LETTER TO THE EDITOR

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The Curious Tale of a Missing Bone Segment

Eksik Bir Kemik Parçasının Tuhaf Hikayesi

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To the Editor,

An elderly man sought consultation for mild pain in his right leg that had lasted for about 4 months. He had no prior medical ailments. Local examination was unremarkable. During further investigations, a bilateral lower limb X-ray (Figure 1A) showed the absence of a segment of the right fibula. Blood investigations revealed hypercalcemia (serum calcium: 3.5 mmol/L), renal failure (serum creatinine: 203.37 µmol/L), and anemia (hemoglobin: 56.5 g/L). A skeletal survey displayed multiple lytic lesions involving the skull (Figure 1B), ribs, vertebrae, and other bones. The differential diagnosis included multiple myeloma and lytic bony metastasis. Magnetic resonance imaging of the legs (Figure 2) revealed an expansive heterogeneous solid mass involving the medulla and cortex of the distal shaft of the right fibula with a cortical breach. Serum protein immunoelectrophoresis did not show an M-band, but the serum free light chain ratio was altered (82.62) with the predominance of kappa light chain at 1408 mg/L. The lambda light chain level was 17.04 mg/L. Bone marrow examination demonstrated 69% plasma cells and immunohistochemical analysis revealed that 60% of the plasma cells were kappa-restricted. A diagnosis of light chain multiple myeloma was established. The radiological illusion of a missing bone segment was explained by the plasmacytoma. Approximately 80% to 90% of myeloma patients develop bone lesions during the course of the disease [1], with almost 60% of patients developing a pathological fracture [2]. In our patient, the plasmacytoma had completely destroyed the bony cortex, but it did not result in a pathological fracture because the fibula is not a weight-bearing bone.

Keywords: Missing bone, Lytic bone lesion, Plasmacytoma, Multiple myeloma

Anahtar Sözcükler: Eksik kemik, Litik kemik lezyonu, Plazmasitom, Multipl miyelom

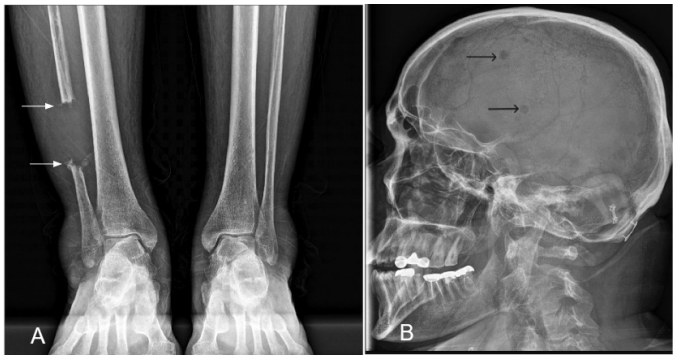

Figure 1. (A) Anteroposterior view of bilateral lower legs revealed a completely lytic lesion resulting in the absence of a focal segment of distal fibula. The proximal and distal margins show irregularity and expansion (arrows). (B) Radiograph of the skull (lateral view) showed punched-out lytic lesions (arrows). The findings suggested multiple myeloma or metastasis.

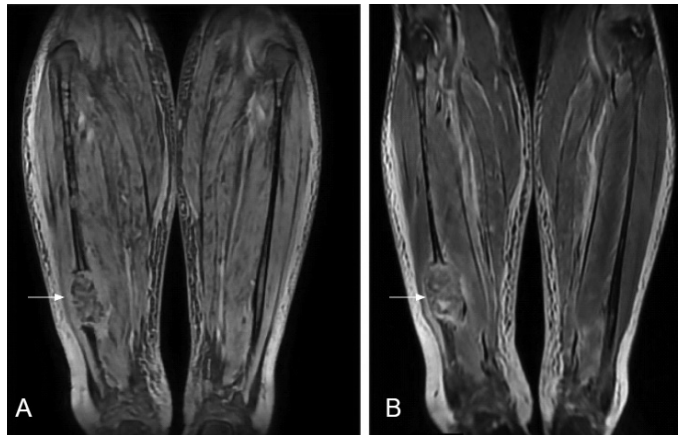

Figure 2. T1-weighted (A) and T2-weighted (B) magnetic resonance imaging revealed an expansive heterogeneous mass (arrows) in the distal fibula with a cortical breach and extension into the surrounding soft tissue, features consistent with an aggressive bone lesion that turned out to be myeloma.

Ethics

Informed Consent: It was obtained from the patient.

Authorship Contributions

Surgical and Medical Practices: M.A., P.K., J.D., P.N.; Concept: M.A., J.D., P.K.; Design: A.R.N., M.A., P.N.; Data Collection or Processing: A.R.N., N.N., P.N.; Analysis or Interpretation: M.A., P.K., J.D.; Literature Search: N.N., A.R.N.; Writing: A.R.N., N.N.

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