Chapter 158

Spontaneous epidural spinal hematoma: case report

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1 INTRODUCTION

Spontaneous epidural spinal hematoma (HEEE) is a rare condition. Its estimated incidenceis 1 new case per 1,000,000 people per year1. HEEE has been associated withcoagulation disorders or vascular malformations. However, its exact etiology may not be discovered in 40 to 50% of cases2. HeeE is usually accompanied by acute cervical pain or high intensity scar injury. Depending on the location and size may be accompanied by neurological deficit.

2 CASE REPORT

VOS, 24 years old, female. He attended the emergency room complaining of severe cervical pain with irradiation to the scapular region. She was medicated by the on-call and returned home after the partial improvement of pain. On the same night he presented a new episode de so intense pain followed by weakness ofthe lower limbs (LLLL). He returned to the same hospital for reassessment. He denied trauma, comorbidities or medication use.

On examination she had unchanged vital signs. His neurologic examination showed paraplegia in both LLLls. Reflexes cuttothe neo abdominal, patellar and aquileu abolished bilaterally. Babinski Sign +. Sensitivity present, but greatly decreases in the dermis below T4. He required delayed bladder catheterization due to urinary removal.

Magnetic Resonance (MR) was performed, which demonstrated an elongated image with hypersignal on T1, located in the region or left sterolateral of the vertebral canal interior, in an extradural situation at the levelof D1 and D2, measuring approximately 3 cm X 1 cm (Figures 1,2 and 3).

Figure 1: Preoperative Sagittal T1

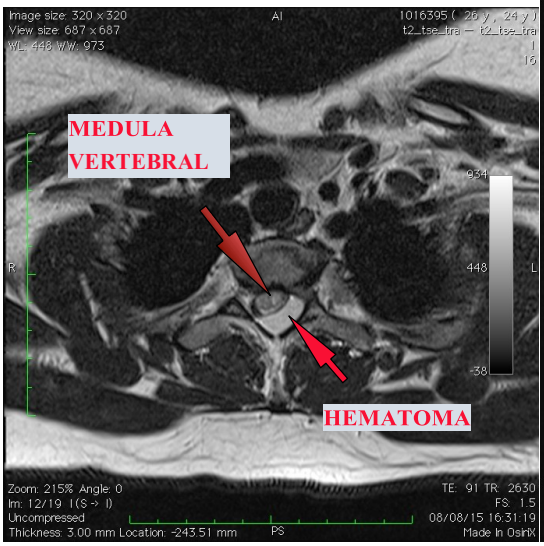


Figure 2: Preoperative sagittal T2

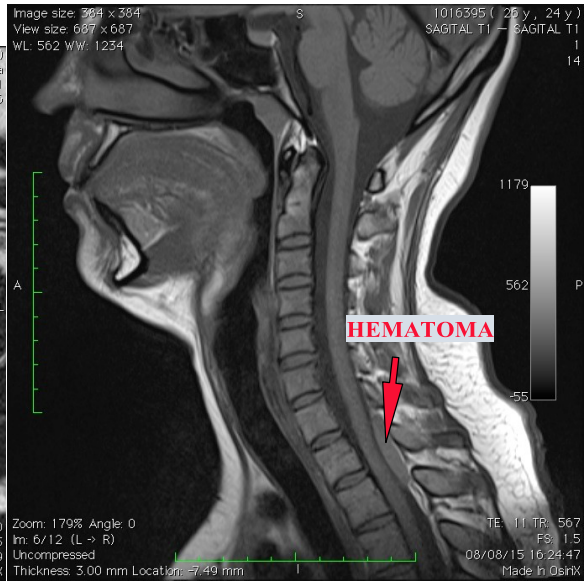
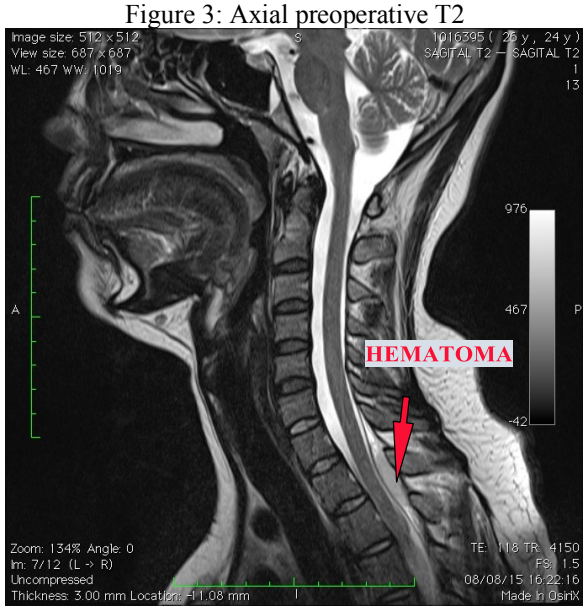


Figure 3: Axial preoperative T2



Laboratory tests, including coagulogram, showed no alterations. The patient was operated within 36 hours of symptoms. A hemyloaminectomy was performed on the left atthelevel of D1 and D2. The hematoma was identified and drained using irrigation with physical serum.

