

# *Mycobacterium avium* complex infection mimicking lung cancer

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Accepted 3 February 2019

## DESCRIPTION

A 65-year-old man presented with chest discomfort. He had no history of smoking and did not have any respiratory symptoms either. Physical examination did not reveal any specific findings. Lung CT demonstrated an irregularly margined and lobulated lesion (22×20 mm) in the left lower lobe that was partially contrast enhanced (figure 1A,B). Although the results of serum tumour markers and transbronchial needle aspiration were inapparent, <sup>18</sup>F-fluorodeoxyglucose positron emission tomography–CT showed a high uptake (maximum standardized uptake value [SUVmax] 5.6) indicating malignancy (figure 1C). A left lower lobectomy was performed by video-assisted thoracic surgery. Subsequent histopathological examination confirmed the presence of a non-caseating granuloma containing multinucleated giant cells. The results of PCR and culture revealed the lesion to be caused by *Mycobacterium avium* complex infection.

Non-tuberculous mycobacteria can manifest as a solitary pulmonary nodule mimicking lung tumour. The lesion may not have any specific clinical or

## Learning points

- ▶ Pulmonary non-tuberculous mycobacteria infection imitates lung cancer in radiological findings.
- ▶ Surgical resection followed by pathological investigations is required to arrive at the diagnosis.
- ▶ Positive findings in PET scans do not necessarily indicate malignancy as similar findings can be observed in inflammatory disorders.

radiological characteristics.<sup>1</sup> Invasive procedures including surgical resection of the lung may be required to arrive at the definitive diagnosis.<sup>2</sup>

**Contributors** HH wrote the manuscript.

**Funding** The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

**Competing interests** None declared.

**Patient consent for publication** Obtained.

**Provenance and peer review** Not commissioned; externally peer reviewed.

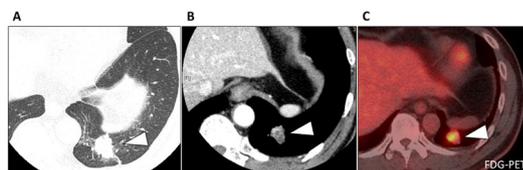
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**To cite:** Hagiya H. *BMJ Case Rep* 2019;12:e228847. doi:10.1136/bcr-2018-228847



**Figure 1** Plain (A), contrast-enhanced (B) and <sup>18</sup>F-fluorodeoxyglucose-positron emission (C) CT of the lung.

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