

Hodgkin's Lymphoma Presenting as Paraplegia: A Case Report

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ABSTRACT

Hodgkin's lymphoma is a malignancy of mature B lymphocytes which has Bimodal distribution of age at diagnosis and presents as palpable, non-tender lymphadenopathy. Neurological manifestations are rare complication of Hodgkin's disease (0.2%) and this is a case of Hodgkin's lymphoma which presented primarily with paraplegia as a neurological deficit caused by spinal cord compression.

Keywords: Hodgkin's lymphoma, paraplegia, neurological deficit.

INTRODUCTION

Hodgkin's lymphoma (HL) is a malignancy of mature B lymphocytes and represents 10% of all lymphomas diagnosed each year. The majority of HL diagnosis is classical HL (cHL). A bimodal distribution of age at diagnosis has been observed, with one peak incidence occurring in patients in their twenties and the other in those in their eighties. Most patients with cHL presents with palpable lymphadenopathy that is non-tender in most of the patients, these lymph nodes are in neck, supraclavicular area and axilla. More than half of the patients will have mediastinal adenopathy at diagnosis, and this is sometimes the initial manifestation. Subdiaphragmatic presentation of cHL is unusual and more common in older males.^[1]

HL is predominantly a disease of the lymph nodes although extranodal sites of disease may be present in 10% of cases. Direct neurologic dysfunction results from

intracranial metastases, metastases to the epidural space of the spinal cord with resultant spinal cord or nerve root compression, metastatic leptomeningeal disease, and intramedullary spinal cord metastases.^[2]

CASE REPORT

This is a case of a 46 year old male who was apparently healthy 6 month back and then he developed low back ache which was dragging type, intermittent, aggravated on prolonged standing and relieved by taking rest. Then he developed difficulty in walking, initially he had difficulty in using left leg for walking, climbing stairs, getting up from squatting position which gradually involved right leg also in a duration of one month. Patient had no involvement of upper limb. The symptoms worsened in next 10 days after which he had decreased sensation of both the lower limb and became completely bedridden. History of walking over cotton wool like sensation present. History of band like sensation around the hip was present. On examinations positive findings were multiple cervical non-tender and non matted lymphadenopathy, bilateral decreased of lower limb with power grading of 0/5, absent abdominal and cremasteric reflex and bilateral extensor Babinski response. The crude touch, pain and temperature were decreased below the level of umbilicus, and absent sensation in perianal region and tenderness over spine in thoracolumbar region.

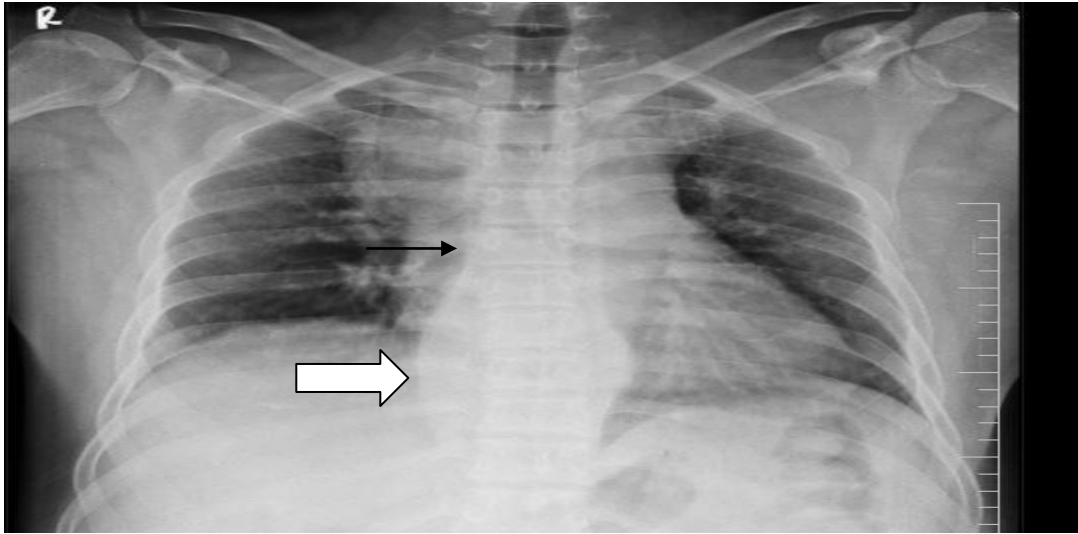


Fig 1: Chest X-Ray PA view of the patient

Routine blood investigations were normal. Chest X-Ray PA view showed mediastinal widening (Fig 1:Thin black

