



Thymoma



Fig. 1

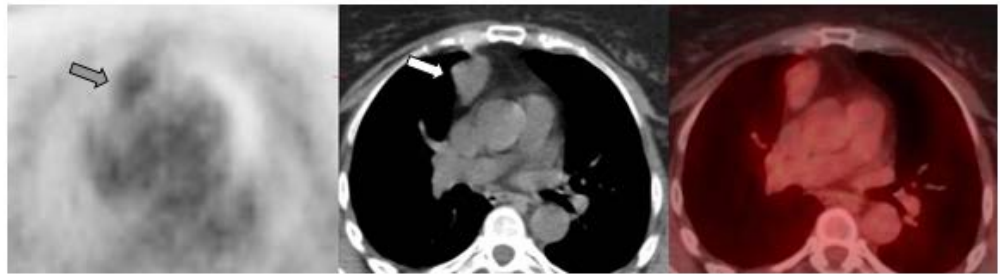


Fig. 2



Fig. 3

This 61 year old woman was found to have an anterior mediastinal mass on chest CT. The mass was felt to represent either a thymoma or a lymphoma. A biopsy had been declined by the patient. A PET-CT scan was ordered to help determine if there were other sites of disease and to evaluate the malignant potential. The PET-CT scan showed low-grade uptake in the mediastinal mass (maximum SUV 2.0) with no other sites of involvement (arrows, Fig. 1-3). At surgery the mass found to be a histological type AB thymoma.

How did the PET-CT help?

In the absence of a biopsy, the PET-CT scan established that there were no other sites of disease that might be easy to biopsy, and that a lymphoma, which might have been treated without surgery, was unlikely. Recent publications have shown that PET-CT can help distinguish between thymic epithelial tumors (types A, AB, and B1-3, SUV generally 2-6) and thymic carcinoma (type C, SUV generally 8-12+). However, PET-CT cannot distinguish among the low risk type A, AB, and B1 thymomas and the high risk type B2 and B3 tumors^{1,2}. Myasthenia gravis is present in 10-50 % of patients with thymoma.

(1) Eur J Cardiothorac Surg 2009;36:475-479

(2) Lung Cancer 2008;61:362-368