

Multislice CT in the diagnosis of bronchopleural fistula

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A 55-year-old man underwent right upper lobe resection after sustaining a chest injury in an automobile accident. An air leak persisted for 5 days after the surgery. On the fifteenth postoperative day, the patient was referred to our emergency ward due to respiratory difficulty. Examination confirmed that he was experiencing mild respiratory difficulty; RR was 25 breaths/min and HR was 98 bpm. Examination of the respiratory system revealed subcutaneous emphysema and the absence of pulmonary sounds in the right hemithorax. A chest X-ray showed right hydropneumothorax. A multislice CT scan confirmed this finding, and multiplanar reconstruction demonstrated the presence of a bronchopleural fistula in the anterior segment of the right lower lobe (Figure 1). Video-assisted thoracoscopic surgery and antibiotics were used in order to manage this lesion.

The persistence of bronchopleural fistulae has been documented to lead to significant morbidity and mortality. (1-3) Prolonged air leakage from these lesions is frequently observed, (1-3) and several procedures have been proposed for the treatment of this complication. Recent innovations include the use of endobronchial valves. Multislice CT may be an important tool for the precise identification of the bronchi responsible for air leakage in cases of bronchopleural fistulae.

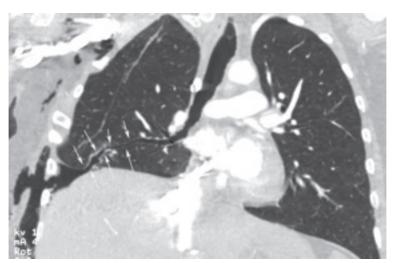


Figure 1. Curved coronal CT reconstruction showing a bronchopleural fistula in the anterior segment of the right lower lobe.

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