

Transesophageal drainage of an infected bronchogenic cyst via endoscopic ultrasound-guided implantation of a 7-Fr nasocystic drainage catheter

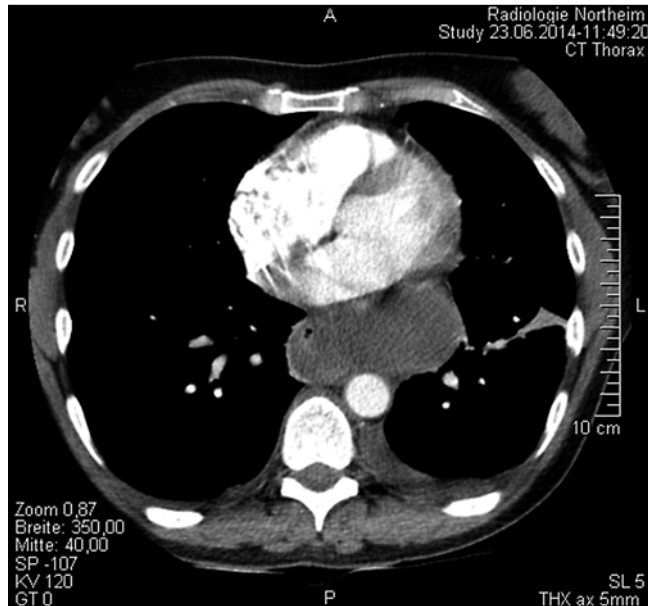


Fig. 1 Computed tomography (CT) scan in a 47-year-old woman with an asymptomatic bronchogenic cyst shows the cyst with dislocation and compression of the esophagus.



Fig. 2 Esophagoscopy revealed external compression of the esophagus with stenosis.



Fig. 3 Endoscopic ultrasound (EUS) appearance of the cyst with fine-needle aspiration in progress.

A 47-year-old woman was admitted to our emergency department with dysphagia and retrosternal pain. The patient's history revealed the existence of an asymptomatic bronchogenic cyst. Computed tomography (CT) demonstrated a cyst (● **Fig. 1**) which had compressed the esophagus and which was in close contact with the left atrium. Echocardiography showed an intact pericardium. Esophagoscopy showed the external compression of the esophagus by the lesion (● **Fig. 2**). Endoscopic ultrasound (EUS) was performed, demonstrating a non-anechoic bronchogenic cyst (● **Fig. 3**). For

diagnostic reasons, fine-needle aspiration was performed which revealed pus. We decided to switch to a conventional cystoscope. Under EUS guidance, a 0.038-inch guidewire was introduced into the cyst and a 7-Fr nasocystic drainage catheter was applied (● **Fig. 4**) and flushed with saline 0.9% solution every 4 hours. After 5 days, a further CT scan was performed (● **Fig. 5**), showing a slowly narrowing cyst. By then, the results of the resistogram had become available and showed *Staphylococcus aureus* resistant to ceftriaxone and meropenem, but sensitive to co-trimoxazole. After changing the

antibiotic regimen, the cyst had almost disappeared after 11 days (● **Fig. 6**) and the drainage was removed.

Usually, symptomatic bronchogenic cysts are treated by open or minimally invasive thoracic surgery [1]. In the case of asymptomatic cysts, the treatment strategy is “wait and see” or prophylactic resection, depending on the clinical situation [2]. The first and, to date, only published case with EUS-guided nasocystic drainage of an infected bronchogenic cyst was demonstrated by Mahady et al. [3] without the need for surgery afterwards. As in our case, the cyst did not relapse, probably because of the scarring inflammatory process. There is always a risk of cyst recurrence, thus, procedures such as the instillation of ethanol might be an option in the case of relapse [4].

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Competing interests: None

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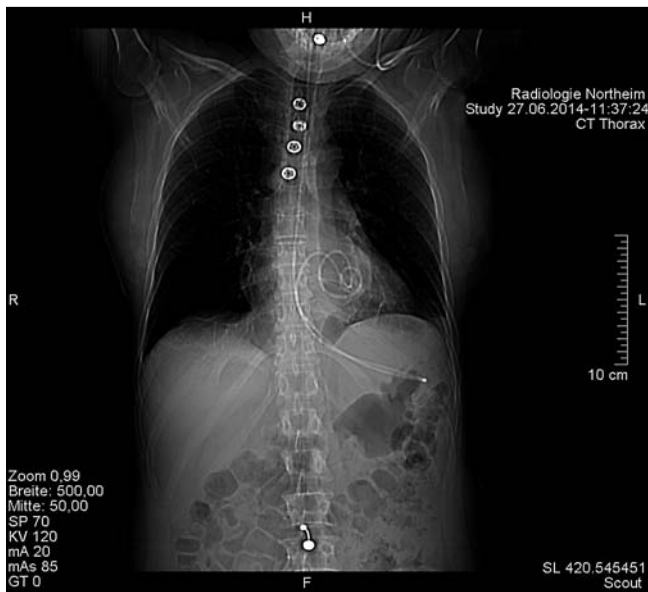


Fig. 4 CT Scout view demonstrates the position of the nasocystic drainage.



Fig. 5 CT scan 5 days after drainage showing a gradually narrowing cyst.

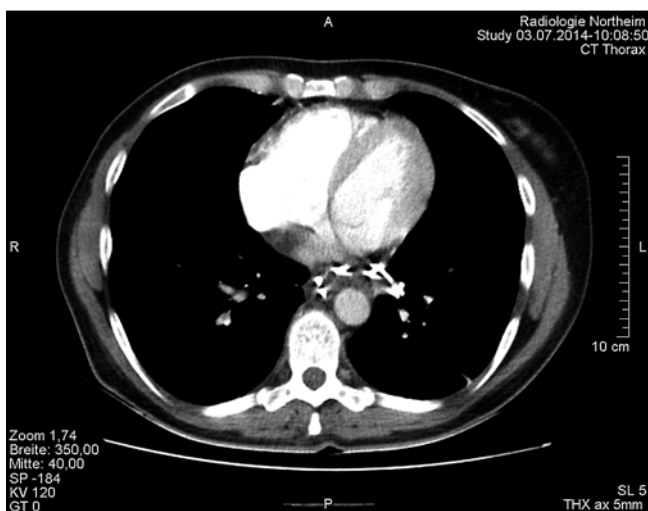


Fig. 6 Corresponding to Fig. 5, the CT scan 11 days after drainage showed that the cyst had almost completely disappeared.

References

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