Atypical presentation of multiple myeloma with renal involvement: A report of 7 cases

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Abstract

Introduction: Multiple myeloma (MM) is a highly polymorphic disease. Early management is crucial for both survival and renal prognosis. The aim of our study was to report atypical presentation cases of this disease in our nephrology department.

Description: We conducted a single-center, descriptive, retrospective study over a period of 4 years (2020-2024). This study included patients diagnosed with multiple myeloma with renal involvement, where the initial clinical presentation was atypical. We detailed the circumstances of discovery, clinical and biological data for these patients.

Results: Among the 9 patients with confirmed multiple myeloma (MM) and renal involvement, the initial presentation was atypical in 7 cases. The sex ratio was 0.75. The median age was 63 years (range: 49-75 years). All patients were referred for the investigation of acute renal failure. The circumstances of diagnosis included infection in 3 cases, specifically infectious bronchopneumonia, acute pyelonephritis, and septic arthritis of a prosthetic joint. One patient had been followed for 3 months for primary myelofibrosis, with a revaluation of the sternal puncture revealing bone marrow infiltration by 20% plasma cells. Other discovery circumstances included acute pulmonary edema, chronic diarrhea with hyperproteinemia and rhabdomyolysis. All patients had normochromic normocytic anemia with hemoglobin levels ranging from 7.1 g/dl to 10 g/dl. Five patients had hypocalcemia, with levels ranging from 1.4 mmol/l to 1.8 mmol/l. Protein electrophoresis showed a narrow-based gammaglobulin peak in 5 cases and hypogammaglobulinemia in 2 cases. The diagnosis of MM was confirmed by sternal puncture in 6 cases and by bone marrow biopsy in one case.

Conclusion: The circumstances of discovery of multiple myeloma were highly polymorphic in our series. We emphasize the importance of performing protein electrophoresis for diagnostic orientation.