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Cauda equina compression—an uncommon presentation of diffuse lymphocytic lymphoma

Sir: When spinal cord involvement occurs in non-Hodgkin's lymphoma it is likely to be the first sign of the disease.¹ There are, however, relatively few reports of lymphoma involving the cauda equina.

A 51-year-old Irish scrap metal dealer was well until six weeks before admission when he developed pain in his thighs and difficulty in walking. In the five days before admission he became unable to walk and developed dribbling incontinence of urine. Examination revealed flaccid weakness of the legs with global sensory loss from the level of L2 downwards and lower limb areflexia. The anal sphincter was lax and the bladder distended. There was no lymphadenopathy or hepatosplenomegaly. He was catheterised and transferred to the regional neurosurgical centre for urgent myelography which revealed a complete block at the level of L2. At laminectomy the dura was found covered with friable tumour which infiltrated the laminae of the L2 and L3 vertebrae. A maximal clearance was attempted. Tumour histology showed a highly cellular malignant tumour of uncertain origin with a differential diagnosis including anaplastic carcinoma, amelanotic melanoma and poorly differentiated large cell lymphoma. He received a course of radiotherapy to the lumbar region. On his return to this hospital one month later, he was now found to have a large right tonsil and rubbery axillary, inguinal and submandibular lymph nodes. The tonsil was biopsied and histology showed a poorly differentiated diffuse lymphocytic lymphoma. He was treated with CHOP (cyclophosphamide, adriamycin, vincristine and prednisolone) to which his disease promptly responded. He was able to walk with a stick and had normal bladder control. Three months later he suffered a relapse but responded to further CHOP, and four months after this, a further recurrence in the right orbit and right lingual tonsil responded to radiotherapy. He has subsequently remained well, living independently and apparently disease-free on maintenance chemotherapy eighteen months after his initial presentation.

Lymphoma may involve the spinal cord and cauda equina by epidural compression, cord infiltration or by paraneoplastic myelopathy. In a recent comprehensive review¹ the incidence of spinal cord (including cauda equina) compression was

said to be as high as 5.9% for lymphosarcoma and the authors confirmed previous findings^{2,3} that patients with non-Hodgkin's lymphoma are particularly likely to develop spinal cord compression as the first sign of their disease. Indeed, in one series³ only 15% of 72 patients with non-Hodgkin's lymphoma had previously been so diagnosed prior to the development of spinal cord or cauda equina compression symptoms. Whether any of the 14 patients in this series, with poorly differentiated lymphocytic lymphomas actually presented with cauda equina compression is not stated. The clinical features of midline cauda equina lesions include backache which is characteristically worse on lying down at night, weakness and wasting of the leg muscles, sensory loss in a radicular distribution, impotence and urinary retention. There is a characteristic "saddle" anaesthesia, flaccid paraparesis with depressed or absent lower limb reflexes and a patulous anal sphincter. Less common presentations are with painless leg weakness, raised intracranial pressure and subarachnoid haemorrhage. Recent case reports of lymphomatous compression of the cauda equina have stressed the similarity of presentations to infective polyneuropathy (Guillain-Barré syndrome), meningitis and encephalomyelitis.⁴⁻⁶ Myelography may demonstrate a complete block, large subdural masses or diffuse symmetrical nerve root swelling.^{4,6} The possibility of apparently isolated lymphoma presenting as a cauda equina lesion should be appreciated by clinicians and pathologists, and careful clinical examination for other evidence of reticuloendothelial system involvement at presentation or subsequently, cannot be over-emphasised.

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Notices

The Eighth International Congress of Neurological Surgery will be held in Toronto, Canada, 7-13 July, 1985. Information may be obtained from Professor AR Hudson, 38 Shuter Street, Toronto, Canada M5B 1A6.

The Second Symposium on the Biology of Brain Tumour will be held in London on October 24-26, 1984. The principal scientific themes will be molecular neuro-oncology, biologic correlates of neuropathology and imaging, and principles of therapy. It will commemorate the centenary of Rickman Godlee's first operation for malignant glioma at the Maida Vale Hospital with a special historical lecture. Further information may be obtained from MD Walker, National Institute of Neurological and Communicative Disorders and Stroke, Bethesda, MD, 20205, USA, or DGT Thomas, Department of Neurological Surgery, Maida Vale Hospital, Maida Vale, London W9, United Kingdom.