Lymphomatous Involvement of Male Breast in a Patient with Bilateral Gynecomastia: Demonstration with ^{18}F-Fluorodeoxyglucose Positron Emission Tomography-Computed Tomography

Sir,

^{18}F-fluorodeoxyglucose positron emission tomography-computed tomography (^{18}F-FDG PET-CT) has now become the imaging modality of choice for high-grade lymphomas. Being a highly sensitive whole-body metabolic imaging technique, it can demonstrate unusual sites of involvement in these patients, which could be otherwise missed. We present such a case here. A 65-year-old male presented with cervical lymphadenopathy along with progressive weakness, weight loss, and fatigue. Biopsy from the cervical node confirmed diffuse large B-cell lymphoma (DLBCL). A staging contrast-enhanced ^{18}F-FDG PET-CT was performed. ^{18}F-FDG PET-CT [Figure 1a-e] showed lymph nodal involvement on both sides of diaphragm along with splenic involvement. Also noted was hypermetabolic right breast nodule suggesting involvement [Figure 1a-e, bold arrow]. Maximum standardized uptake value of this lesion was 6.2.

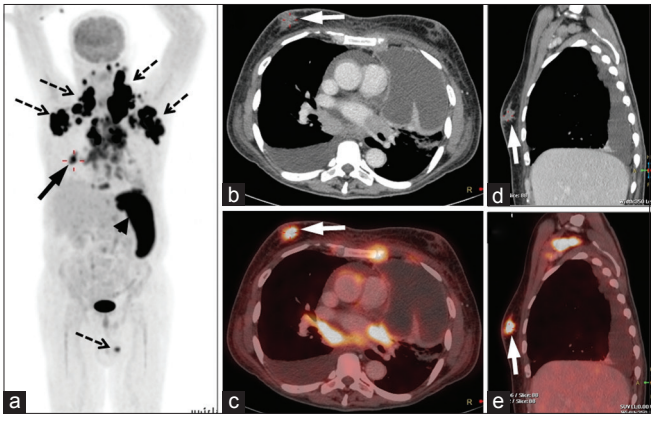

Figure 1: Maximum intensity projection PET image (a) showing hypermetabolic lymphadenopathy both above and below the diaphragm (broken arrows), along with hypermetabolic splenomegaly (arrowhead). Also noted was focal ^{18}F-FDG uptake in right anterior chest wall (bold arrow). Transaxial and sagittal CT and PET-CT (b-e) images of the thorax showing focal hypermetabolism involving right breast nodule measuring 17 mm × 15 mm, suggesting involvement (bold arrow). ^{18}F-FDG PET-CT: ^{18}F-fluorodeoxyglucose positron emission tomography-computed tomography

Based on ^{18}F-FDG PET-CT findings, a diagnosis of stage IVBE DLBCL was made. A clinical examination was done thereafter which revealed bilateral age-related gynecomastia, firmer and slightly tender on right side, further supporting the diagnosis. The patient was started on rituximab-cyclophosphamide-doxorubicin-vincristine-prednisolone chemotherapy but was lost to follow-up after two cycles.

Breast involvement in lymphoma could be either primary or secondary with latter being more common.[1] Lymphoma accounts for <0.5% of all breast malignancies. Hence, lymphoma of male breast is even rarer.[2] In these patients, it can present with gynecomastia.[3] DLBCL is the most common histopathological subtype.[4] Management is with chemotherapy and adjuvant radiotherapy when required while surgery has no definite role.[5] As for lymphoma of other sites, ^{18}F-FDG PET-CT plays an important role in the management of primary and secondary breast lymphoma.[6,7] In the present case, while the patient had bilateral gynecomastia clinically, lymphomatous involvement was only seen in right breast. This case reiterates the importance of ^{18}F-FDG PET-CT in the management of patients with high-grade lymphoma by demonstrating usual sites of involvement.

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Conflicts of interest

There are no conflicts of interest.

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