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IMAGE OF THE MONTH

^{18}F-FDG PET/CT in a case of intravascular large B-cell lymphoma

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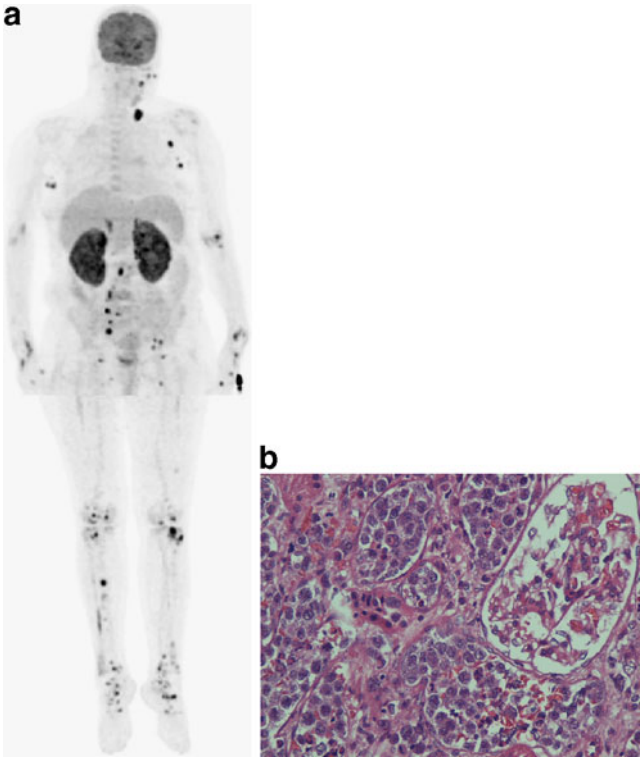
Intravascular large B-cell lymphoma (IVLBCL) is a rare systemic disease characterized by proliferation of lymphoid cells within the lumina of small arteries, veins and capillaries [1]. Due to its rarity and heterogeneous symptoms in close relationship with the involved organs such as skin, liver, lung, bone marrow, kidney or brain, the early diagnosis is difficult and often made post-mortem [2, 3]. However, treatment of IVLBCL is possible when diagnosed early.

Herein, we report a case of a 61-year-old woman with IVLBCL who presented with fever and weakness. Her routine laboratory findings were uneventful except elevated serum lactate dehydrogenase (LDH) levels and sedimentation values. Imaging studies such as abdominal ultrasonography, chest and abdominal CT and echocardiography studies revealed neither evidence of tumoural lesions nor the origin of fever. Subsequently, ^{18}F-fluorodeoxyglucose (FDG) positron emission tomography (PET) demonstrated an increased FDG uptake in multiple organs such as bilateral kidneys and adrenal glands, uterus, supra- and infradiaphragmatic lymph nodes, and multiple sites of bone marrow. The diagnosis of IVLBCL was established with kidney biopsy performed due to bilateral diffuse intense uptake of renal cortex. Histopathological examination of the renal biopsy demonstrated large atypical lymphoid cells occupying the intravascular space on haematoxylin and eosin staining.

Based on the findings of the present case, we believe PET/CT may be used for detecting locations that are involved with IVLBCL. Moreover, as mentioned in the literature, FDG PET may also have a role in monitoring response to chemotherapy.



Conflicts of interest None.

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