

## NON HODGKIN'S LYMPHOMA PRESENTING AS A SPINAL CORD COMPRESSION — A CASE REPORT

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### INTRODUCTION

Malignant lymphoma initially presenting with signs and symptoms of spinal cord compression is a rare occurrence. We report a case of a fifty five years old lady who presented with signs and symptoms of spinal cord compression. On a laminectomy biopsy specimen, a diagnosis of a malignant lymphoma was made.

Malignant lymphoma involving the central nervous system is a rare occurrence and ranges from 5-11% of cases.<sup>1</sup> Non Hodgkin's lymphoma affects the nervous system either primary or by metastatic involvement.<sup>2</sup> Spinal cord compression occurs during the course of non hodgkin's lymphoma from 0.1-6.5% of patients.<sup>3</sup> Such involvement tends to develop late in the course of established disease when dissemination has occurred. Cord compression, as the initial presenting feature is uncommon.<sup>4</sup>

### CASE REPORT

A fifty five years old lady was admitted with a history of progressive weakness of both her legs over the last ten days. She was unable to walk for the last five days and had gone into urinary retention two days prior to admission for which she was catheterized. Clinical examination showed normal higher mental function. On fundoscopy the optic discs were normal extra ocular movements showed a left lateral rectus palsy. Arms were

normal. She had a spastic paraparesis. Deep tendon reflexes were pathologically brisk in the lower limbs with bilateral up going planter reflexes. Sensations were diminished to all sensory modalities up to the level of T8. The rest of the general physical examination was normal.

On investigation full blood count was normal ESR was 100 mm/1st hour. Blood Urea and sugar were normal. Abdominal Ultrasound, Chest X-ray and C.T Scan of the head were normal. Plain Radiograph of the spine was normal. A Myelogram showed an extra dural compression at T8 level (Figure-I) and a CSF specimen obtained at time of myelogram showed a raised CSF protein of 185%, glucose level was normal and cell count 6/cu mm. No organisms seen on gram stain. She was seen by the Neurosurgery team and a decompression laminectomy was performed at T8 level and a biopsy was taken from the extradural mass found at the site. The biopsy revealed a malignant lymphoma diffuse large cell type (Figure-II). A bone marrow biopsy done later showed depressed bone marrow activity with 70% abnormal lymphoma cells. (Fig-III) Post operatively transferred to the oncology team.

