Views You Can Use

PET/CT Case: Metastatic Breast Cancer

This 77-year-old woman had a history of right radical mastectomy for ductal carcinoma 16 years earlier. Four years ago she presented with metastatic breast carcinoma in a right neck lymph node, for which she received hormonal therapy. An adenocarcinoma in the bladder was recently discovered and a cystectomy was suggested. A PET/CT was ordered for additional staging information and restaging of the breast cancer.

The PET/CT showed uptake in a subcarinal lymph node and a left lung nodule (Fig. 1, arrowheads). Tracer uptake was also present in three right inguinal lymph nodes (Figs. 1 and 2, gray arrows) and a left iliac lymph node (Figs. 1 and 3, white arrows). The right inguinal adenopathy had not been detected clinically. An ultrasound-guided, right inguinal lymph node biopsy showed a poorly differentiated adenocarcinoma which immunostains indicated was of breast origin. The histology was identical to the prior bladder lesion, and immunostains were obtained from the bladder specimen showing it represented a breast metastasis.

How Did PET/CT Imaging Help?

PET/CT demonstrated abnormal right inguinal nodes, that, when biopsied, lead to the diagnosis of metastatic breast cancer alone, rather than an additional primary cancer in the bladder. Inappropriate treatment was therefore avoided.

Recent studies have shown the utility of PET for staging and restaging women with breast carcinoma (1,2).

References

About Views You Can Use

This case was provided by David Seldin, MD, Franklin Square Hospital Center, Baltimore, MD. It was also featured on the Web site of Gabriel Soudry, MD, at www.petcases.com. In addition to the Web site, Dr. Soudry also mails printed versions of his example cases to referring physicians in Franklin Square and the surrounding community. Working with Dr. Soudry and other PET specialists, the PCOE Web site (www.snm.org/PET) features “Views You Can Use,” single-sheet PDFs that include specific cases, images, and references. As a PCOE member, you can add your own contact information to these sheets and distribute them electronically or by printed hard copy to referring physicians for educational purposes.