Interesting image

Unilateral breast metastasis from alveolar rhabdomyosarcoma in adult detected by $^{18}$F-FDG PET/CT

Metástasis mamaria unilateral de rabdomiosarcoma alveolar en un adulto, detectada por $^{18}$F-FDG PET/TAC

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Fig. 1 shows the images of a 44-year-old woman, who was diagnosed of an alveolar rhabdomyosarcoma of the right heel (dotted arrow in B), during her second trimester of her pregnancy. After diagnosis, she underwent delivery by elective cesarean.

In the initial staging of the disease, she had an extensive lymph node involvement of inguinal, iliac and retroperitoneal territories detected by contrast-enhanced CT (prior to first FDG PET/CT), which had a good response to chemotherapy, as well as the primary tumor.

During her follow up, in a $^{18}$F-FDG PET/CT, an intense focal uptake (SUVmax 5) in the superior external quadrant of the right breast (arrow in B and D) was observed, correlating with a sub-centimeter nodal lesion in CT, not present in previous study (A and row C). Subsequently, this lesion was biopsied by ultrasound guided fine needle aspiration, confirming the diagnosis of alveolar rhabdomyosarcoma metastasis.

Rhabdomyosarcoma (RMS) is a rare soft tissue sarcoma in adults, being the 3% of all of them, most commonly localized in extremities and head and neck.\(^1\)

Up to 30% of RMS in the adult could be alveolar, and these types have more lymphatic spread than other types of RMS.\(^1,2\) Five years overall survival in adult population is worse, compared to pediatric population (27% vs. 61%).\(^2\)

Breast metastases from sarcomas have been reported, principally in female children and adolescents, and in alveolar sarcoma.\(^2\)

The role of $^{18}$F-FDG PET/CT in RMS has been described in initial staging and restaging, follow-up, and also as a prognosis tool.\(^3\)

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Fig. 1. 18F-FDG PET/CT images from the first study (April 2013) are shown in image (A) maximum intensity projection (MIP) and in the row C: CT, PET and fusion PET/CT. The second study (July 2013) images are shown in B: MIP and row D: axial images of CT, PET and fusion PET/CT.

References