

Clinical Image

## Exceptional Case of Endobronchial Foreign Body Mimicking Primitive Lung Cancer



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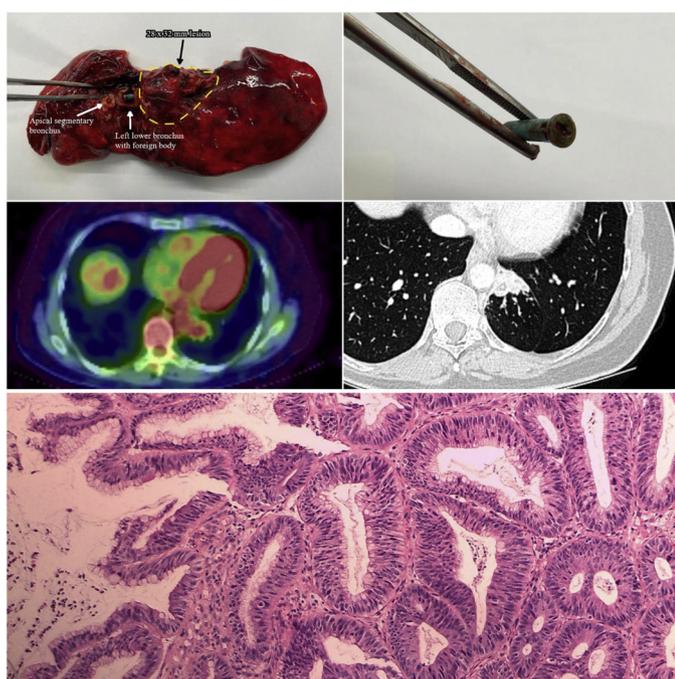


Fig. 1.

52 years-old woman presented persistent cough and single-episode haemoptysis, no clinical history. CT-scan showed hypoplastic left lower lobe with 28 mm × 32 mm PET

positive (SUVmax=2.7) lesion obstructing bronchus. Bronchoscopy showed non-transitable bronchial obstruction and oedema of mucosa. Biopsies suggested well-differentiated neoplasm (adenoma/adenocarcinoma G1). Mutational panel showed presence of BRAF mutation. Bronchial-sleeve left lower lobectomy was programmed. Frozen-section bronchial margin resulted negative and a 2.5 cm plastic screw was found in the basal pyramid. Histology showed a pattern of giant-cell chronic inflammation without neoplasm. No mutations of BRAF were found in the specimen. Patient didn't recall foreign-body inhalation during youth. Invertebrate foreign-body inhalation is a rare problem in adults and left lower bronchus localization relatively uncommon (14% of cases).<sup>1</sup> In this case foreign-body caused chronic inflammation and consequent tissue reaction mimicking a malignant process. Furthermore, bronchial obstruction prevented normal lobar development causing hypoplasia. The absence of radiological findings suggesting foreign-body (non-metal screw) addressed an endobronchial lesion (NSCLC/carcinoid/hamartoma) and the endoscopic biopsy with BRAF mutation constituted a challenging element for correct preoperative diagnosis. However surgical approach was also prompted by the hypoplastic lobe, towards preventing potential uncontrollable haemoptysis or recurrent pneumonia and would have been the correct approach even with a correct preoperative diagnosis (Fig. 1).

### Reference

1. Sehgal IS, Dhooria S, Ram B, Singh N, Aggarwal AN, Gupta D, et al. Foreign body inhalation in the adult population: experience of 25,998 bronchoscopies and systematic review of the literature. *Respir Care*. 2015;60:1438–48.

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