### DISCUSSION

Spinal cord compression due to malignant tumours is a common neuro surgical

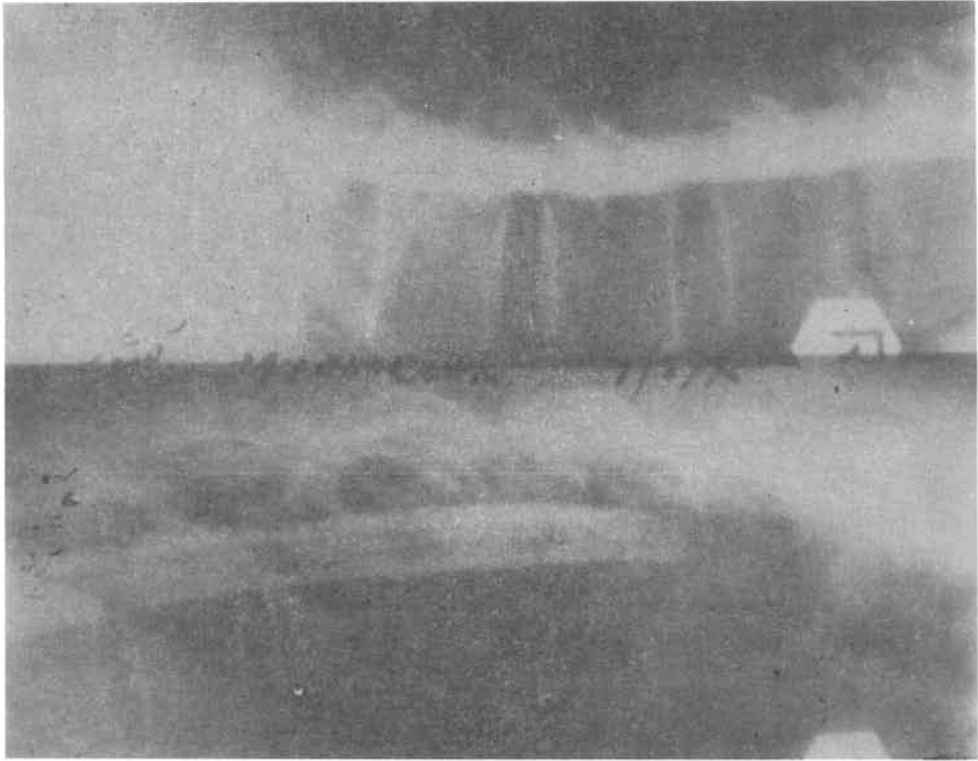


Fig. 1. Myelogram showing an extra dural block at D8.

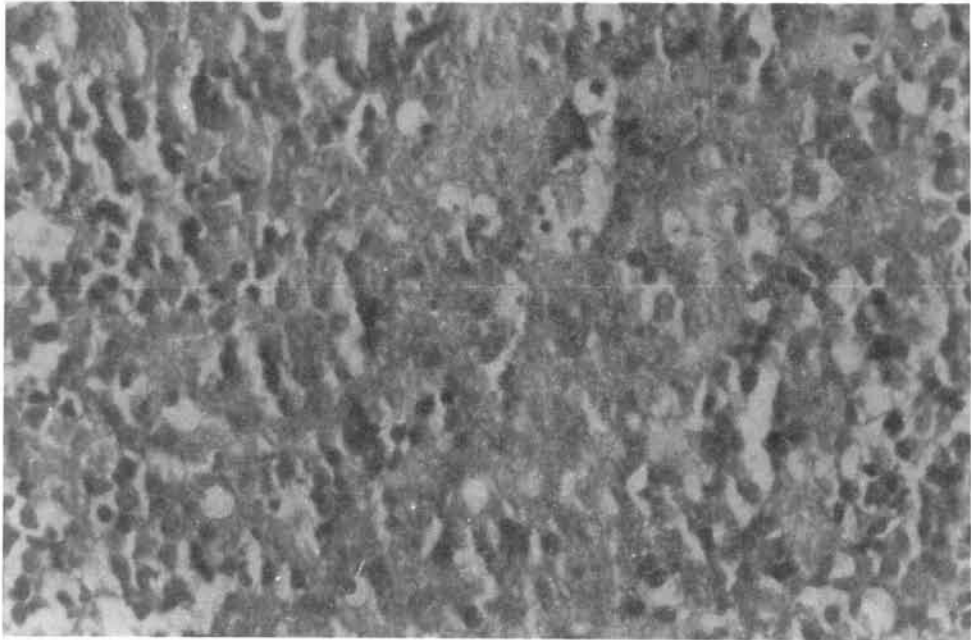


Fig. 2. Biopsy specimen showing diffuse large cell type malignant lymphoma.

