

Clinical Image

A Solitary Pulmonary Nodule of Unexpected Etiology



Nódulo pulmonar solitario de etiología inesperada

Maria Kipourou^{a,*}, Ioannis Papachristos^b, Konstantinos Katsoulis^a

^a Pulmonary Department, 424 General Military Hospital (424 GMHT), Thessaloniki, Greece

^b Thoracic Surgery Department, 424 GMHT, Thessaloniki, Greece

A solitary pulmonary nodule of the right lower lobe was the incidental finding of a routine chest X-ray in a 27 year old asymptomatic, non-smoker soldier, with a positive family history of lung cancer. The nodule had a diameter of 1.1 cm, showed enhancement on chest CT and a high ¹⁸F-FDG uptake (SUVmax: 7.6) on ¹⁸F-FDG PET/CT scan (Fig. 1). All imaging features were suggestive of a potentially malignant lesion. Bronchoscopy was normal and the patient finally underwent right lower lobectomy, leading to the diagnosis of inflammatory myofibroblastic tumor (IMT), according to 2015 WHO classification.

IMT is a rare mesenchymal tumor of unknown origin, most frequently affecting the lung.¹ Previously used term 'inflammatory pseudotumor' is suggestive of the undergoing intense inflammation, leading to the high ¹⁸F-FDG uptake in the PET/CT scan. Surgery is often required, since diagnosis is difficult to reach with less invasive methods and recurrence is common, unless the tumor is completely resected. Major resection techniques, such as the lobectomy in our case, are bibliographically supported in order to achieve both goals of diagnosis and curative treatment.²



Fig. 1. ¹⁸F-FDG PET/CT scan. Highly metabolic nodule of the right lower lobe, without mediastinal lymphadenopathy.

References

1. Panagiotopoulos N, Patrini D, Gvinianidze L, Woo WL, Borg E, Lawrence D. Inflammatory myofibroblastic tumour of the lung: a reactive lesion or a true neoplasm? *J Thorac Dis.* 2015;7:908–11.
2. Barbetakis N, Efstathiou A, Xenikakis T, Konstantinidis H, Fessatidis I. An unusual cause of haemoptysis in a young male. *Int Semin Surg Oncol.* 2006;3:6 [BioMed Central].

* Corresponding author.

E-mail address: mariakipo@hotmail.com (M. Kipourou).