Granulocytic Sarcoma Presenting as Compressive Myelopathy

Sir,

Granulocytic sarcoma (GS) is an extramedullary solid tumour consisting of myelogenous leukemic blasts, usually seen in a case of acute myelogenous leukemia (AML). Less commonly GS can also be seen in patients with chronic myeloid leukemia (CML), myelodysplastic syndrome (MDS) and myeloproliferative disorders. Rarely, GS can occur without a pre-existing diagnosis of AML. GS virtually can occur in any organ or tissue, most common sites being - skin (called leukemia cutis) and bones. Other sites are lymph nodes, mediastinum, epidural sites, small intestine, ovary/testis and brain. Epidural GS causing compressive myelopathy without AML is un common. We have seen one such case.

Case: A 30 years old male presented with history of pain in upper back, weakness of both lower limbs with difficulty in passing urine of 2 months duration. He denied any history of trauma or febrile illness. Neurological examination revealed – upper motor neurone signs with bilateral extensor planters with grade 0/5 power with bladder/bowel involvement. Investigations: Hb 12.6G, WBC- 5460/cmm, Differential- N2, L35, M10, E3 and platelets-100,000/cmm. MRI spine revealed- extradural lesionat D8-D10 level with evidence of cord compression. He underwent D8-D9 laminectomy with complete excision of the extradural mass. There was a dark red, moderate vascular, granular and infiltrative tumour over dorsal dura compressing

the cord with absent pulsations. Histopathology of the tumour was consistent with granulocytic sarcoma, immunohistochemistry was positive for myeloperoxidase, CD13, CD33, CD56, MIC-2.

Comments: Diagnosis of a case of granulocytic sarcoma presenting as epidural mass causing spinal cord compression may be challenging and some times can be confused with diffuse large cell non Hodgkin's lymphoma. Biopsy and immunohistochemistry staining with myeloperoxidase, CD 34, CD 117 (as done in present case) are important to establish the diagnosis.¹ Treatment with systemic chemotherapy as for AML results in complete remission in most cases.² In patients with persistent mass local therapy using surgery or radiation can be considered ³.

REFERENCES:

- Chauhan S, Suri V, Malhotra P, et al. Granulocytic sarcoma: an unusual cause of compressive myelopathy.Am J Hematol 2007; 82(7): 687-8.
- Meltzer JA and Jubinsky PT. Acute myeloid leukemia presenting as spinal cord compression. Peditr Emerg Care. 2005; 21(10): 670-2.
- Mostafavi H, Lennarson PJ, Traynelis VC. Granulocytic sarcoma of the spine.: Neurosurgery. 2000;46(1):78-83.

Gull Mohd Bhat

Department of Medical Oncology SKIMS, Soura, Post bag 27 Srinagar, 190011 e-mail: drgull8125@yahoo.com