Spinal Cord Hematoma
After Spinal Fluid Drainage
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Disclosure
None

Outline
- Etiology
- Clinical Course
- Prevention
- Treatment

Spinal Subdural Hematoma after Spinal Drain for Endovascular Thoracic Aortic Aneurysm Repair

Example of Normal MRI
Our Case: T1-weighted MRI

Abnormal heterogeneous high signal within the thecal sac at L5 and the sacral level which occupies the majority of the thecal sac (arrows).

Abnormal, heterogeneous intermediate signal within the thecal sac at the same levels. Hematoma 15 mm anterior to posterior and 6 cm craniocaudally from L5-S2.

Inverted Mercedes-Benz sign. Subdural space collections form this configuration owing to two lateral denticulate ligaments and the midline dorsal septum. This creates an anterior collection (1) and two posterolateral collections (2 and 3).

Risk Factors
- Age (older)
- Spinal stenosis
- Needle size
- Multiple attempts at drain insertion
- Blind insertion (compared to fluoroscopy)
- Anticoagulation at the time of removal
- Clinically misdiagnosed

Our Patient
- 80 y/o
- Lumbar laminectomy
- 14-gauge
- YES
- YES
- YES
- YES

14-gauge needle had higher rates of complication (intracranial hypotension, headaches, and epidural hematoma) (6 out of 27 patients, or 22%)

18-gauge needles (3 out of 20 patients, or 15%) when placing lumbar drains in patients undergoing open cranial surgeries.
Classification of Spinal Subdural Hematoma

Treatment of Spinal Subdural Hematoma
- Conservative vs. acute surgical decompression
- Neurosurgical team decided on conservative treatment in our patient
- Our patient’s neurological symptoms resolved
Our Case has Reignited the CSF Drainage Debate
Lumbar cerebrospinal fluid drains for thoracic endovascular aneurysm repair: common practice or standard of care?

Dr. Hilary Grocott, MD
Editor-in-Chief of Canadian Journal of Anesthesia

Position Paper 2015
Contemporary spinal cord protection during thoracic and thoracoabdominal aortic surgery and endovascular aortic repair: a position paper of the vascular domain of the European Association for Cardio-Thoracic Surgery

• We need to educate patients who get a spinal drain about the potential risk of spinal hematoma
• Patients should seek medical attention immediately if they develop symptoms such as back pain, incontinence, muscle weakness, or loss of sensation

THANK YOU