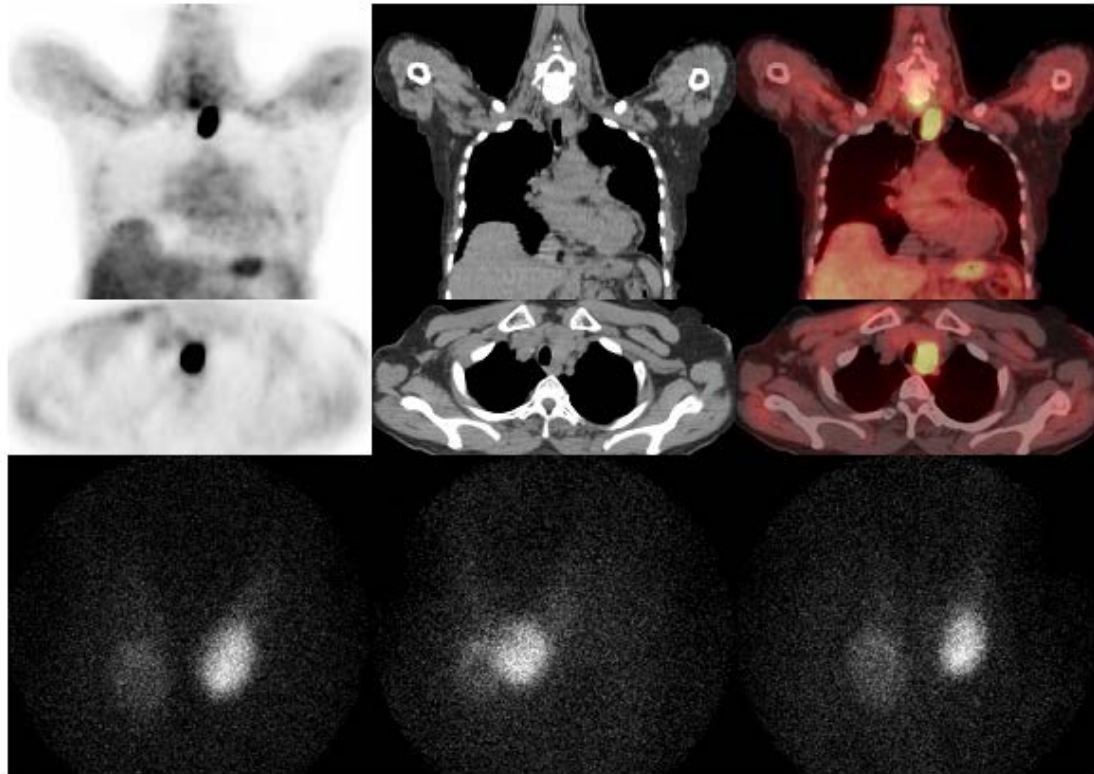




Thyroid Adenoma



This 68 year old woman treated for breast carcinoma five years earlier had a restaging PET-CT because of rising CA27-29, which showed marked increased tracer uptake involving a large portion of the left lobe of the thyroid with a maximum SUV of 50.3 (Figs. 1,2). The risk of malignancy prompted additional thyroid evaluation. Thyroid ultrasound showed a very large left thyroid nodule and additional large right lobe and isthmus nodules, which were all negative for malignant cells on FNA. Thyroid function tests were normal. A subsequent thyroid scan showed likely autonomous function in the left lobe nodule, and to a lesser extent in the right lobe nodule (Fig. 3). The nodules were stable in size over an eight month follow-up period.

How did the PET-CT help?

The PET-CT scan identified the previously unrecognized thyroid disease. Many studies have shown PET-CT to reveal incidental thyroid abnormalities in 1 -5 % of patients, about a third of which prove to be malignant. The preponderance of studies has found no correlation between maximum SUV and malignancy¹⁻³.

- (1) Endocrine Journal 2010, 57 (5), 395-401
- (2) World J Surg Oncol. 2009 Aug 10;7:63-69
- (3) Nucl Med Commun. 2009 Sep;30(9):742-8