

patient the lesion in the retro orbital portion of the right optic nerve was thought to be an inflammatory granuloma or glioma preoperatively but it proved to be cysticercosis. To our knowledge this has not been described previously.

V S MADAN
R M DHAMIJA
H S GILL
M S BOPARAI
P D SOUZA
P C SANCHETEE
J R BHARDWAJ
The Army Hospital, Delhi,
and the Lady Harding Medical College,
New Delhi, India

Correspondence to: Dr Madan, Department of Neurology, Sir Ganga Ram Hospital, Rajinder Nager, New Delhi-110060, India

- 1 Baranski MC. Teniasis. In: Chaia G, Ed. *Atlas of parasitology*. Sao Paulo: Johnson and Johnson Research Institute for Endemic Diseases, 1975:69-76.
- 2 Malik SRK, Gupta AK, Choudary S. Ocular cysticercosis. *Am J Ophthalmol* 1968;66:1166-71.
- 3 Mingnetti G, Ferreira MVC. Computed tomography in neurocysticercosis. *J Neurol Neurosurg Psychiatry* 1983;46:936-42.
- 4 Venkataraman S, Vijayan GP. Neurocysticercosis. In: Ahuja MMS, ed. *Progress in clinical medicine in India*, Series Four. New Delhi: Arnold Heinemann, 1981:382-406.
- 5 Kapoor S, Sood GC, Aurora AL, Sood M. Ocular cysticercosis, report of a free floating cysticercus in the anterior chamber. *Acta Ophthalmologica* 1977;55:927-30.

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 non-organic mechanism 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 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 evaluation 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's¹ series of 2154 patients, the incidence of vertebral haemangioma was 11.9%. In a series of more than 10 000 necropsies by Junghanns,² the incidence was 10%. Extension into the epidural space is uncommon. In a comprehensive study, Hurth³ 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,⁴ 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^{5,6} that may lead to spinal cord compression: extension into the epidural space; expansion of the vertebrae, which causes narrowing of the spinal canal; epidural haemorrhage, possibly involving thrombosis; and compression fracture. 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 authors⁷ suggest that angiography be performed in less acute situations 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 vertebro-epidural vascular tumour, which may be recurrent, is a rare but treatable cause of acute spinal cord compression.

JONATHAN NEWMARK*
H ROYDEN JONES Jr
Department of Neurology
CHRISTINE B THOMAS
H THOMAS ARETZ
Department of Anatomic Pathology
STEPHEN R FREIBERG
Department of Neurosurgery
RICHARD A BAKER
Department of Diagnostic Radiology,
Lahey Clinic Medical Center,
Burlington, MA, USA

*Present address: Hospital of the University of Pennsylvania, Neuromuscular Division, 3 Gates Building West, 3400 Spruce Street, Philadelphia, PA 19104, USA.

Correspondence to: Dr Jones Jr, Department of Neurology, Lahey Clinic Medical Center, 41 Mall Road, Burlington, MA 01805, USA.

- 1 Töpfer D. Infiltrating hemangioma of skin and multiple capillary ectasias: angioma of vertebra. *Frankfurt Ztschr f Path* 1928;36:337-45.
- 2 Junghanns H. Hämangiom des 3. Brustwirbelkörpers mit Rückenmark-kompression. Laminektomie. Heilung. *Arch f klin Chir* 1932;169:321-30.
- 3 Hurth M. Les hémangioblastomes intrarachidiens. *Neurochirurgie* 1975;21(suppl 1):1-136. (Eng abstr.)
- 4 McAllister VL, Kendall BE, Bull JW. Symptomatic vertebral haemangiomas. *Brain* 1975;98:71-80.
- 5 Graham JJ, Yang WC. Vertebral hemangioma with compression fracture and paraparesis treated with preoperative embolization and vertebral resection. *Spine* 1984;9:97-101.
- 6 Padovani R, Tognetti F, Proietti D, et al. Extrathecal cavernous hemangioma. *Surg Neurol* 1982;18:463-5.

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.

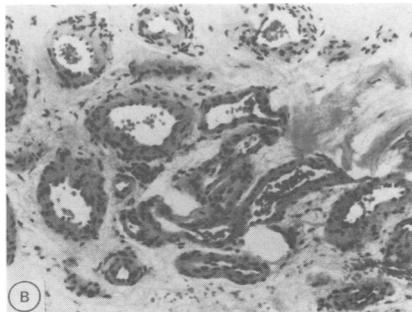
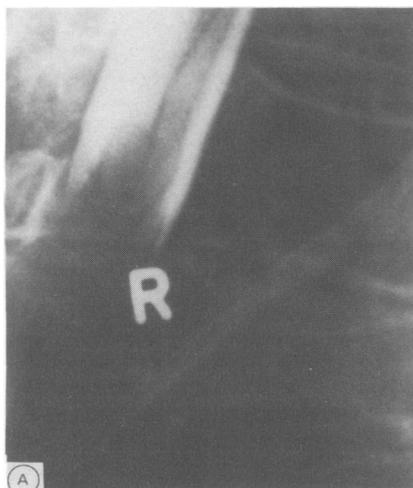


Figure 1A Lateral myelograph from above demonstrates total block at the level of the compressed T6 vertebra consistent with an epidural process; (B) section from the epidural component of the tumour shows large thick-walled vessels. Bone involvement was seen in other sections. (H&E; original magnification $\times 100$.)