




Images in Clinical Hematology

Primary breast lymphoma in a male patient



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Primary breast lymphoma is a rare neoplasm; it corresponds to 0.4–0.5% of breast tumors¹ and is defined as the absence of concurrent widespread lymphoma, having no previous diagnosis of extramammary lymphoma. It is an infrequent tumor, as lymphoid tissue is absent in the mammary region.² It is especially prevalent in females (95–100%), representing little more than a mere anecdote in males.³ The PET/CT can be useful in the initial staging, treatment response evaluation, and restaging of patients with primary breast lymphoma.

An 81-year-old man with a personal history of stage II colon adenocarcinoma that was completely resected in 2015, and who is currently in remission, has been diagnosed with a painless tumor in the left breast. The examination showed a 5-or-6-cm hard lump under the left nipple without palpable peripheral adenopathy. The left breast ultrasound demonstrated a hypoechoic and non-homogeneous mass measuring 35 mm in the lower inner quadrant. These sonographic findings were

highly suspicious for malignancy. The histopathological analysis revealed a large B-cell lymphoma. Before the systemic therapy was started, a PET/CT was performed with ¹⁸F-FDG for extension study. The PET/CT with ¹⁸F-FDG images showed an area of increased radiopharmaceutical uptake located in the left breast with an approximate size of 5 × 5.5 × 4.7 cm (T × AP × CC) and it reached a maximum standardized uptake value (SUV) of 27.59 suggesting malignity (Figure 1A). In the rest of the study, no other pathological uptake of the radiotracer was observed in the remaining lymph tissue examined (Figure 1B). The patient was treated with 4 cycles of CP (cyclophosphamide and prednisone) and radiotherapy. The post-treatment PET/CT showed a complete metabolic response (Figure 1C and D). The patient continues in clinical monitoring. We presented this case because of the singularity which this unusual type of tumor presents in men and the very reduced number of these cases described in the literature.

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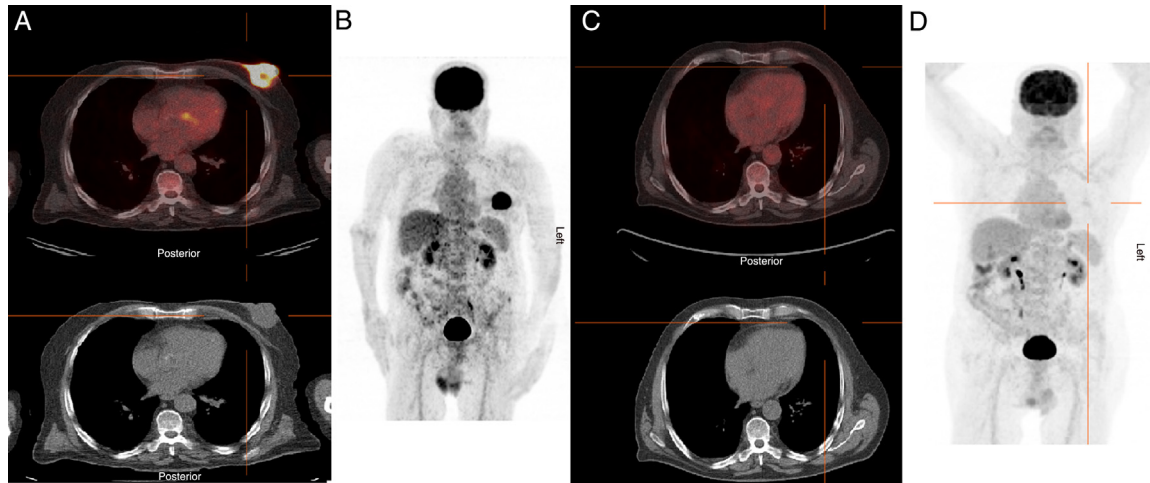


Figure 1 – ^{18}F -FDG PET/CT baseline (A, B) and ^{18}F -FDG PET/CT post treatment (C, D). Images showing area of increased radiopharmaceutical uptake located in the left breast on transaxial fused images (A) that disappears after four cycle of chemotherapy (C). B and D are baseline and post-treatment maximum intensity projection (MIP) PET images demonstrating complete metabolic response.

Conflicts of interest

The authors declare no conflicts of interest.

REFERENCES

1. Lokesh KN, Sathyanarayanan V, Lakshmaiah KC, Suresh TM, Babu KG, Lokanatha D. Primary breast diffuse large B cell lymphoma – report of 6 cases from South India with review of literature. *Indian J Surg Oncol.* 2013;4(4):368–73.
2. Ryan G, Martinelli G, Kuper-Hommel M, Tsang R, Pruneri G, Yuen K, et al. Primary diffuse large B-cell lymphoma of the breast: prognostic factors and outcomes of a study by the International Extranodal Lymphoma Study Group. *Ann Oncol.* 2008;19:233–41.
3. Jabbour G, El-Mabrok G, Al-Thani H, El-Menyar A, Al Hijji I, Napak S. Primary breast lymphoma in a woman: a case report and review of the literature. *Am J Case Rep.* 2016;17: 97–103.