

IMAGES AND VIDEOS

Contralateral drainage of a second breast tumor by 18F-FDG PET/CT

Drenaje contralateral de un segundo tumor mamario diagnosticado mediante PET/TC CON 18F-FDG



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We report a 69-year-old female with a previous history of intraductal right breast carcinoma stage IIA (Luminal B), treated with lumpectomy plus axillary lymphadenectomy and subsequent adjuvant chemotherapy, mammary radiotherapy, and hormonotherapy ending in 2011. At this time, she was referred to our center for a cutaneous lesion in the right chest progressing to anti-inflammatory treatment. The mammography showed a 5 cm pseudo-nodular lesion, with solid characteristics in the echography (BIRADS 4c) and no axillary involvement, being congruent with inflammatory triple negative ductal carcinoma in the biopsy.

After six chemotherapy cycles (carboplatin plus paclitaxel), a right mastectomy was performed revealing a multicentric carcinomatous intravascular infiltration along with stromal fibrosis secondary to neoadjuvant treatment. Ulterior axillary ultrasound revealed some equivocal left lymphadenopathies. Therefore, a re-staging 18F-FDG PET/CT was requested.

The skull-base-to-mid-thigh imaging (Fig. 1) evidenced six metabolically positive lymphadenopathies affecting the

three levels of the left axillary region (horizontal arrow) reaching a size of 2,2 cm (SUVmaximum: 22,26). In addition, another ipsilateral retroclavicular lymphadenopathy (vertical arrow) was visualized (1,2 cm, SUVmaximum, 10,82); all of them suggestive of malignancy. No pathological activity was visualized in the left breast. Reactive post-chemotherapy activity in the right breast was found (asterisk). Following the biopsy confirmation of contralateral axillary infiltration, locoregional radiotherapy was proposed to prevent expected comorbidities of a second chemotherapy.

Ipsilateral axillary lymphatic dissemination is a common finding in breast cancer.¹ Given the evidence of a contralateral drainage, the presence of a second contralateral breast tumor should be considered at first.² Aberrant lymphatic drainage is an uncommon finding, although it may be justified by previous surgery and fibrocicatricial changes after chemotherapy.³ In this case, the completion of 18F-FDG PET/CT allowed a correct establishment of the second breast lesion, excluding another contralateral breast tumor and leading to the most appropriate therapeutic option.

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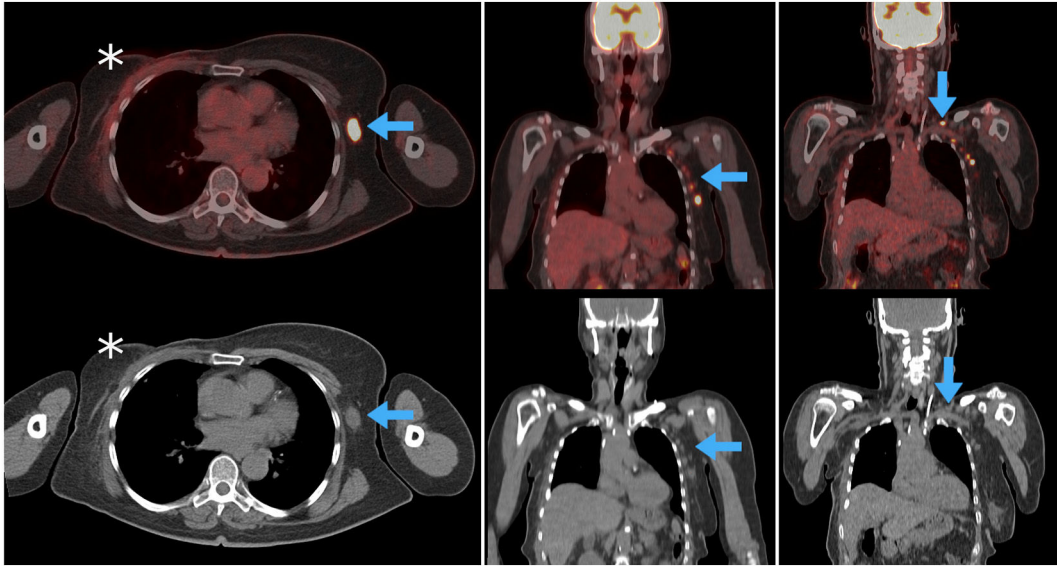


Figure 1 18F-FDG PET/CT axial and coronal fused images of reactive post-chemotherapy activity in the right breast (asterisk) and pathological contralateral axillary and retroclavicular lymphadenopathies (arrows).

Ethical considerations

The authors declare that privacy policy of the institution has been followed, excluding any identification detail of the patient. Also the patient was informed and give her verbal consent following the legislation (ORDER of July 8, 2009 / BOJA N° 152 Pages 77–79).

Declaration of Competing Interest

The authors declare that they have no conflict of interest.

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