arrow) with mass lesion in paravertebral region (Fig 1:Thick white arrow) at the thoracic level D4 to D6.



Fig 2: MRI Spine Sagittal section at the level of thoracic cage

MRI whole spine showed T1 isointense and T2 hypointense lesion pre and paravertebral region extending from D6-9 vertebral level. The lesion is seen to extend into the spinal canal through D7-D8, D8-9 (Fig 2: Thick white arrow) and D12 – L1 neural foramina surrounding the cord

with compression of thecal sac (Thick white down arrow). Multiple enlarged lymphnode in cervical and axillary region, paraaortic, pretracheal and aortopulmonary region with the largest measuring 4 cm causing mass effect on the SVC with compression, Feature suggestive of Lymphoma.

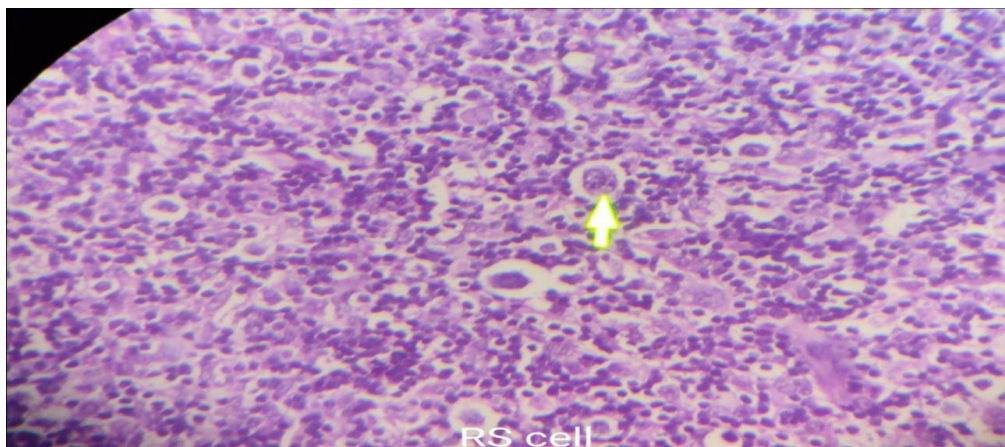


Fig 3 : Light Microscopic picture of cervical lymph node showing classical Reed Sternberg Cells

FNAC of cervical lymphnode showed many large mononucleated and binucleated Reed Sternberg cells (Fig 3: Yellow arrow), and several multinucleated giant cells suggestive of lymphoproliferative disorder. Lymph node excision biopsy was done which confirmed it as *Hodgkin's lymphoma*.

DISCUSSION

Spinal cord and cauda equina compression is caused due to spinal epidural space metastases of Hodgkin's lymphoma. The incidence of HL causing spinal cord compression has been estimated to be 0.2%. Symptoms of spinal cord compression (not unique to HL) include back pain (progressive, worse when lying flat, and improved with walking), weakness, sensory loss, autonomic dysfunction (painless urinary retention, fecal incontinence, and impotence), and ataxia. Signs of spinal cord compression result in sensory level, paraparesis, hyperreflexia, and presence of the Babinski response. Cauda equina compression is characterized by back pain, dermatomal sensory loss, and asymmetric paraparesis. Because HL is usually chemosensitive, surgical decompression may not be necessary and if employed, may delay the delivery of definitive chemotherapy. Surgery, customarily vertebrectomy, is clearly indicated however

if the diagnosis is uncertain or if there is evidence of spinal instability. Chemotherapy alone or chemotherapy followed.^[3-5]

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