The patient obtained significant sensory and motor improvement afterthe surgicalprocedure. After24hours of surgery, he presented practically normal sensitivity and an M4 force in the LLLl, in the raízes of L2 to S1 bilaterally.

Removing the bladder catheter, he showed recovery from spontaneous control of urine. He was discharged after 72 hours of the surgical procedure, reporting only a feeling of subjective weakness in the LLLL.

With 3 weeks of surgery presented without complaints. Your neurol exam was normal. With a mêsurgery was performed in themri, which did not show any intracanal lesion (Figures 4 and 5). Today the patient is one and a half years of follow-up performing only routine consultations, without complaints. Returned his working life and activity physical normally.

Figure 4: Postoperative Sagittal T2

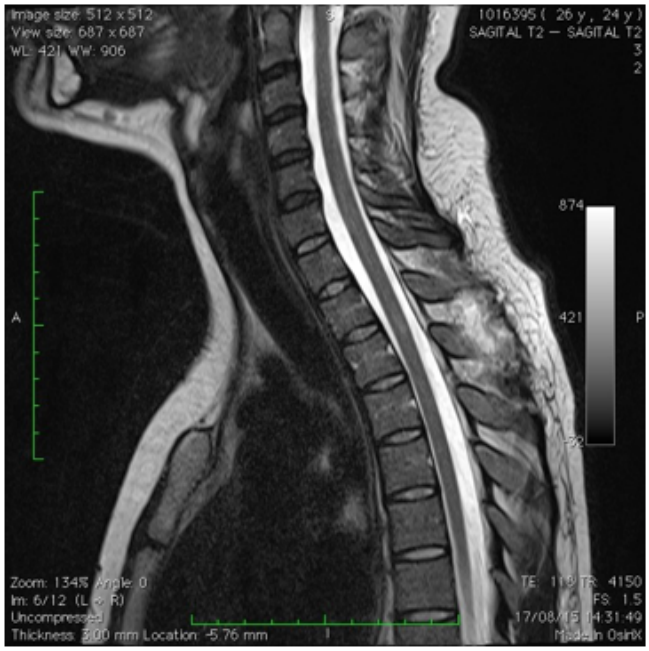
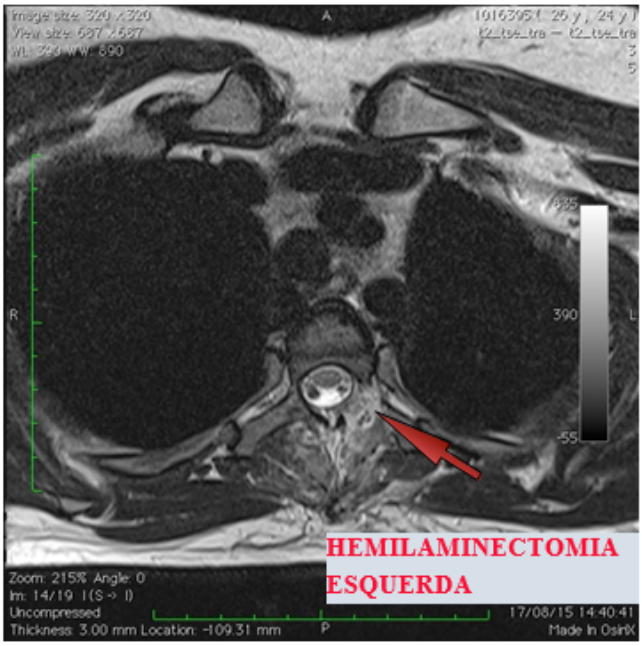


Figure 5: Axial Postoperative T2



3 DISCUSSION

Although rare, HEEE is a serious condition. It can occur in any range andria, being more common in menafter40 years3. It's unusual in children. The most frequently affected sites are the cervicotor and thoracolumbar regions. The most common risk factors include coagulopathy, use of anticoagulants, and vascular malformations.

However, it is not possible to identify any risk factor inup to 50 % of patients, as occurred with our patient. Most authors believe that the origin of bleeding is due to the epidural venous plexus. Other authors, however, believe that the origin is arterial.

The most common clinical presentation is acute and severe cervical pain or torto cica, followed by paraparesis or tetraparesis, depending on the level of the lesion. The examination of choice for the diagnostic is MRI.

When there is neurologic d éficit, the treatment of choice is the urgent decompression of the spinal cord4. On the other hand, when thereisno ficit or when thereis progressive improvement of it, conservative treatment can be performed.

4 CONCLUSION

Despite the important neurologic deficit that our patient presented in the primary, the decompression of the bone marrow was effective for improving pain and the neurological state of the same.

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4- 1. Groen RJ, van Alphen HA: Operative treatment of spontaneous spinal epidural hematomas: a study of the factors determining postoperative outcome. Neurosurgery 1996, 39:494-509.