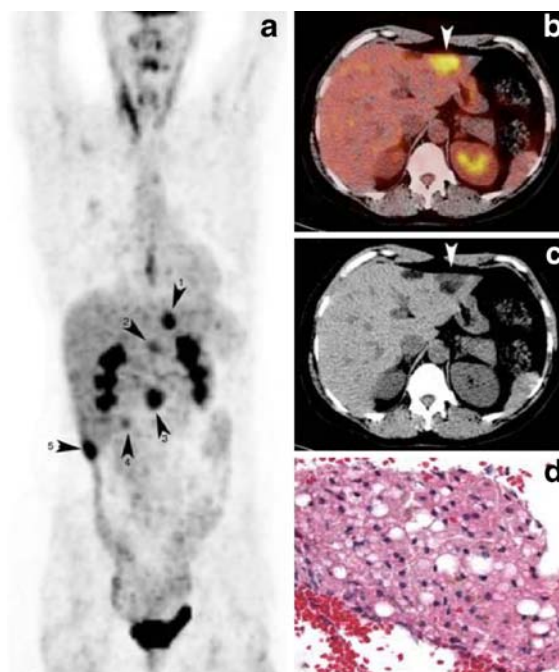


Focal fat mimicking multiple hepatic metastases on FDG PET/CT imaging

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FDG PET/CT imaging is commonly used for the detection of metastatic disease within the liver [2]. Its use has been suggested in the setting of hepatic steatosis due to a decrease in false-positive ‘pseudotumor’ findings commonly seen on sonographic and CT imaging as a result of areas of focal fat sparing [3]. While benign hepatic lesions such as granulomatous abscesses and focal nodular hyperplasia have been shown to concentrate FDG, steatosis is typically associated with decreased FDG activity and can be recognized on the basis of periportal distribution [1, 4]. Here we present the case of a 48-year-old woman with infiltrating ductal carcinoma of the right breast with metastatic disease in 11 axillary lymph nodes found during axillary node dissection. Subsequent PET/CT scanning identified five low-density, intensely FDG-avid hepatic foci with standardized uptake values (SUV) in the range 4.2–7.3 that were presumed to represent metastases (panels a–c). The patient was treated with chemotherapy and chest wall radiation. PET/CT after six cycles of chemotherapy did not show significant change in the liver lesions and was otherwise negative. CT-guided biopsy of the four largest liver lesions was performed. Pathology results showed macrosteatosis in a background of benign hepatic parenchyma, without inflammatory cells or neoplastic infiltrates (panel d). Follow-up PET/CT after 13 months showed the same five foci of focal steatosis with similar size, shape and FDG uptake that strikingly mimic the appearance of hepatic metastases.



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