

CLINICAL PICTURE

Primary bone marrow diffuse large B-cell lymphoma affecting distal parts of the legs as a cause of persisting B symptoms

A 72-year-old patient presented with drenching night sweats, weight loss, malaise as well as episodes of fever. Blood tests showed tricytopenia and elevated LDH levels (>900 U/L), and all other values including comprehensive serology and screening for autoimmune antibodies were unremarkable. Ultrasonography revealed massive splenomegaly. Bone marrow biopsy of the posterior iliac crest was performed, revealing regenerative changes without any evidence for malignant cells or dysplasia. Contrast-enhanced computed tomography confirmed splenomegaly, but could not identify another abnormality. The patient underwent diagnostic splenectomy. Pathologic examination demonstrated chronic congestive features; malignancy could not be confirmed.

In the following weeks, pancytopenia, LDH elevation, and B symptoms did not resolve. Bone marrow biopsy was repeated and repeatedly yielded unspecific reactive changes. Due to the pathologic congestive splenic finding consistent with liver disease, transjugular liver biopsy was performed and ruled out malignancy or lymphatic infiltration.

The patient was referred for further diagnostic work using ¹⁸F-fluorodeoxyglucose positron emission tomography/computed tomography (FDG-PET/CT). Whereas the

standard field-of-view from the vertex to the proximal thighs just revealed a single, unspecific FDG-avid lymph node in the right groin (Fig. 1, Panel A, arrow), PET of the legs showed intensive symmetric hypermetabolism of both distal femora, tibiae, fibulae, and feet (Fig. 1, Panels B-D). Although CT did not reveal any abnormality and the patient did not complain about leg pain, the PET finding was highly suspicious for malignancy. Subsequent biopsy of the tibia revealed nodular and diffuse infiltration of the bone marrow by diffuse large B-cell lymphoma (DLBCL) with expression of CD20, CD10, and BCL2. Thus, the final diagnosis was established 6 months after the patient's initial presentation.

After eight cycles of R-CHOP chemotherapy, the patient is in complete remission.

Conflict of Interest

The authors declare that there is no conflict of interest.

Informed consent

There is informed consent by the patient.

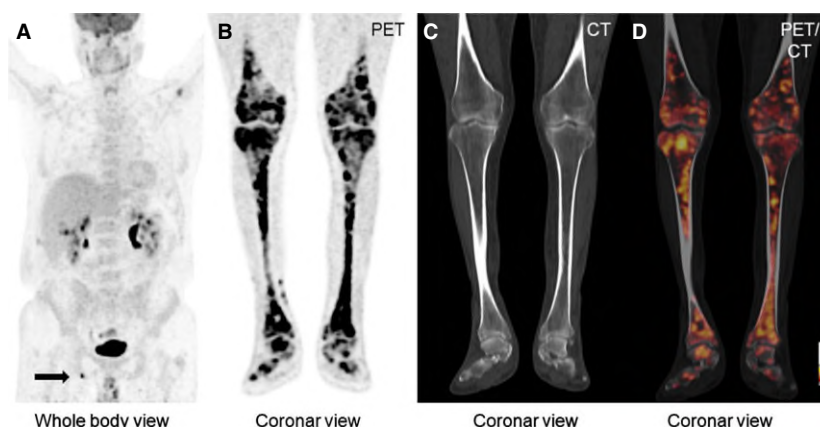


Figure 1 FDG-PET/CT scan depicting the standard field-of-view from the vertex to the proximal thighs (A). Additional PET (B), CT (C), and fused (D) images of the legs. Whereas the standard field-of-view just reveals a single, unspecific FDG-avid lymph node in the right groin (Panel A, arrow), PET of the legs shows intensive symmetric hypermetabolism of both distal femora, tibiae, fibulae, and feet (Panels B–D), highly suspicious for malignancy.

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