

Unveiling Underlying Pathologies: The Importance of Thorough Evaluation in Cases of Persistent Back Pain

Altta Yatan Patolojilerin Ortaya Çıkarılması: İnatçı Sırt Ağrısı Vakalarında Kapsamlı Değerlendirmenin Önemi

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Dear Editor,

Multiple myeloma (MM) is a hematologic malignancy characterized by the uncontrolled proliferation of clonal plasma cells in the bone marrow. Although its etiology remains unknown, MM presents with various clinical symptoms, including hypercalcemia, anemia, renal failure, and bone pain. Notably, 52% of MM patients are initially misdiagnosed, most commonly with musculoskeletal disorders such as osteoporosis, costochondritis, or muscle strains (47.8%). Back pain is among the most frequent symptoms (47%). The vertebrae are particularly vulnerable to lytic lesions and compression fractures, making the back a key site of pain in MM.

In outpatient settings, back pain is a common complaint, necessitating a thorough differential diagnosis to distinguish benign musculoskeletal conditions from malignancies like MM. This case highlights the importance of considering MM in pa-

tients with persistent back pain and underscores the critical role of early diagnosis.

CASE REPORT

A 59-year-old female presented with persistent back and lumbar pain for approximately three months. The pain was diffuse, bilateral, worsened with forward bending, relieved by rest, and radiated to the hips. Eight months earlier, she had received a lidocaine injection into the paravertebral muscles at another center due to similar complaints, with only temporary relief. A medial branch block was also performed for radiating back pain, but symptoms recurred after initial improvement.

On physical examination, there was restricted thoracic and lumbar motion, severe paravertebral muscle spasms, and tenderness over the spinous processes. Neurological examination of upper and lower limbs revealed no deficits. There was no history of unintentional weight loss, night sweats, or systemic symptoms.

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Lab tests showed hemoglobin 9.2 g/dL, mean corpuscular volume 89.8 fL, and vitamin D level 5 ng/mL. Thyroid hormones, parathyroid hormone, calcium, phosphorus, alkaline phosphatase, sedimentation rate, and platelets were normal.

Thoracolumbar X-ray showed vertebral compression fractures, prompting a thoracolumbar CT, which revealed ~50% height loss at the anterior L2 vertebra and a collapse fracture at the upper plate of T10. Dual-energy X-ray absorptiometry showed severe osteoporosis with L1-L4 T-score of -3.3.

Differential diagnoses included osteoporotic fractures, metastasis, vertebral osteomyelitis, and hematologic malignancies. Further evaluation with serum and urine electrophoresis detected kappa light chains. Hematology was consulted, and a bone marrow biopsy confirmed MM. PET/CT demonstrated F18-Fluorodeoxyglucose uptake in multiple millimetric lytic lesions in the right distal humerus, bilat-

eral clavicles, scapula, sternum, bilateral ribs, and vertebral column.

The patient was prescribed a dorsolumbar corset with steel underwire, bisphosphonate therapy, vitamin D, and calcium supplementation. Tramadol was administered for pain. Hematology initiated bortezomib, cyclophosphamide, and dexamethasone therapy.

This case underscores the importance of considering MM in patients with persistent back pain, especially when accompanied by anemia and vertebral fractures. Recurrent or treatment-resistant back pain should prompt further evaluation, particularly if systemic findings suggest malignancy. Early diagnosis is crucial for timely treatment and improved outcomes.

The patient was informed about the publication of this case report, and written consent was obtained.

Yours sincerely.

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