



Oligosymptomatic B cell lymphoma presenting as an ANA-positive polyarthrititis with PET/CT full-body infiltration

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Presentation

Connective tissue diseases have a higher risk of diffuse large B-cell lymphoma [1]. Typically, at presentation, B symptoms are prominent and easily recognizable [2]. This is the case of a 60-year-old patient from Bolivia who initially presented with nausea, jaundice, and general malaise evolving over 1 week. Initially was managed as a suspected Hepatitis A infection, with elevated transaminases and bilirubin, and general malaise. Decrease in jaundice was seen after treatment with hydration and analgesia. Gastro-intestinal symptoms persisted over the following months. Further study with full body CT scan revealed hydronephrosis and benign prostatic hyperplasia with increased prostate size and elevated total prostate-specific antigen. With no improvement, and the emergence of new hand and knee arthritis and stiffness, an immunological study was requested, which revealed ANA 1/80 AC-4 pattern along with a GP210 positive panel of 23 ANA antigens. Our patient travelled to Chile for further evaluation, presenting

with new pronounced sicca symptoms, hand arthritis, diffuse pruritus, and painful skin with induration in the gluteal region. New immunological study showed ANA 1/320 AC-4 pattern, GP210 positive at medium titers, high IgM levels, low C3, and CD25s at 5062 (average value 623). PET-CT revealed diffuse uptake in all quadrants with elevated SUV values and reduced usual brain uptake due to contrast relocation. Skin biopsy showed lymphocytic infiltration and pleural fluid, and hematological studies demonstrated that B-cell infiltration was consistent with diffuse large B-cell lymphoma. Successful treatment with polatumab vedotin plus rituximab, gemcitabine, and oxaliplatin was initiated.

Discussion

The presentation of polyarthrititis, cutaneous symptoms, sicca, and hepatitis with ANA/GP210 positivity firstly delayed the diagnosis and then raised the question of whether the underlying rheumatologic condition was associated with the lymphoma or part of the tumor's immunological disturbance. ANA positivity in DLBCL reaches up to 20% [3], though specific patterns are not consistently associated. Granular ANA patterns may indicate diseases as Sjögren's or primary biliary cholangitis, raising suspicion of lymphoma in at-risk patients with early symptoms. Additionally, the decreased brain contrast on PET-CT, not linked to hypoperfusion, was an interesting finding, possibly explained by the high metabolic activity of the tumor and the extensive inflammatory response in the skin as was demonstrated in the biopsy. Due to the autoimmune inflammation, contrast was diverted from brain to other non-cerebral areas

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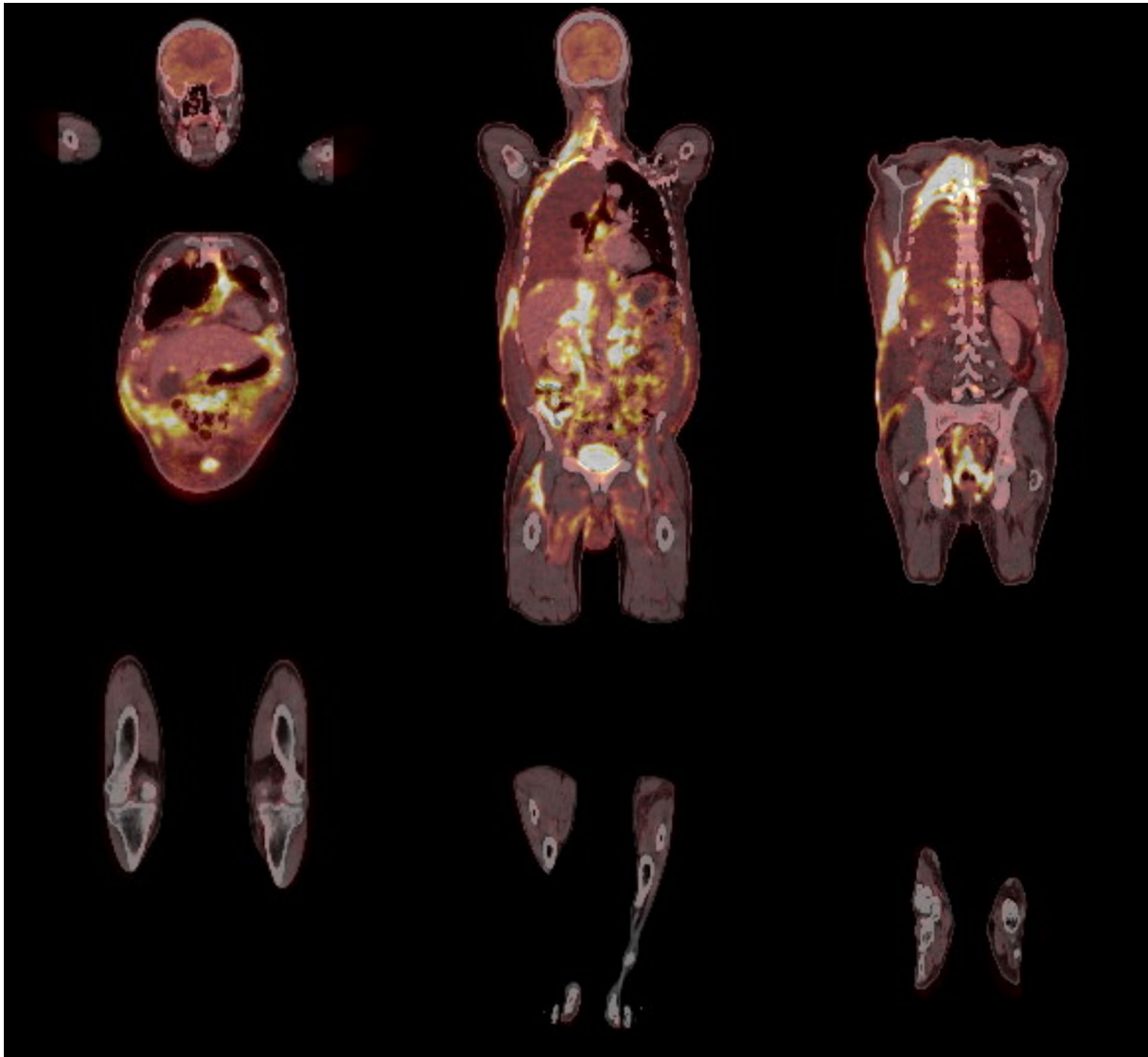


Fig. 1 Representative coronal slice from a whole-body PET/CT scan. The imaging demonstrates extensive hypermetabolic infiltration of cervical, dorsal, and lumbar muscle planes, particularly on the right side, with notable involvement of subcutaneous adipose tissue and retroperitoneal structures. Bilateral pleural effusion, hypermetabolic mediastinal and retroperitoneal adenopathies, and omental thickening

[4, 5]. It is important to be vigilant for persistently positive ANA with pauci-inflammatory multiorgan manifestations, as this could indicate an underlying malignancy or autoimmune disturbance (Fig. 1).

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Data availability This study did not generate any new data.

suggest peritoneal involvement, supporting the diagnosis of a lymphoproliferative disorder. Technical details: A pre-injection glucose level of 69 mg/dl was recorded. Following the injection of 6.8 mCi of FDG, axial tomography from the vertex to the feet was obtained using intravenous contrast, with PET images acquired 50 min post-injection

Declarations

Informed consent An informed consent was obtained.

Disclosures None.

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