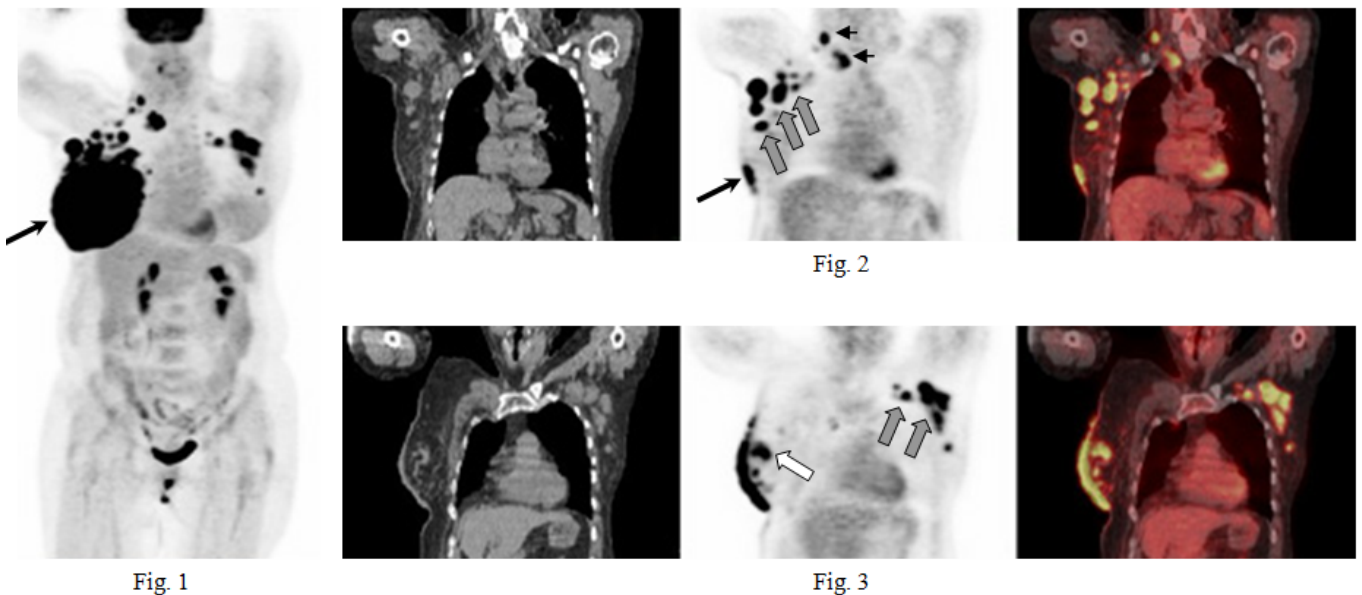




## Breast Cancer



This 54 year old woman with biopsy proven infiltrating ductal carcinoma of the right breast was found to have bilateral axillary adenopathy on a staging CT scan. A diagnostic mammogram and ultrasound examination of the left breast showed that the enlarged lymph nodes had an appearance suspicious for malignant nodes, and the left breast showed diffuse skin and trabecular thickening thought to represent lymphatic engorgement. Neither the mammogram or breast sonogram showed any masses, architectural distortion, or microcalcifications suspicious for a left breast malignancy.

A staging PET-CT scan showed extensive increased FDG uptake in the skin of the right breast (black arrows), in the right breast parenchyma (white arrows), in bilateral axillary lymph nodes (gray arrows), and in several right neck foci (arrowheads), corresponding to anatomic abnormalities on the CT images (Figs. 1-3).

### How did the PET-CT help?

PET-CT demonstrated the extensive nature of the cancer, with skin involvement of most of the right breast and marked adenopathy in both axillae and in the right neck. Supraclavicular and contralateral

axillary metastases are uncommon, but have been reported in the literature<sup>1,2,3</sup>. This route of metastatic spread should be kept in mind when contralateral axillary adenopathy is seen, without evidence of any contralateral breast primary tumor.

- (1) Breast 2006; 15(2):266-8
- (2) J Surg Oncol 2004;86(3):167-9
- (3) Bull Cancer 1998;85(8):713-5