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Pulmonary puzzle

A 69-year-old smoker with mediastinal and hilar lymphadenopathy

CLINICAL PRESENTATION

A 69-year-old male heavy smoker was referred to our service with 6 months minimal productive cough and 2 weeks pleuritic central chest pain, with no weight loss or constitutional symptoms. There was no relevant previous medical history. Clinical examination demonstrated no abnormalities. CT chest revealed extensive mediastinal and right hilar lymphadenopathy with a conglomerate subcarinal lymph node of 7×3.9 cm, with no parenchymal lung abnormalities identified.

Whole-body ¹⁸fluorodeoxyglucose (FDG) positron emission tomography revealed increased nodal uptake throughout the mediastinum (figure 1) as well as in the right supraclavicular fossa, and right hilum. Bronchoscopy demonstrated no focal endobronchial lesions, and cytology, Gram staining and culture of bronchoalveolar lavage fluid were non-diagnostic. Endobronchial ultrasound-guided transbronchial needle aspiration of the paratracheal and subcarinal lymph nodes using a 22-gauge transbronchial needle aspiration needle (NA-201SX-4022, Olympus, Tokyo, Japan) with five passes was performed. Pathological examination revealed fibrous tissue with abundant plasma cells. Immunohistochemical staining for immunoglobulin light chains was equivocal.

QUESTION

What is the likely diagnosis and how should this be confirmed?
See page 187 for answer.

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Figure 1 Positron emission tomography image demonstrating large intensely fluorodeoxyglucose (FDG)-avid masses in (a) pretracheal and (b) subcarinal and right hilar regions.

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