Vertebral haemangioma causing acute recurrent spinal cord compression

Vascular tumours are commonly seen in bone, particularly in vertebral bodies; they are, however, far less common in the epidural space. Most of these epidural tumours represent extension of vertebral lesions. Patients with epidural lesions usually present with slowly progressive symptoms of back pain or compression of the spinal cord. Our patient presented with neurological symptoms that developed with unusual rapidity and seemed to be recurrent. This clinical picture has not to our knowledge previously been described.

A 73 year old woman had difficulty in walking. Ten years earlier, the patient had had a gradual onset of stiffness in both legs. Results of neurological examination and radiography of the spine and chest were normal. A computed tomogram was considered. The symptoms improved over three months, and the patient remained asymptomatic for nine years.

Six months before the present examination, the patient experienced gradual unsteadiness of gait. Five days before this evaluation, she experienced mild difficulty lifting her right foot. On admission, she was unable to walk without assistance. Examination showed a mild paraparesis. Exaggerated patellar reflexes and Babinski's signs were bilaterally present. Sensory examination disclosed a mild deficit to soft touch on the right leg below the knee.

Results of routine blood studies and CT of the head were normal. Radiography of the spine demonstrated severe compression at T6 and diffuse osteoporosis. Review of the findings on chest radiography obtained 10 years earlier revealed a compression at T6 that had not been observed originally; however, this status was unchanged (fig 1A).

On the day after admission, bilateral sensory impairment developed below the T6-7 level. Myelography demonstrated complete block at T6 (fig 1A). Total laminectomy at T4-6 demonstrated a highly vascular epidural tumour extending from the affected T6 vertebra, which was excised. Pathological examination revealed a cavernous haemangioma (fig 1B).

Sensation and strength returned to both legs, and six days after the operation, the patient walked with assistance. She recovered well at a rehabilitation hospital.

Vertebral haemangioma that does not involve the epidural space is a common, usually asymptomatic, lesion. In Töpfer's series of 2154 patients, the incidence of vertebral haemangioma was 11.9%. In a series of more than 10000 necropsy cases by Junghanns, the incidence was 10%. Extension into the epidural space is uncommon. In a comprehensive study, Hurth estimated that 12% of all intraspinal haemangiomas involve the epidural space and suggested that these lesions are underdiagnosed. Most symptomatic epidural and vertebral haemangiomas involve the thoracic spine, possibly because the spinal canal is narrow at this level.

Rapid progression of symptoms associated with an epidural vascular lesion is a rare occurrence. Four pathophysiological mechanisms have been postulated that may lead to spinal cord compression: extension into the epidural space; epidural hematoma or epidural-synovial cyst. We suggest that the most recent presentation in our patient fits the first or second category best because no new fracture was present and no acute bleeding or obvious thrombosis was found at operation.

We did not have the benefit of nuclear MRI at the time this patient was treated. Today, this procedure might well be the optimal method of imaging a lesion before operation. Some authors suggest that angiography be performed to permit embolisation of the lesion preoperatively.

Reports of neurological symptoms that developed as quickly as they did in our patient form a small minority of cases. We have not found a case previously described in which symptoms of subacute spinal cord compression developed and then resolved completely for 10 years, only to recur in an acute fashion as a result of an epidural haemangioma. Unsuspected epidural or vertebral-epidural, vascular tumour, which may be recurrent, is a rare but treatable cause of acute spinal cord compression.

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Giant intracranial aneurysm associated with Marfan’s syndrome: a case report

We report a case of Marfan’s syndrome presenting with the thromboembolic or mass effects of a giant basilar aneurysm: this was successfully clipped by direct exposure, an outcome we believe not previously described in Marfan’s syndrome.