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Case Report

Hodgkin Lymphoma Revealed by Thoracic Epidural Spinal Cord Compression

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Abstract

Hodgkin Lymphoma is rarely diagnosed as spinal cord compression syndrome. Caused by an epidural mass, this complication is often encountered in a late stage of the disease. We report the case of a 52-year-old woman presenting with symptoms of low thoracic spinal cord compression due to an epidural tumor on the MRI. Emergent surgery was undertaken on this patient, consisting in laminectomy and tumor resection. After surgery, pain relief and mild neurological improvement were noticed. The histological study revealed a Hodgkin Lymphoma and the patient was referred to chemotherapy and radiotherapy. Though chemotherapy is the gold standard treatment for Hodgkin Lymphoma, surgical spinal decompression may be required in epidural involvement of the disease. Diagnosis may be suspected in the presence of lymphadenopathy and general health decay.

Keywords: Hodgkin, Lymphoma, Epidural, Spine, Surgery.

INTRODUCTION

Spinal cord compression caused by lymphoma is mostly a late manifestation of the illness. It is also three times as frequent with non-Hodgkin's disease as with Hodgkin's disease. We report the case of a 50-year-old woman with epidural spinal cord compression as being the initial presentation of a Hodgkin's Lymphoma, which is a rare condition.

CASE DESCRIPTION

We report the case of a 52-year-old woman, without medical history, who was suffering for two weeks from sphincter disorders consisting of constipation, associated with numbness of the perineum area and the left foot. Furthermore, he suffered from asthenia, weight loss, generalized pruritus and night sweats. At examination, he had a temperature of 37.5°C, a normal blood pressure and heart beat rate. The neurological examination showed a paraparesis predominant on distal muscles, a brisk right patellar reflex, a normal plantar reflex, a saddle anesthesia. The examination of the spine was normal. Complete blood count revealed a leukocytosis (29,900/ mm3), an inflammatoryanemia, a high sedimentation rate (80 mm at the 1st hour) and an elevated CRP (65 mg/L). HIV and Wright serology were negative. The spinal MRI showed an epidural circumferential mass at the T10-T11 compressing the spinal cord (Figure 1). The patient was operated on and a laminectomy of T10 and T11 was achieved. A white and soft lobulated epiduritis was found leaning on the conus medullaris posteriorly and laterally towards the right. A large resection of the posterior portion of the tumor was done until the spinal cord seemed free of compression. Postoperatively, the patient noticed a pain relief and a mild sensorimotor recovery. The immunohistopathological study revealed a Hodgkin Lymphoma and the patient was sent for chemotherapy (Figure 2).

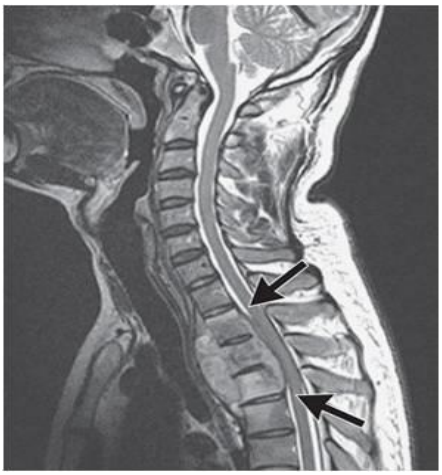

Fig 1: Sagittal T2 weighted pre-operative MRI showing an epidural soft tissue mass centered at T10-T11on the left side, displacing the cord to the posterior with mild compression

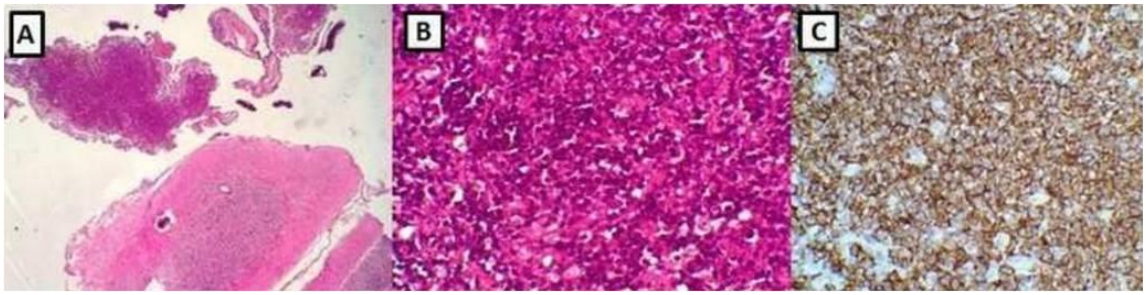

Fig 2: Microphotographs of the histological (A) and the immunohistochemical (B and C) studies. A: hematoxylin and eosin [H&E], original magnification X 40, shows a tumor proliferation composed by lymphocytes, numerous eosinophilic polynuclear and uninucleated Hodgkin cells. Antibody staining shows that tumor cells express CD15 (B) and CD30 (C)

DISCUSSION

Frequency

Hodgkin's Lymphoma (HL) is a hematological malignancy that affects lymphatic nodes, accounting for 0.5 to 1% of adult cancers [1, 2]. Extra-nodal involvement of the disease is estimated at 10% of cases [1-5]. Epidural HL leading to a spinal cord compression occurs in 5% of cases, but usually at an advanced stage of the disease: it reveals the diagnosis in only 0.2% of cases [4, 6, 7].

Pathophysiology

Epidural mass in HL may originate from hematogenous dissemination or more likely develops by direct spread from retroperitoneal or thoracic lymph nodes [5, 6]. Otherwise, primary vertebral lesion may occur [8]. In our case, contiguous spread from retroperitoneal and iliac adenopathy through intervertebral foramen is obviously the origin of the epidural lymphoma. Thoracic spine is the most implicated region, followed by lumbar then cervical spine [3, 4, 8].

Clinical findings

Hodgkin's disease usually presents with painless cervical adenopathy which may be accompanied by weight loss, long-term fever and night sweats [2, 3]. Spinal cord involvement owing to an epidural mass is a rare complication that usually develops in the setting of a diffuse, undiagnosed disease or sometime after the initial diagnosis. Then, the disease manifests itself with back pain and neurological deficits depending on the level and location of the lesion [3, 8].

Imaging

The MRI aspect of HL epiduritis is isointense on T1 and T2 weighted images, with a marked contrast enhancement. A full body CT scan is useful to complete the disease extension assessment [3].

Treatment

The gold standard treatment of Hodgkin Lymphoma is chemotherapy, however in case of primary disease presenting with spinal cord compression, surgical debulking is indicated and allows for adequate tissue sampling for a histopathological diagnosis [3, 6, 8]. Radiotherapy is useful for further local control of the epidural and paraspinal spread [6].

Prognosis

If adequately treated, HL involving the spinal epidural space has an overall good prognosis, with 86% of neurological function improvement and 61% of complete clinical response [7].

CONCLUSION

The spinal cord compression is a well-known complication with patients with Hodgkin Lymphoma, usually occurring in the setting of an advanced disease. It may rarely be the initial presentation of the illness and the diagnosis may be misleading. A histological identification of the disease is essential, so a surgical biopsy and decompression should be considered as first-line diagnostic and therapeutic options.

Conflict of Interest: None

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