Spontaneous Spinal Epidural Haematoma with Spontaneous Resolution Demonstrated by Magnetic Resonance Imaging: Case Report

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Abstract: The source of bleeding in spontaneous spinal epidural haematoma has never been clear, but has been assumed to be venous. We report the seventh case of spontaneous spinal epidural haematoma with spontaneous resolution, which was demonstrated by magnetic resonance imaging.

INTRODUCTION

Spontaneous spinal epidural haematoma (SEH) is a rare condition, the cause of bleeding is still unknown (9). The clinical presentation is remarkably uniform, beginning with local and radicular pain followed by sensory changes and finally motor weakness or paralysis (2, 6, 13, 15, 17). This symptom complex may evolve in an hour or may take weeks or months (6-8, 17). With surgical treatment, the majority of these patients are markedly improved or cured (2, 6-8, 10). Only six cases of spontaneous recovery from spontaneous SEH have been reported in the English literature (3, 5, 11, 12, 18, 19). In this paper, we report a seventh case of spontaneous SEH with spontaneous recovery, which was demonstrated by magnetic resonance imaging (MRI).

CASE REPORT

A 58-year-old woman developed severe back pain of sudden onset while sitting, radiating down to the right leg and associated with bilateral paraesthesiae. Six hours later she was admitted to hospital.

There was no history of hypertension, metabolic or haematological disorders or recent trauma and she was not taking anticoagulants.

Examination: Motor function and tendon reflexes were normal and no pathological reflexes were present. There was disturbance of touch sensation below the level of Th9. She had no bowel or bladder symptoms. Blood pressure was 140/80 mm Hg. Laboratory values, including haemostasis and blood coagulation time, were all within normal limits. The initial diagnosis was acute low back pain accompanied by intervertebral disc herniation. Ten hours following the onset of symptoms, MRI was carried out. T1-weighted sagittal and axial MR images demonstrated an isointense mass lesion in the Th 9-Th 10 region in the posterior epidural space, predominantly on the right side. The spinal subarachnoid space was obliterated by the epidural mass (Fig. 1 a,b). In this period analgesics and bed rest was started and 48 hours later, the patient had achieved complete recovery of strength and resolution of pain. After three days there was no neurological deficit. At the second MRI performed after fifteen days, no abnormal signal was observed on the non-selective and selective spinal angiogram between Th 9 and L1 (Fig 3 a,b).
Twenty days after admission, the patient was discharged with normal neurological status and at the 1-month follow up, had returned normal routine house-work and had no pain or paresthesia.

**DISCUSSION**

Spontaneous SEHs are rarely seen in clinical practice and generally occur in adults males. They are most frequently located in the lower cervical or thoracolumbar regions (2, 9). We have defined the term “spontaneous” as meaning without identified "aetiology". This definition excludes haemorrhage caused by coagulopathy, neoplasia, AVM, trauma or postoperative complications, and also patients who have received anticoagulation therapy. In our case we could find none of these reasons for SEH.
REFERENCES

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