

Letters

Lumbar extradural arachnoid cyst presenting as a conus lesion in a man aged 77 years

Sir: Spinal arachnoid cysts are a well recognised but uncommon cause of spinal cord compression. They typically present as a slowly progressive thoracic cord lesion in a young adult.^{1,2} Extradural cysts at the thoracolumbar region are very rare.^{3,4} We report a case of extradural arachnoid cyst which presented as a very slowly progressive conus lesion in a man aged 77 years.

An active 77 year old man presented with a ten year history of intermittent pain in the right heel. Standing precipitated pain which radiated to the sole and ankle and eventually limited walking to about 50 yards. Similar but milder symptoms had been present in the left foot for about a year. There was a past history of acute lumbar backache 40 years ago and 20 years previously he had undergone a transurethral resection of a prostatic carcinoma and was maintained on stilboestrol. He had no new urinary symptoms. Neurological examination one year prior to admission was normal apart from an absent right ankle reflex.

On examination the cranial nerves and upper limbs were normal. There was no wasting in the legs but tone was increased at the right knee. The right knee jerk was pathologically brisk and the right ankle jerk was absent. The left ankle jerk was just present with reinforcement. Light touch and pain appreciation was reduced on the lateral aspect of the right foot and right lower leg. Proprioception was normal but vibration sense was absent at the right hallux. Straight leg raising was reduced to 60° on the right and 70° on the left.

Spinal radiographs showed widening of the interpedicular distance at T11-L2 with flattening of the lateral arch elements and posterior scalloping of the vertebral bodies. Myelography demonstrated forward displacement of the theca by a non opacified extradural lesion reducing the cephalad flow of contrast between T11-L2; computed tomography (CT), magnetic resonance imaging (MRI) (fig) and cyst puncture confirmed the presence of an extradural arachnoid cyst with a narrow neck at its upper margin. On 24 April 1987 he underwent thoraco-lumbar laminectomy for excision of the cyst which extended along the nerve roots between T10 and L1. His postoperative course was complicated by a brain stem stroke producing left sided facial weakness, a left sixth nerve palsy and ataxia. This



Fig MRI scan. TR 500 TE 40 spin echo sequence. Sagittal view of lower thoracic and lumbar regions demonstrating a low density expansive mass indenting the theca from behind between T11 and L2.

improved rapidly leaving him with mild facial asymmetry alone. There was considerable improvement in the right heel pain.

This case represents a very rare cause of a conus lesion and illustrates an unusual presentation of a spinal arachnoid cyst. The patient was older than patients previously described. Diagnosis was difficult because of the long history of pain, (initially suggesting a local lesion in the foot) and the lack of development of neurological signs. The severity of the pain in this case prompted further investigation, together with signs suggesting a lesion in an unusual location for degenerative disc disease. In retrospect the diagnosis of an arachnoid cyst was suggested by the intermittent nature of the symptoms⁵ and their relationship to posture.^{4,6} Pain is a more typical presentation of cysts in this area while thoracic lesions produce a slowly progressive spastic paraparesis.^{1,6}

The diagnosis in this case was established by myelography and CT. Although MRI was not performed as the primary diagnostic procedure it provided clear demonstration of the lesion in a non invasive manner.

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Accepted 31 January 1988

Comparison of the Westmead PTA Scale and Glasgow Coma Scale as predictors of neurological outcome following extremely severe blunt head injury

Sir: In 1974 Jennett and Teasdale reported on the Glasgow Coma Scale (GCS).¹ Since then this scale has gained widespread acceptance as a means of objectively assessing the depth and duration of coma in head injury and other conditions. Studies have demonstrated its usefulness in predicting outcome following head injury.^{2,3} However, Brooks *et al*⁴ have shown that a subjective and retrospective assessment of the duration of post-traumatic amnesia (PTA) is a better predictor of outcome than duration of coma in head injury patients. No study has compared the objective measurement of duration of coma with an objective measurement of the duration of PTA in predicting neurological outcome.

The Westmead PTA Scale, described in 1986,⁵ is an objective measurement of the duration of PTA following head injury. It has a high degree of inter-rater reliability, takes approximately only 3 minutes to administer and has been satisfactorily used with only a minimum of training by medical staff, nurses and occupational therapists. It is an extension of the Oxford Scale⁶ and different from the Galveston Orientation and Amnesia Test⁷ in that both orientation and the re-establishment of the daily ability to recall newly learned information are required for defining the end of the PTA period. The present report is of a 2 year follow-up study comparing GCS score of