MedStar Franklin Square Medical Center

9000 Franklin Square Drive
Baltimore, MD 21237
443-777-7441 PHONE
443-777-7397 FAX
MedStarFranklin.org/PETCases

Nuclear Medicine

Gabriel Soudry, MD
gabriel.soudry@medstar.net
Director, Nuclear Medicine and PET-CT Services

Ovarian Cancer

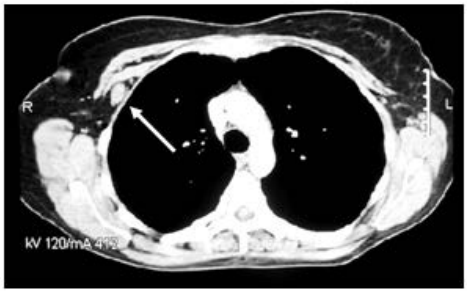

Fig. 1

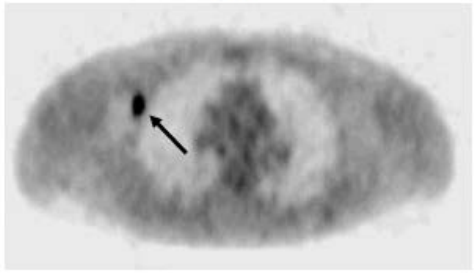

Fig. 2

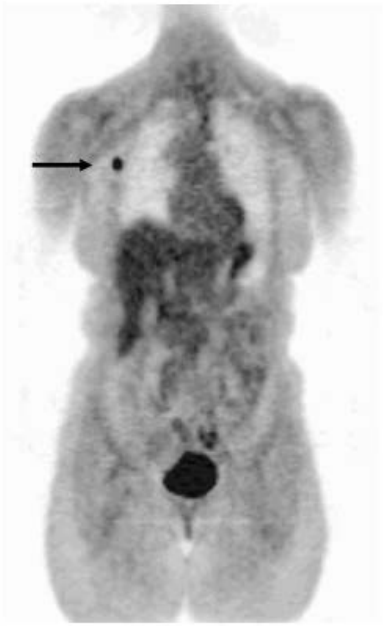

Fig. 3

This 56-year-old lady had a history of **ovarian carcinoma** starting seven years prior. A chest CT with contrast (Fig. 1) was performed for an unrelated reason which was reported as follow: “Enlarged right axillary lymph node deep to the pectoralis minor muscle. In the absence of enlarged nodes elsewhere, this is probably not significant.”

A PET scan (Fig. 2 and Fig. 3) was obtained for further investigation, which showed:

- A focus of intense FDG accumulation in the right axilla highly suggestive of a malignant process
- No other evidence of malignancy in the rest of the body

Subsequently, this right axillary node was biopsied under ultrasound guidance. The pathologic findings were compatible with a metastatic endometrioid carcinoma similar to the patient’s original ovarian tumor.

How did the PET help?

The PET scan increased the suspicion of metastatic involvement of the mildly enlarged right axillary lymph node from low to high, leading to better restaging of the patient. This lymph node was resected to run drug resistance assays and guide the choice of subsequent chemotherapy.

In a study involving 24 patients who had undergone surgery or chemoradiotherapy for histopathologically proven ovarian cancer, the sensitivity and specificity of PET to identify recurrence was 92.3% and 100% respectively as compared with CT 72.7% and 75% respectively (1).

(1) AJR 2001;176:1449-1454