



Pulmonary mucosa-associated lymphoid tissue lymphoma with internal calcifications on positron-emission tomography/CT

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A 68-year-old man with a two-year history of dry cough underwent ¹⁸F-fluorodeoxyglucose positron-emission tomography/CT (¹⁸F-FDG PET/CT) for the evaluation of lung masses. The results of laboratory tests, which included a complete blood count and determination of serum levels of tumor makers, were unremarkable, except for an elevated serum level of C-reactive protein. The ¹⁸F-FDG PET/CT revealed multiple hypermetabolic masses, with scattered internal calcifications, in both lungs (Figure 1A-1C). The maximum diameter was 66 mm, and the standardized uptake value was 4.45. Transbronchial needle aspiration biopsy confirmed the suspected diagnosis of pulmonary mucosa-associated lymphoid tissue (MALT) lymphoma. The patient then received immunotherapy, and a follow-up CT scan showed that the mass decreased

in size, although the calcifications remained unchanged (Figure 1D).

The most common diagnosis for a pulmonary mass with internal calcification is granuloma. The differential diagnoses include hamartoma, carcinoid, metastasis, and primary bronchogenic carcinoma.⁽¹⁾ However, calcification is rarely observed in lymphoma. It is almost always associated with previous treatment, including radiation and chemotherapy.⁽²⁾ Calcification in untreated pulmonary MALT lymphoma has rarely been described in the literature, and the underlying mechanism is unknown. The FDG-avid nature of the lesion described here might be due to its large size.⁽³⁾ In patients presenting with a hypermetabolic lung mass with scattered internal calcifications on ¹⁸F-FDG PET/CT, the differential diagnosis should include MALT lymphoma.

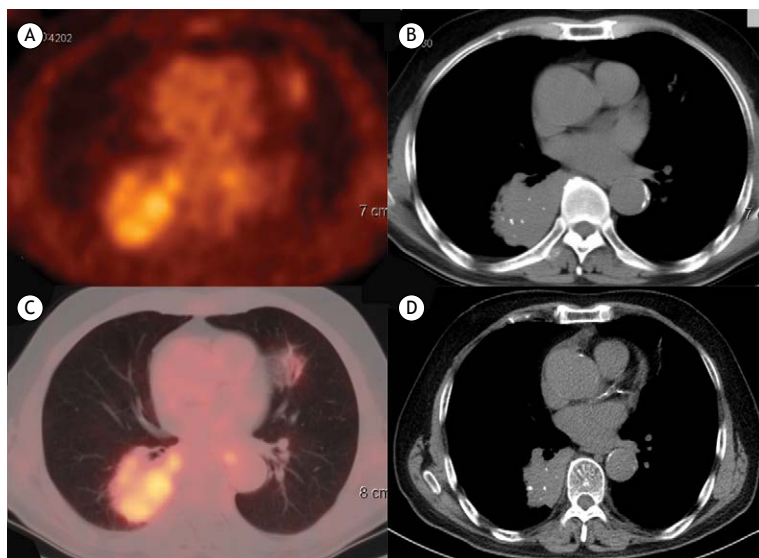


Figure 1. Positron-emission tomography (A), axial CT (B), and fusion images (C), showing multiple fluorodeoxyglucose-avid masses with scattered internal calcifications in both lungs. A follow-up chest CT (D), after treatment, shows that the mass decreased in size, although the calcifications remained unchanged.

REFERENCES

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