



C0047 - BROWN-SÉQUARD SYNDROME AND CERVICAL POSTTRAUMATIC SUBARACHNOID HEMATOMA

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Resumen

Objectives: Report a unique case of a ventrolateral Spinal Subdural Hematoma (SSH) due to mild traumatic brain injury (TBI). Show a simple and feasible surgical approach for this rare pathology. Explain a possible cause of this type of injury.

Methods: An 83-year-old woman with a previous history of atrial fibrillation treated with acenocumarol, and an implanted cardiac pacemaker, was admitted after suffering a 4-5 stairs fall. The patient presented right hemiparesis 3/5, predominantly in right forelimb (RFL), 1/5 distal paresis of the flexor carpi and fingers extension, loss of proprioception and vibration in the right hemi body. She also presented loss of pain and temperature sensitivity in the left hemi body, without autonomic involvement (Brown-Séquard syndrome). CT scan showed an extensive right C3-C5 ventrolateral cervical hematoma, and severe acute spinal cord compression. The patient underwent emergent surgical decompression with a posterior cervical approach. A C4-C5 hemi laminectomy was done with dural opening. Careful mobilization of the spinal cord with micro dissection was performed and the right ventrolateral subarachnoid hematoma was evacuated.

Results: The postoperative CT scan shows more than 95% of the hematoma evacuated and absence of spinal cord compression. After the first 24 hours, the patient partially recovered RFL strength.

Conclusions: Cervical Traumatic SSH are very rare in literature. They are usually caused by cardiopulmonary diseases that increases vascular pressure leading to spinal vessels rupture. In TBI, an abrupt extension-flexion movement could have caused the rupture of subarachnoid vessels. This, accompanied by the slowed blood "wash out" (probably due to the previous osteoarthrosis and spinal canal stenosis), lead to the formation of an organized clot, which caused an acute spinal cord compression syndrome. The posterior approach is feasible, fast and simple to evacuate a cervical ventrolateral hematoma with good results.