

Elastofibroma Dorsi: Findings on ¹⁸F-Fluorodeoxyglucose Positron Emission Tomography-Computed Tomography

Abstract

Elastofibroma dorsi (EFD) is a relatively rare soft-tissue pseudotumor that arises from mesenchymal tissue. We present a case of 48-year-old woman who underwent ¹⁸F fluorodeoxyglucose (FDG) positron emission tomography-computed tomography for initial staging of suspected carcinoma of the left breast. Incidental detection of soft-tissue masses showing moderate FDG uptake was seen in the bilateral infrascapular location characteristic of EFD.

Keywords: *Elastofibroma, fluorodeoxyglucose, positron emission tomography-computed tomography*

A 48-year-old woman underwent staging ¹⁸F fluorodeoxyglucose positron emission tomography-computed tomography (¹⁸F FDG PET-CT) for the evaluation of the left breast lesion. PET-CT revealed an FDG avid lesion in the left breast lower outer quadrant [Figure 1a and f] with few ipsilateral Level I and II lymph nodes showing increased FDG uptake [Figure 1a and g]. In addition to these findings, maximum intensity projection images of ¹⁸F FDG PET-CT showed symmetrical foci of FDG uptake in the bilateral posterolateral chest regions [Figure 1a black solid arrows]. Axial CT images [Figure 1b and d solid white arrows] show soft-tissue masses in the bilateral infrascapular locations which showed moderately increased FDG uptake in the fused PET-CT images [Figure 1c and e solid white arrows]. Biopsy from the left breast lesion showed invasive ductal carcinoma.

Elastofibroma is a benign poorly circumscribed soft-tissue lesion classically located in the subscapular region and hence it is named as elastofibroma dorsi (EFD). It can be seen in other rare sites such as olecranon, ischial tuberosity, thighs, and subcutaneous tissue.^[1-3] EFDs show diffuse low-to-moderate grade FDG uptake in a ¹⁸F FDG PET-CT scan although high FDG uptake can also be seen that may be caused due to high vascularity and abnormal fibroblastic reactive proliferation within the

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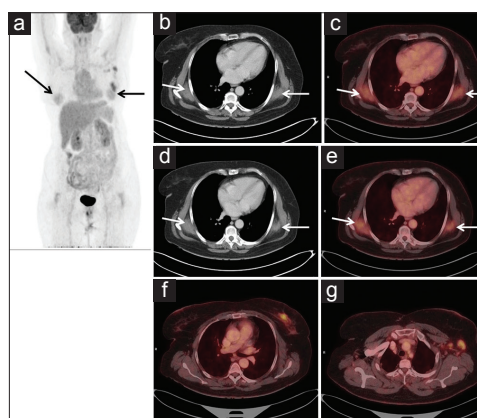


Figure 1: (a) ¹⁸F fluorodeoxyglucose positron emission tomography-computed tomography maximum intensity projection image showing areas of moderately increased symmetrical fluorodeoxyglucose uptake in the bilateral lower chest regions shown by solid black arrows (b and d): Axial computed tomography images showing soft tissue masses in the bilateral subscapular regions which show moderate fluorodeoxyglucose uptake in the fused transaxial ¹⁸F fluorodeoxyglucose positron emission tomography-computed tomography images (solid white arrows) as seen in c, e and f - Fused transaxial fluorodeoxyglucose positron emission tomography-computed tomography image showing fluorodeoxyglucose avid lesion in the left breast parenchyma (g) - Fused transaxial fluorodeoxyglucose positron emission tomography-computed tomography image showing fluorodeoxyglucose avid left axillary lymph nodes

mass.^[4-6] The correct diagnosis of this benign entity is essential to avoid any false positive results and unnecessary interventions in patients suffering from malignant conditions.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the

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form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Nil.

Conflicts of interest

There are no conflicts of interest.

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