



## Unusual presentation of hairy cell leukemia

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A 71-year old man was referred to our hospital because of osteolysis of the right femur. Two weeks before admission he had developed pain, swelling and *functio laesa* of his right hip. Bone biopsy showed a lymphoid infiltrate, not further typed. A CT scan study showed lytic lesions in the femoral neck and head with a very mild periosteal reaction; extensive demineralization was present with patchy areas of ill-defined sclerosis<sup>1</sup> (Figure 1). Physical examination revealed only right hip tenderness; constitutional symptoms were not reported. Hemoglobin and leukocyte counts were normal; his platelet count was  $141 \times 10^9/L$ . At the time of admission, serum alkaline phosphatase, calcium and phosphorus levels were normal. Abdominal and chest-CT scans showed no abnormal features. Bone marrow aspirate (Figure 2a and 2b) showed a very small population (about 2-3%) of ovoid cells which it was not possible to identify by immunophenotyping. Bone marrow biopsy showed a relatively small population of ovoid mononuclear cells with abundant clear cytoplasm. The nuclear chromatin was stippled and nucleoli were not evident. The pattern of bone marrow involvement was nodular.<sup>2</sup> Gomori's silver staining demonstrated patchy areas of reticulin fibrosis. Intracellular tartrate-resistant acid phosphatase was suggestive of hairy cell leukemia. Hairy cells from the fixed bone marrow biopsy are shown in Figure 2c. The patient was successfully treated with radiotherapy and interferon- $\alpha$ .<sup>3</sup>

### References

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3. Clavio M, Masoudi B, Spriano M, Casciaro S, Gobbi M, Damasio EE. Alpha-interferon as induction and maintenance therapy in hairy-cell leukemia: a long-term follow-up analysis. *Haematologica* 1999; 84:466-8.



Figure 1. CT scan showing lytic lesion in the femoral neck and head.

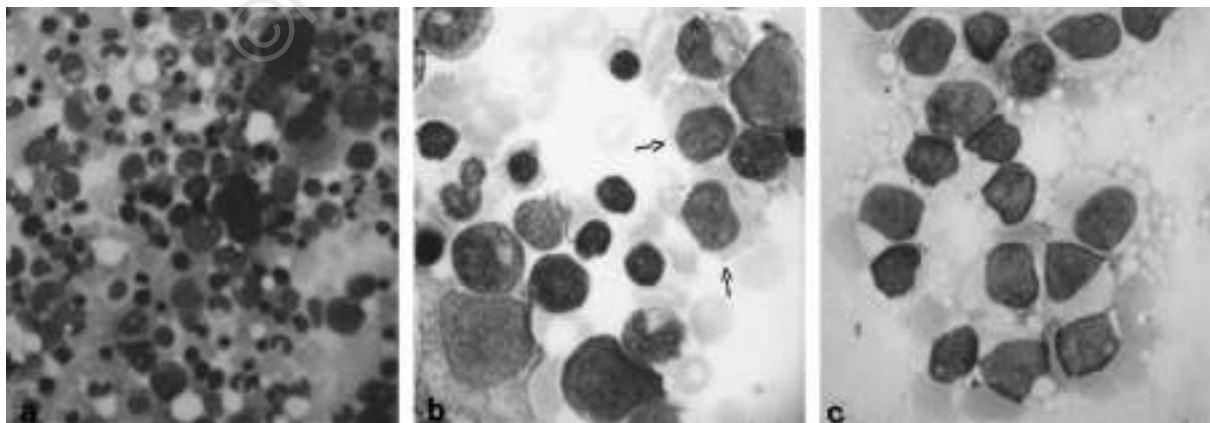


Figure 2. Bone marrow aspirate of the patient (x40, a) showed a very little population of hairy cells (x100, b) as indicated by arrows; c) bone marrow fixing showed a large population of hairy cells.

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