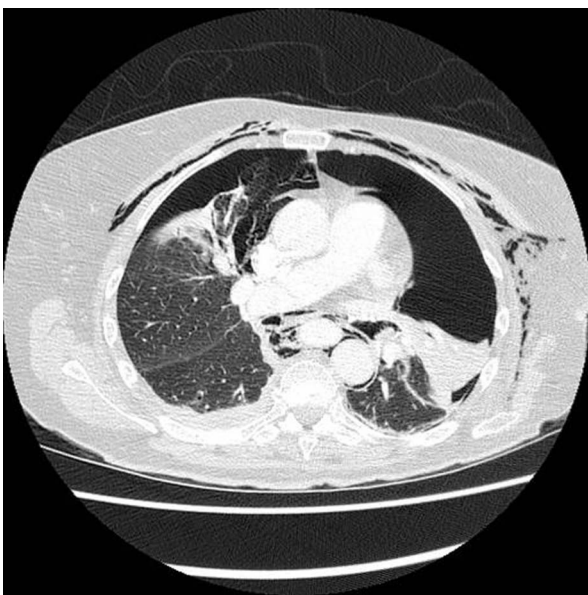
# Bilateral pneumothoraces, pneumomediastinum and subcutaneous emphysema as a rare complication of endoscopic cholangiopancreatography

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## DESCRIPTION

A 67-year-old woman underwent endoscopic cholangiopancreatography (ERCP) for elective exchange of a bile duct stent. The ductus hepaticus communis was stented because of a biliary stricture of unknown aetiology for the first time half a year ago. Multiple previous performed ERCPs were without any complications and show no unexpected findings. The previously placed stent was extracted and replaced by a new 10 French stent. The patient remained stable through the intervention with close monitoring and there were no complications. Immediately after the intervention, the patient developed a progressive dyspnoea. She was tachypnoeic and physical examination revealed subcutaneous emphysema of the thorax and the neck (figure 1). Heart and lung sounds were noticeably decreased. A CT with oral contrast indicated a perforation of the oesophagus as the cause of bilateral pneumothoraces, pneumomediastinum and subcutaneous emphysema (figure 2). The patient was admitted to the intensive care unit where a chest tube was



**Figure 1** Bilateral pneumothoraces, pneumomediastinum and subcutaneous emphysema after ERCP.



**Figure 2** The CT demonstrates a perforation of the oesophagus with a paraesophageal depot of contrast agents (shown by the arrow).

placed and an endoscopic re-evaluation was performed. Intraluminal, there was no hint for perforation. Under non-surgical management, bilateral pneumothoraces, pneumomediastinum and subcutaneous emphysema were regredient and the patient was discharged asymptomatic after 9 days. ERCP is a widely used diagnostic and therapeutic tool in gastrointestinal daily practice. Most complications are rare with a complication rate of 4–10% and a mortality of 0.4%.<sup>1</sup> Complications of ERCP include post-interventional pancreatitis, haemorrhage, cholangitis and perforation. However, bilateral pneumothoraces, pneumomediastinum and subcutaneous emphysema after ERCP are very rare in the literature and till now there have been only four cases reported.<sup>2 3</sup>

## Learning points

- ▶ Endoscopic cholangiopancreatography can cause serious complications even if this is rare.
- ▶ This rare complication should be managed by non-surgical treatment.

**Competing interests** None.

**Patient consent** Obtained.

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