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Case Report

A rare case of chronic idiopathic spinal epidural haematoma

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Introduction

Spinal epidural haematoma (SEH) though rare is the most frequent cause of spinal haemorrhage. It is an important cause of compressive myelopathy, frequently presents as an emergency and requires prompt diagnosis and management. SEH can be classified as secondary (e.g., secondary to coagulopathies or anticoagulant therapy), spontaneous (absence of any definite cause but associated with risk factors like minor trauma) and idiopathic (no attributable risk factors identified) or acute and chronic.[1] The spontaneous and idiopathic groups comprise about 50% of cases.[2] The chronic form is the rarest and its most frequent location is the lumbar spine. Magnetic resonance imaging (MRI) is the imaging modality of choice for diagnosis. Irrespective of the aetiology, the mainstay of treatment is urgent surgical decompression and evacuation of the haematoma. There are only a few reports of successful conservative treatment in this condition where symptoms and signs have resolved without surgery.[3,4] Here we present an unusual case of chronic idiopathic spinal epidural haematoma where the patient was only symptomatic with chronic low backache. This article aims to discuss the pathogenesis, clinical and radiological features, and differential diagnosis in this condition.

Case report

A 42-year-old male patient presented with chronic low backache of four months duration. The pain was insidious in onset, moderate in intensity and aggravated by prolonged standing. There was no history suggestive of radiculopathy or neurogenic claudication. There was no history of any comorbid condition, medication or spinal trauma (accidental or surgical). Examination of the patient revealed normal vital parameters. Lower paraspinal muscle spasm was noted. There was no point tenderness or swelling. There was no sensorimotor deficit or evidence to suggest sacroiliitis. Haematological and other relevant laboratory investigations were normal. MRI of the lumbosacral spine was requisitioned which revealed bilateral spondylolysis of L5 vertebra. There was no spondylolisthesis. An elongated, gently lobulated, multisegmental epidural lesion (lentiform in cross-section) was noted on the left posterolateral aspect, extending from the level of L1 to L5 vertebra and measuring approximately 9.1 mm × 5.8 mm × 130.0 mm (anteroposterior × transverse × craniocaudal). The lesion was heterogeneously hyperintense on T1, T2 (with a central rounded hypointense focus) and T1 weighted fat-sat images.

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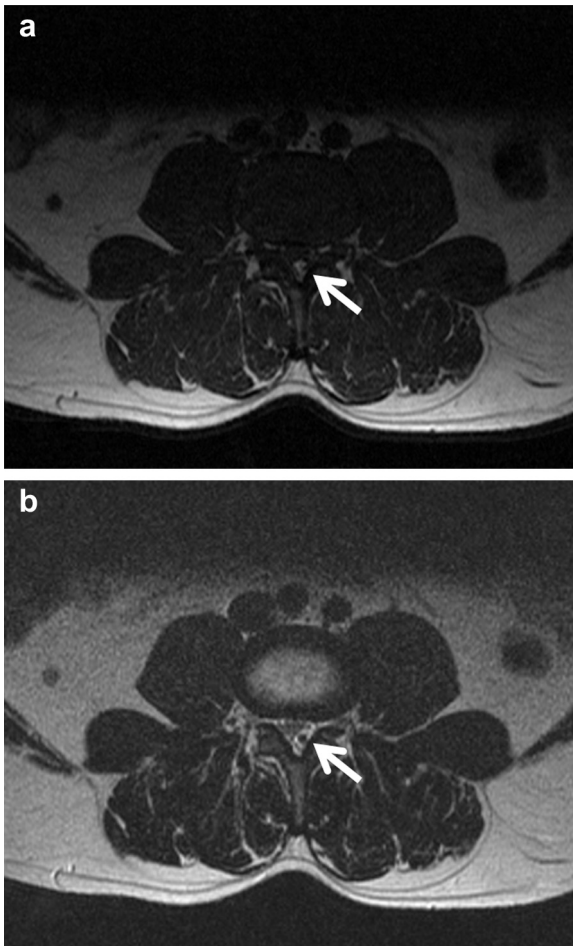

Fig. 1 – A rare case of chronic idiopathic spinal epidural haematoma. Initial MRI images. (a) T1-weighted (TR/TE = 500/14) and (b) T2-weighted (TR/TE = 4260/107) axial images of the rostral lumbar spine reveal a biconvex left posterolateral epidural lesion which is hyperintense on both sequences (arrows). There is thecal indentation and compression.

