

18F-FDG PET-CT Features of A Hemophagocytic Syndrome Secondary To A Metastatic Melanoma

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2. Keywords

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1. Abstract

Several cases of hemagocytic syndrome have been described in ¹⁸F-fluorodeoxyglucose (¹⁸F-FDG) positron emission tomography/computed tomography (PET/CT), secondary to lymphoma diseases. Splenic nodules were discovered during a surveillance scanner performed in a 77 year old woman followed up for a melanoma stage IIB. A whole body ¹⁸F-FDG PET/CT was performed to assess these lesions, followed by a bone marrow aspirate to explore ¹⁸F-FDG PET/CT abnormalities. The ¹⁸F-FDG PET/CT demonstrated a high splenic and hepatic uptake, and especially an intense and diffuse osteo-medullary fixation mimicking a "super bone scan". According to the bone marrow aspirate, this aspect of ¹⁸F-FDG super bone scan was related to a hemophagocytic syndrome secondary to a melanoma medullar invasion. This case highlights that this syndrome can occur either in lymphoma or in less expected solid tumors such as metastatic melanomas, and can mimic a "super bone scan" on ¹⁸F-FDG PET/CT.

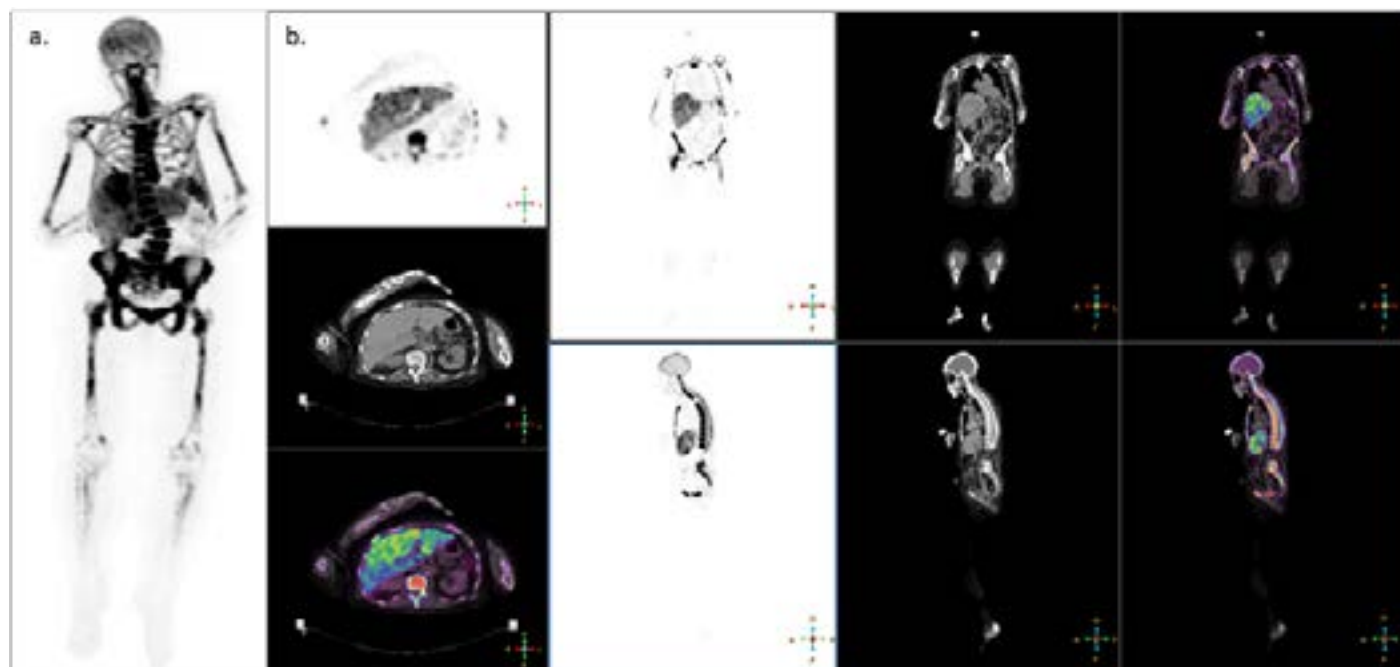


Figure 1.a Maximum Intensity Projection images with ¹⁸F-FDG PET revealed a widespread, marked and diffuse bone marrow uptake, higher than the cerebral uptake, mimicking a "super bone scan". ¹⁸F-FDG = ¹⁸F-fluorodeoxyglucose, PET/CT = positron emission tomography/computed tomography, MIP = Maximum Intensity Projection.

Figure 1.b The axial, sagittal and coronal PET, CT and PET/CT fusion images showed an intense and heterogeneous liver fixation with a hepatomegaly and no obvious bone lesions underlying the bone fixation. ¹⁸F-FDG = ¹⁸F-fluorodeoxyglucose, PET/CT = positron emission tomography/computed tomography.

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