

PET-CT CASE OF THE MONTH

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Fig. 1

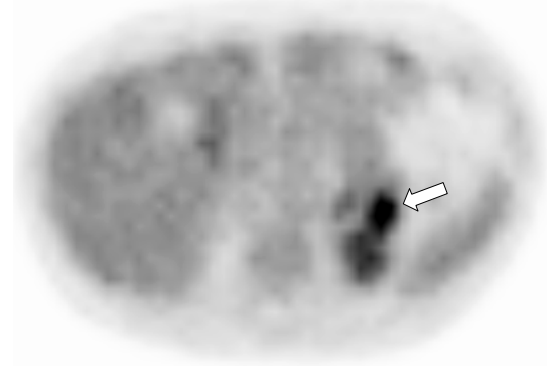
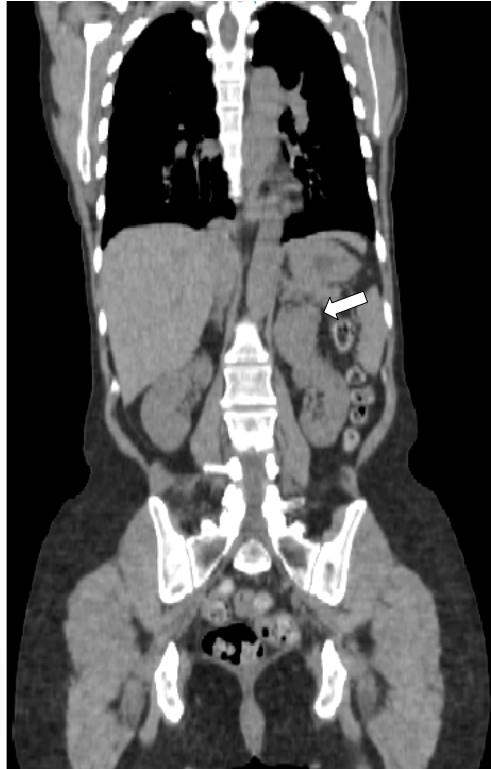


Fig. 2

This 47 year old woman had presented with Stage II lobular breast carcinoma of the right breast 16 months earlier, treated with mastectomy and chemotherapy. A PET-CT scan was ordered for restaging (Figs. 1, 2). The scan showed a 5 x4 x 4 cm left adrenal mass with irregular increased tracer uptake with a maximum SUV of 6.1. A subsequent left adrenal FNA showed atypical cells with morphologic and immunohistochemical features suggestive of an adrenal cortical neoplasm, not consistent with a metastasis. Adrenal hormone levels were normal. A left adrenalectomy was performed which showed an adrenal cortical carcinoma.

How did the PET-CT help? :

The PET-CT scan identified the adrenal mass, and because of the high tracer uptake an aggressive work-up ensued. Many adrenal cortical carcinomas are non-functioning and are not detected at an early stage. Delayed diagnosis contributes significantly to the generally poor prognosis in this disease. Recent articles have shown that the sensitivity of FDG PET for this malignancy make it useful tool for the staging and restaging of adrenal cortical carcinomas^{1,2}.

This case also serves as a reminder that tracer uptake in an atypical location in a patient with a known cancer may indicate a second malignancy.

(1) J Clin Endo Metab. 2006 91:920-925

(2) J Clin Endo Metab. 2006 91:2665-2671

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This case and previous ones can
be seen at www.petcases.com