Collapse of Third Cervical Vertebra as First Manifestation of Plasmacytoma

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Sir,

Plasmacytoma is a plasma cell tumour of the bone.1 The tumour may occur in axial bones and initial symptoms are often non-specific. Hence, diagnosis may be delayed and this may lead to irreversible neurodeficit due to compression. We here report a case of Plasmacytoma of 3rd cervical vertebra. Plasmacytoma of cervical vertebrae has only rarely been reported from India.

A 56 year old female from West Bengal presented with pain in left side of the neck for last two months. She had not had any trauma to the neck. She at first tried over-the-counter analgesics with variable relief. Finally, she came to our clinic when the pain became unbearable and she had difficulty in turning her head. On examination, neck movements in all planes were restricted due to pain. There was no neurological deficit.

Initial x-ray of cervical vertebrae was inconclusive. Routine blood reports showed hemoglobin of 12 gm/dl, total leukocyte count of 8000/μL and ESR of 40 mm in 1st hour. Serum urea and creatinine were normal. Total serum protein was 6.7 gm/dl with albumin 3.2 gm/dl and globulin 3.5 gm/dl. An MRI scan of the neck was done which showed (Figure 1) collapsed 3rd cervical vertebra with mild cord edema. In view of the cord edema, although no neurological signs were present, oral dexamethasone was started. Along with that, high dose naproxen was also given for the pain. A CT-guided biopsy from the collapsed vertebra was done which showed (Figure 2) multiple plasma cells. Serum protein electrophoresis was done which was normal, with no M bands. Corrected serum calcium was 9.2 mg/dl. Urine did not show Bence-Jones protein. Bone marrow study also showed plasma cells <5%. Skeletal radiological survey did not show any other lesion at that point. MRI of whole spine and pelvis was done to look for concurrent lesions; this was negative. Serum free light chain assay could not be done due to cost factor. Thus, the final diagnosis was isolated Plasmacytoma of 3rd cervical vertebra.

The patient was transferred to the radiotherapy department where she underwent fractionated radiotherapy to the C3 vertebra with relief of the pain.

Plasmacytoma of cervical vertebrae are relatively rare and there is no pathognomonic clinical sign.2 Patients present mainly with neck pain and may be initially treated for cervical spondylosis.3 Since any cervical vertebral collapse may lead to quadruparesis or even lower bulbar involvement, early diagnosis and treatment are of paramount importance.2 Plasmacytoma of cervical vertebrae is relatively rare compared to other segments of the spine. The treatment is also more challenging. According to standard guidelines, radiotherapy is the first line therapy.2 But it may be combined with surgery if needed.2,3

Even after successful treatment of a Plasmacytoma, the patient should be followed up for later development of multiple myeloma.

References