“A Case Report of Lumbar Spine Metastasis in Newly Diagnosed Multiple Myeloma”.

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Background: Multiple myeloma (also plasma cell myeloma also known as MM, myeloma, plasma cell myeloma, or as Kahler’s disease) is a progressive hematologic (blood) disease. Multiple myeloma is a clonal plasma cell malignancy that accounts for slightly more than 10% of all hematologic cancers. Metastasis of multiple myeloma rarely occur in lumbar spine, these metastasis causes pain and spine instability.

Abstract: The case of a 64-year-old woman that was admitted due to back pain, dyspnea, anemia and mild leukocytosis is presented, patient was on ATT for continuous 2 year initially for pulmonary koch’s and after that for pott’s spine. Patient further evaluated for bony tenderness and back pain, patient diagnosed as a case of multiple myeloma with serum electrophoresis, biochemistry and radiological findings.

I. Case presentation

Our patient 64 year old female who was diagnosed a case of pulmonary koch’s was given ATT, koch’s resolved. Despite satisfactory control of kochs’, she experienced a gradual but profound loss of weight of sixteen (16) kilograms with loss of appetite for the same duration. Over the last few months, she was complaining of a worsening generalized malaise, which affected her activities of daily living. There was no muscle pain but complained that her walking has become clumsy and it was difficult for her to stand from the seated position. Neurological examination revealed reduced muscle power in lower limbs with diminished reflexes without any sensory deficit. Her fundoscopy examination was normal.

Her initial investigations revealed normocytic normochromic anaemia (8.9 g/dl) with rouleaux formation. She had elevated ESR of 120 mm/1st hour. Liver function tests showed reversed albumin to globulin ratio (Albumin – 29 g/l, Globulin – 50 g/l) and dearranged kidney function urea–71 creatinine-2.1. On further investigation, serum protein electrophoresis revealed a monoclonal band in the gamma region. However, her x-rays spine shows destruction of L3-L4 level vertebrae and x-ray skull shows multiple lytic lesions and urinary Bence Jones protein were negative.

Destruction of spine at L2-L3-L4
Punched out lesions seen on xray skull

Outcome and follow up
Patient started with chemotherapy with thalidomide and dexamethasone combination.
Patient progressed well with the treatment and her pain also relieved.

II. Discussion
We report the case of a dramatic radiological finding of destruction of the L2-L3-L4 vertebral body in a patient presenting with backache. We have been unable to identify similar images or case reports of such dramatic isolated radiographic appearances in the literature. Myeloma is however common and is known to produce destructive lesions.\textsuperscript{3} Up to 20\% of patients present with a pathological lesion and the majority of patients will have a pathological fracture throughout the course of their disease.\textsuperscript{4} The spine is one of the most commonly affected sites.\textsuperscript{2} In the majority of cases, chemotherapy and/or radiotherapy is sufficient to control symptoms in the spine. All patients presenting with skeletal pain and a confirmed or suspected diagnosis of malignancy should undergo imaging. Clinicians should equip themselves with the knowledge and skills to instigate the basic management of a potentially unstable cervical spine as this may unexpectedly present itself. The majority of patients with myeloma-associated lesions of the spine do not require surgical treatment but good results have been reported in those with instability, refractory pain or neurologically compromised.

References