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Clinical Image

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

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2. Keywords

Hemophagoytic lymphocytiosis; Melanoma; ^{18}F-FDG; PET/CT

1. Abstract

Several cases of hemagocytic syndrome have been described in ^{18}F-fluorodeoxyglucose (^{18}F-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 ^{18}F-FDG PET/CT was performed to assess these lesions, followed by a bone marrow aspirate to explore ^{18}F-FDG PET/CT abnormalities. The ^{18}F-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 ^{18}F-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 mimick a "super bone scan" on ^{18}F-FDG PET/CT.

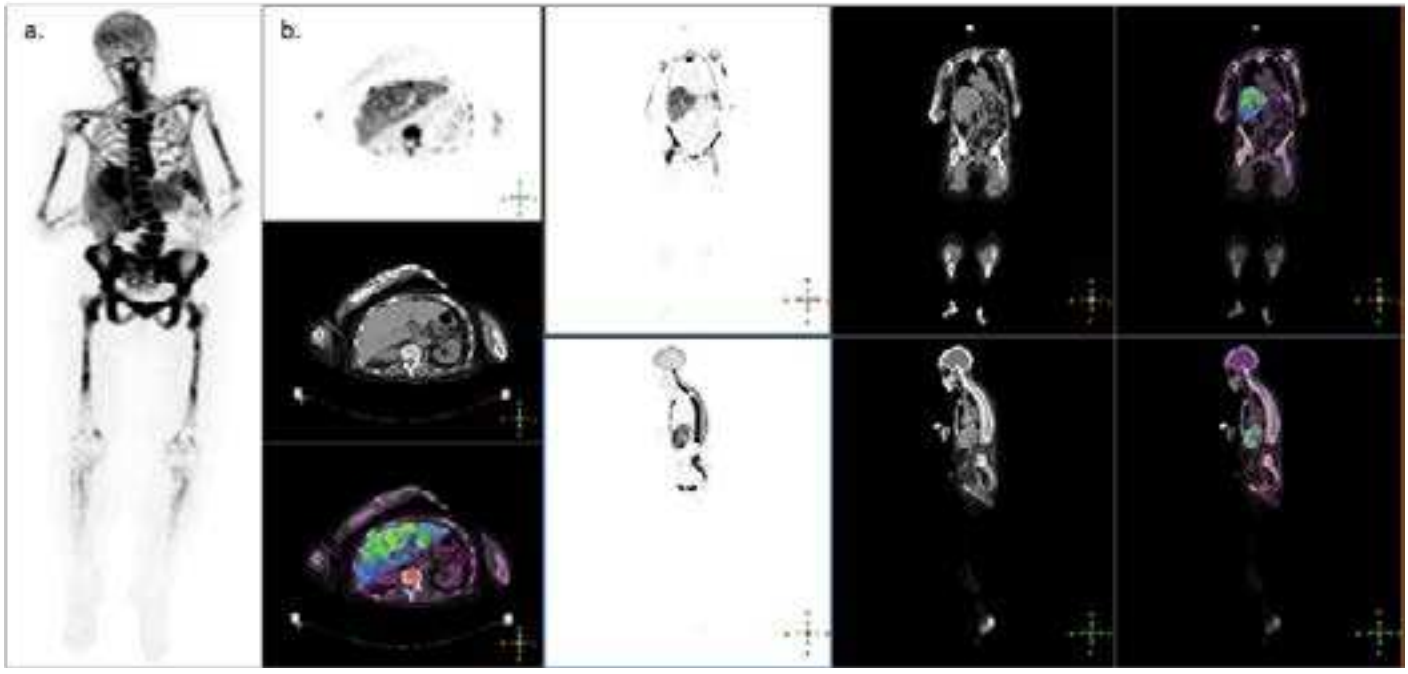

Figure 1.a Maximum Intensity Projection images with ^{18}F-FDG PET revealed a widespread, marked and diffuse bone marrow uptake, higher than the cerebral uptake, mimicking a "super bone scan". ^{18}F-FDG = ^{18}F-fluorodeoxyglucose, PET/CT = positron emission tomography/computed tomography, MIP = Maximum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

1. Henter JI, Horne A, Aricó M. HLH-2004: Diagnostic and therapeutic guidelines for hemophagocytic lymphohistiocytosis. Pediatr Blood Cancer. 2007; 48: 124-31.
2. Lehmberg K, Nichols KE, Henter JI. Study Group on Hemophagocytic Lymphohistiocytosis Subtypes of the Histiocyte Society. Consensus recommendations for the diagnosis and management of hemophagocytic lymphohistiocytosis associated with malignancies. Haematologica. 2015; 100: 997-1004.
3. Law WP, Emmett S, Jackson P. 18F-FDG Superscan Caused by Extensive Bone Marrow Involvement in Hemophagocytic Lymphohistiocytosis. Clin Nucl Med. 2017; 42: 617-9.
4. Suga K, Kawakami Y, Hiyama A. F-18 FDG PET/CT findings in a case of T-cell lymphoma-associated hemophagocytic syndrome with liver involvement. Clin Nucl Med. 2010; 35: 116-20.
5. Donald JS, Barnthouse N, Chen DL. Rare Variant of Intravascular Large B-Cell Lymphoma With Hemophagocytic Syndrome. Clin Nucl Med. 2018; 43: e125-6.
6. Wang X-B, Zhu Y-X, Liu X. The clinical value of F-18 FDG PET/CT in patients with secondary hemophagocytic syndrome. Zhongguo Shi Yan Xue Ye Xue Za Zhi. 2014; 22: 1698-701.
7. Kim J, Yoo SW, Kang S-R. Clinical implication of F-18 FDG PET/CT in patients with secondary hemophagocytic lymphohistiocytosis. Ann Hematol. 2014; 93: 661-7.
8. Tang Y, Tan H, Hu S. Is There Any Potential of FDG PET/CT in Monitoring Disease Activity in Familial Hemophagocytic Lymphohistiocytosis? Clin Nucl Med. 2018; 43: 296-8.