There was displacement and compression of the thecal sac with obliteration of the subarachnoid space at multiple levels. Mild contrast-enhancement was also noted (Figs. 1–3). In the absence of any neurological deficit, the patient was advised conservative treatment. A review MRI after three months revealed mild reduction in the size of the lesion and without any significant change in the signal characteristics.

Discussion

Haemorrhage in the spinal epidural space is a rare entity that accounts for only 0.3%–0.9% of all lesions occupying the spinal canal.[1] This condition has been reported at all ages; however it is most frequent in the fourth and fifth decades with a slight male preponderance (male/female ratio of 1.4:1).[5] The most common site of a spontaneous spinal epidural haematoma (SSEH) is the cervicothoracic region or thoracolumbar region[5] that usually presents as an

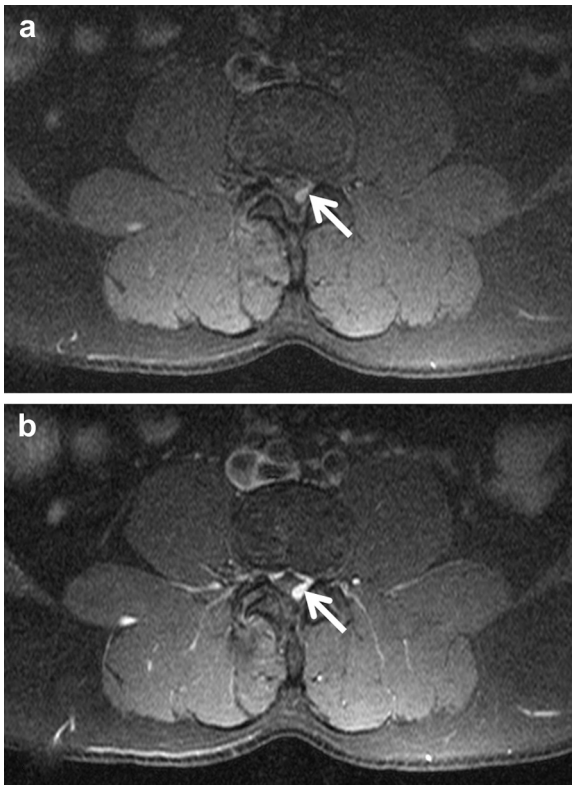

Fig. 2 – A rare case of chronic idiopathic spinal epidural haematoma. Initial MRI images. (a) T1-weighted (TR/TE = 698/14) fat-saturated axial image revealing the same lesion as in Figure 2 without any loss of signal intensity. (b) Post-contrast T1-weighted (TR/TE = 698/14) fat-saturated axial image reveals contrast-enhancement.

emergency. The condition frequently presents as a sudden stabbing neck or back pain that progresses to paraparesis or quadriparesis, depending on the level of the lesion and the nerve root mimicking prolapsed disc, tumour or canal stenosis. In the high cervical region, SSEH could cause spinal shock. In almost all cases of spinal epidural haematoma surgical evacuation is necessary. However, a few cases are mentioned where conservative management has been successful; most of these patients had haemorrhage secondary to coagulopathies and were symptomatically improving on arrival at hospital.[3]

SEH can be classified as secondary (secondary to coagulopathies or anticoagulant therapy, vascular malformations, neoplasms, trauma including surgery and surgical procedures), spontaneous (absence of any definite cause but associated with risk factors like minor trauma, chiropractic manipulation, Paget's disease, ankylosing spondylitis, rheumatoid arthritis, and cervical spondylitis) and idiopathic (no attributable risk factors identified) or acute and chronic.[1] The spontaneous and idiopathic groups comprise about 50% of cases and their combined incidence is approximately 0.1 per 100,000 patients per year.[2]

The chronic form is the rarest and its most frequent location is the lumbar spine. Only about twenty cases of chronic epidural haematoma have been described in world literature.[1] These chronic cases are generally characterized by slow