

Abstracts of the WCMSR

The Myeloma Masquerade: Diagnosing Multiple Myeloma in the Absence of Hypercalcemia and Bence Jones Proteinuria - A Case Report

Mouna Sree Pothireddy¹, Anshu Taj Achukatla¹, G. Kalyan Kumar¹, Sureddi Sasidhar¹.

¹ P.E.S. Institute of Medical Sciences and Research, Kuppam, India.

ABSTRACT.

BACKGROUND: Multiple myeloma is a malignant plasma cell disorder defined by clonal bone marrow infiltration, monoclonal immunoglobulin secretion, and end-organ damage affecting the skeletal, renal, and hematopoietic systems. Diagnosis may be delayed when atypical presentations lack hallmark features such as hypercalcemia or Bence Jones proteinuria, underscoring the need for a high clinical index of suspicion.

THE CASE: A 60-year-old male presented with a 15-day history of generalized weakness, and decreased appetite, with intermittent low back pain for six months. The pain was dull and aching, non-radiating, activity-aggravated, and worse at night. No fever, weight loss, trauma, urinary symptoms, or tuberculosis contact was reported. Past medical history was unremarkable.

On examination, the patient was conscious, oriented, and with pallor noted, with moderate build and nutrition. Vital signs were stable except for mild tachycardia (pulse 105/min) and blood pressure of 150/80 mmHg. Musculoskeletal assessment demonstrated thoracic kyphosis, scoliosis, and bony tenderness over the lumbar spine without focal neurological deficits. Differential diagnoses considered were multiple

myeloma, spinal tuberculosis, and metastatic malignancy.

Investigations revealed severe normocytic normochromic anemia (hemoglobin 6.6 g/dL), elevated serum urea (64 mg/dL), mildly raised creatinine (1.46 mg/dL), markedly elevated total protein (11.6 g/dL) and globulin (8.01 g/dL), a low albumin-to-globulin ratio (0.44) and elevated alkaline phosphatase. Notably, serum calcium was within normal limits (9.8 mg/dL), and urine Bence Jones protein was negative - posing an initial diagnostic challenge. Peripheral smear and reticulocyte count were consistent with marrow pathology. MRI of the lumbosacral spine demonstrated diffuse osteoporosis, extensive osteolytic lesions, and vertebral height reduction suggestive of multiple myeloma.

Bone marrow aspiration revealed atypical plasma cells showing binucleation, multinucleation, flame cells, and occasional plasmablasts along with suppression of normal hematopoietic elements. Bone marrow biopsy confirmed sheets of plasma cells with plasmablastic forms, consistent with multiple myeloma. Serum protein electrophoresis demonstrated a monoclonal spike, and serum kappa light chains were significantly elevated (234.27 mg/L), establishing the diagnosis.

The patient was initiated on chemotherapy with weekly Bortezomib (1.3 mg/m²) and Thalidomide (100 mg daily), with prophylactic acyclovir, fluconazole, and allopurinol. Follow-up monitoring included complete blood count, renal function, peripheral neuropathy screening, and infection surveillance.

CONCLUSION: Multiple myeloma can present without classical features such as hypercalcemia or Bence Jones proteinuria. Clinicians should maintain heightened suspicion for multiple myeloma in elderly patients with persistent back pain, severe anemia,

hyperglobulinemia, and osteolytic lesions. Early comprehensive diagnostic evaluation – including bone marrow biopsy, serum protein electrophoresis, and serum free light chain assay – is critical for timely diagnosis and treatment initiation.

Key Words: *Multiple Myeloma, Osteolysis, Bortezomib, Plasma Cell Neoplasm, Case Report.* (Source: MeSH-NLM).

Figure or Table:

Key Laboratory Investigations:

Investigation	Patient Value	Reference Range	Interpretation
Hemoglobin	6.6 g/dL	13.5 - 17.5 g/dL	Low
RBC Count	Decreased	4.5-5.9 ×10 ⁶ /μL	Low
Serum Urea	64 mg/dL	7-20 mg/dL	High
Serum Creatinine	1.46 mg/dL	0.7-1.3 mg/dL	High
Total Protein	11.6 g/dL	6.0-8.3 g/dL	High
Globulin	8.01 g/dL	2.0-3.5 g/dL	High
A/G Ratio	0.44	1.2-2.2	Low
Alkaline Phosphatase	Elevated	44 -147 IU/L	High
Serum Calcium	9.8 mg/dL	8.5 -10.5 mg/dL	Normal
Urine Bence	Negative	Negative	Normal

Jones Protein			
Serum Kappa Light Chains	234.27 mg/L	3.3 -19.4 mg/L	High
SPEP	Monoclonal spike	No M-protein	Abnormal

A/G = Albumin-to-Globulin ratio; SPEP – Serum Protein Electrophoresis

This work is licensed under a [Creative Commons Attribution 4.0 International License](#)

ISSN 2076-6327

This journal is published by [Pitt Open Library Publishing](#)