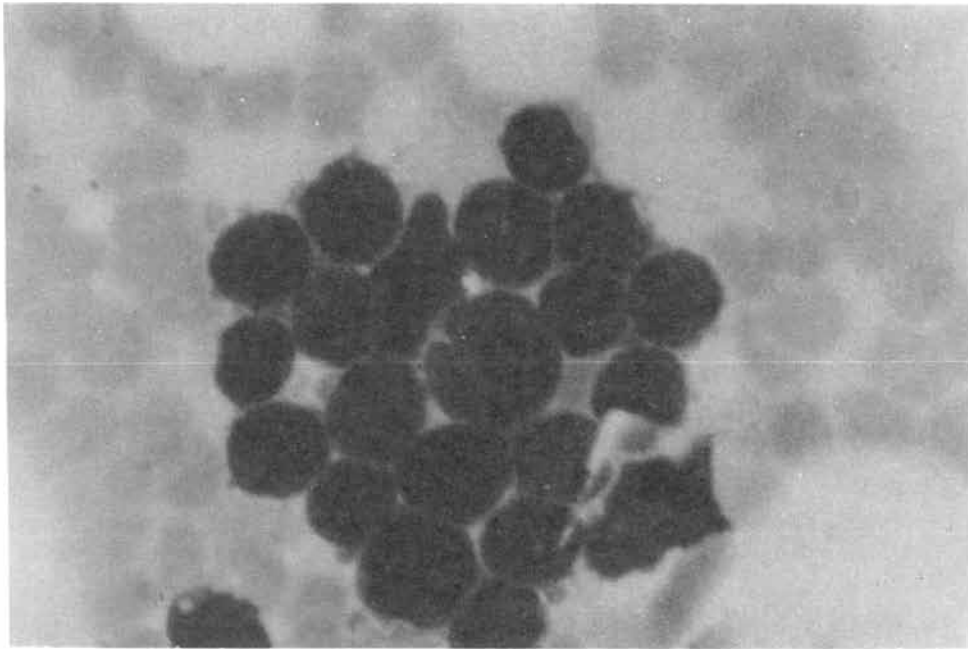


Fig. 3. Bone marrow biopsy –depressed bone marrow activity with 70% abnormal lymphoma cells.

emergency. Of the malignancies that cause cord compression lymphoma has a relatively favourable prognosis, requiring adequate histological and immuno histo chemical analysis.<sup>5</sup> Spinal cord compression during the course of lymphoma tends to develop late in the cause of established disease. When dissemination has occurred.<sup>6</sup> However cord compression as the initial presenting feature of underlying lymphoma is uncommon. Muhammad et al<sup>5</sup> reported a series of a 20 cases of spinal epidural malignant lymphoma over a 18 year period in whom the symptoms and signs of cord compression were the first evidence of malignant lymphoma, of these 10 cases had definite evidence of systemic lymphoma on immediate post operative investigations similar to our case. Six other cases represented malignant lymphoma most likely arising in the vertebra and extending into the epidural space, while 4 cases had no evidence of systemic or local bone involvement.

Peny et al<sup>4</sup> reported a marked difference in survival between cord compression

resulting from lymphoma and compression resulting from other extra dural malignancies, in their series 50% cases of lymphomas survivor to 3 years compared to mean survival of 8-9 months and less then 10% for more than 1 years in all types of extra dural tumour<sup>7</sup> in a hospital series from Shiraz Iran secondary tumours were the most frequent cause of spinal cord compression and among the secondary tumours the most common metastatic tumours was lymphoma in 10 of the 16 patients with lymphoma spinal cord dysfunction was the initial manifestation.<sup>8</sup>

Spinal cord compression is a neurological/neurosurgical emergency and should be relieved on a priority basis. If the compression is not relieved without delay neurological deficits such as urinary retention and paraplegia at any stage become irreversible. A Myelogram is an essential investigation but the investigation of choice is a Magnetic resonance imaging (MRI) of the spine.<sup>9</sup> MRI allows non invasive recognition of cord compression, demonstration of intraspinal

and intra cranial lepto meningeal spread and improved demonstration of subdural tumours deposit.<sup>10</sup>

Patients presenting with acute spinal cord compression should be treated aggressively with surgery for tissue diagnosis followed by radiotherapy and chemotherapy and can result in significant neurological improvement and a favourable long term survival especially in the younger patient.<sup>11</sup> It must still be emphasized that extradural lymphoma even when localized can be aggressive.

### CONCLUSION

Every cord compression should be relieved as soon as possible to prevent disability and tissue diagnosis obtained to ascertain etiology.

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