

RADIOLOGICAL FINDINGS:

X-ray dorsal spine showed a lytic lesion in the body of D10 vertebra. X-ray lumbar spine showed evidence of degenerative changes at L4 and L5 level.

BONE MARROW STUDY:

The bone marrow aspiration showed 21% plasma cells including some binucleate forms.

DIAGNOSIS?

Multiple Myeloma with double/biclonal gammopathy.

DISCUSSION:

Multiple myeloma is a hematological malignancy caused by clonal proliferation of plasma cells. The tumor, its products, and the host response to it can manifest in multiple organ dysfunctions and symptoms like bone pain/fracture, renal failure, susceptibility to infection, anemia, hypercalcemia, and occasionally clotting abnormalities, neurologic symptoms, and manifestations of hyperviscosity. It is associated with expansion of a single clone of immunoglobulin (Ig) secreting plasma cells that results in the secretion of a unique homogeneous monoclonal protein (M component).¹

However, in a rare 1-5% of cases of multiple myeloma, instead of a single monoclonal band, double/biclonal gammopathy, defined by simultaneous appearance of two distinct monoclonal protein, is found.² This can result from either a proliferation of two clones of plasma cells with each producing an unrelated monoclonal spike or from the production of two monoclonal spikes by a single clone of plasma cells.³