ABSTRACT

Only a few publications regarding traumatic hematoma in spinal ligament have been reported compared to spontaneous spinal hematoma. This type of bleeding is classically associated with bone fracture and/or the presence of haemostasis abnormalities.

However, in our case the patient presented with traumatic dorsal hematoma in spinal ligament without any associated disc or bone lesion, and no crisis problems. We report a case of a 50-year-old man, who was a victim of a car accident. Neurological examination revealed paraplegia and hypoesthesia below the T4 sensory dermatome. Spinal magnetic resonance imaging revealed an acute hematoma in spinal ligament extending from T5 to T7 with spinal cord compression. The patient was not operated; the evolution was marked by spontaneous resorption of hematoma with the gradual recovery of the neurological deficit using functional reeducation.

Keywords: traumatic, hematoma, spinal ligament

INTRODUCTION

Spinal dorsal ligament hematoma (SDLH) is an uncommon cause of spinal cord compression. Post-traumatic SDLH is relatively rare (1). The exact incidence rate accounts for 0.5% to 1.7% of all spinal injuries (2).

Also, this type of traumatic extra dural haematoma is classically associated with bone fracture and/or the presence of haemostasis abnormalities (3).

However, in our case the patient presented with traumatic dorsal spinal ligament haematoma without any associated disc or bone lesion, and no crisis problems.

CASE REPORT

We report a case of 50-year-old man, who was a victim of a car accident. Neurological examination revealed paraplegia and hypoesthesia below the T4 sensory dermatome. Spinal magnetic resonance imaging revealed an acute hematoma in posterior spinal ligament extending from T5 to T7 with spinal cord compression, without any disc or bone lesion (Figure 1).

The patient was not operated; the evolution was marked by spontaneous resorption of hematoma with the gradual recovery of the neurological deficit using functional reeducation.
Spinal epidural hematoma (SEH) is relatively rare and is seen mostly in the older literature. Groen and Ponssen (4) reported that 99% of sudden SEH occurs in the posterior region of the epidural space (4).

Most cases of traumatic spinal dorsal ligament hematoma (TSDLH) were associated with spinal fracture or dislocation (5). However, TSDLH with neurologic symptoms can develop in the setting of blunt trauma without vertebral column fracture, and the condition can be an extremely rare disease entity after spinal trauma.

The pathogenesis of traumatic spinal ligament hematoma TSLH remains unknown. Some authors suggest rheumatoid disease, spinal spondylosis, ankylosing spondylitis, Paget disease, and medication-induced coagulopathy as the cause of bleeding (6).

Gundry and Heithoff (7) reported an association between epidural hematoma and rupture of a deep disc. This led them to argue that a SLH would result from the tearing of adjacent fragile epidural veins to the annulus fibrosus or nucleus pulposus (8).

Clinical symptoms of this disease are variable (pain; neurological deficit). The MRI is the modality of choice for diagnosis. The differential diagnosis for TSLH includes migration of a slipped disc, metastatic tumor, epiduritis and rarely a neural cyst (9).

CONCLUSION

This case report is important as it demonstrates a traumatic spinal dorsal ligament hematoma with neurologic symptoms and without vertebral column fracture.

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