

## Primary Patellar T Cell Lymphoma: An Unusual Cause of Monoarthritis

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A 72-year-old man presented with active right knee arthritis and 2 hard, 1–1.5 cm, tender subcutaneous nodules over the right prepatellar and infrapatellar regions. Synovial fluid was noninflammatory and lacked malignant cells. Patella had multiple lytic lesions and a moth-eaten appearance (Figure 1). The excised nodule showed diffuse infiltration of dermis and subcutis by monomorphic medium to large size lymphoid cells with scanty cytoplasm, vesicular nuclei, 1–2 prominent nucleoli, and mitotic figures (Figure 2); the cells stained strongly for CD3 and CD45, but not for CD19 or CD30 (Figure 3). Other bone, hematological and biochemical tests, bone marrow biopsy, and imaging for thorax and



Figure 1. Radiograph of the right knee joint showing moth-eaten appearance of the patella.

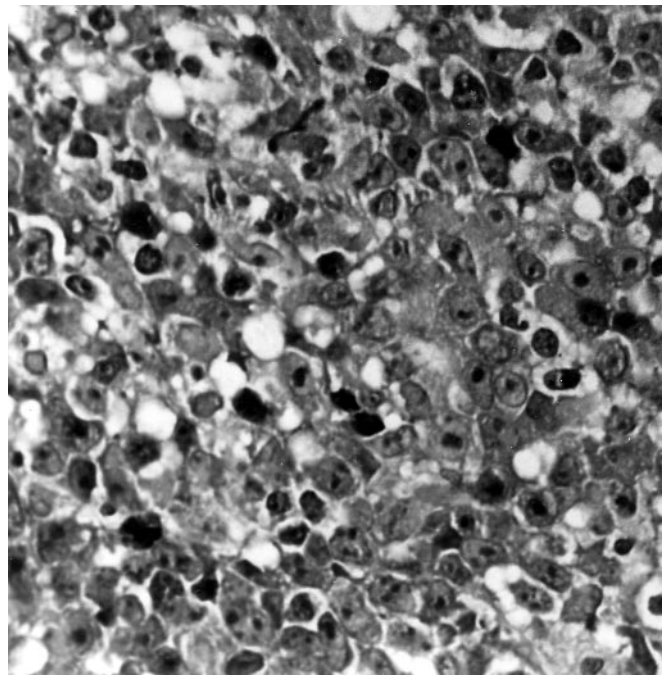
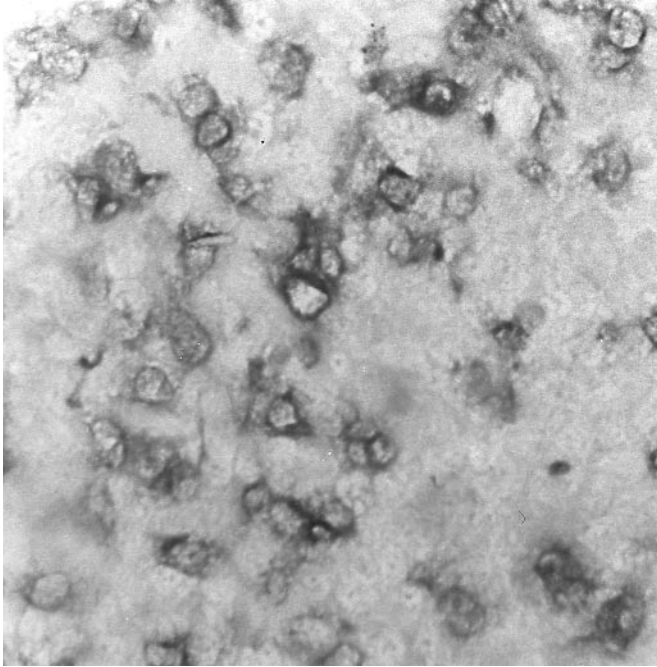


Figure 2. Histopathological section of the subcutaneous nodule showing noncleaved large cells with monomorphic appearance and a few prominent nucleoli suggestive of non-Hodgkin's lymphoma (H&E stain,  $\times 200$ ).

abdomen were unremarkable. Subcutaneous nodules and knee swelling subsided completely after CHOP chemotherapy for primary lymphoma of bone (PLB; right patella), stage IE.

PLB constitutes about 5% of all extranodal non-Hodgkin's lymphomas and 7% of primary bone tumors<sup>1</sup>. It usually presents in the fifth decade of life, with localized bone pain, pathological fracture, and rarely a mass. Isolated patellar involvement is distinctly uncommon<sup>2</sup>. Radiographic changes include lytic (70%) or mixed density lesions (28%) with a moth-eaten pattern; periosteal reaction and soft tissue mass may be seen<sup>3</sup>. Articular involvement may occur due either to direct invasion or to synovial reaction; absence of inflammation and malignant cells in our patient's synovial fluid suggests the latter. Most PLB are of B cell origin<sup>1</sup>; T cell lymphoma involving the bone and presenting as arthritis has been described in 3 children with disseminated disease<sup>4</sup>.



*Figure 3.* Immunohistochemical staining of subcutaneous nodule tissue showing strong perinuclear reactivity with anti-CD3 antibody, confirming the T cell origin of the lymphoma (x200).

## REFERENCES

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