



Presentation and Management of a Postoperative Spinal Pseudomeningocele

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Key Summary Points

A pseudomeningocele, or a collection of cerebrospinal fluid, typically presents as a postoperative complication, and can be asymptomatic and resolve spontaneously, though some present with headaches, low back pain, or radicular symptoms.

The best management of spinal pseudomeningocele is debated, but important considerations include nerve root involvement, pseudomeningocele size and location.

Revision surgery and dural tear repair may be an important option in symptomatic patients. In patients who are asymptomatic, nonsurgical management can result in spontaneous resolution of the pseudomeningocele with scar formation over time.

CASE

The aim of this case is to highlight the importance of radiographic determination of the presence of a pseudomeningocele and the subsequent constellation of symptoms. A

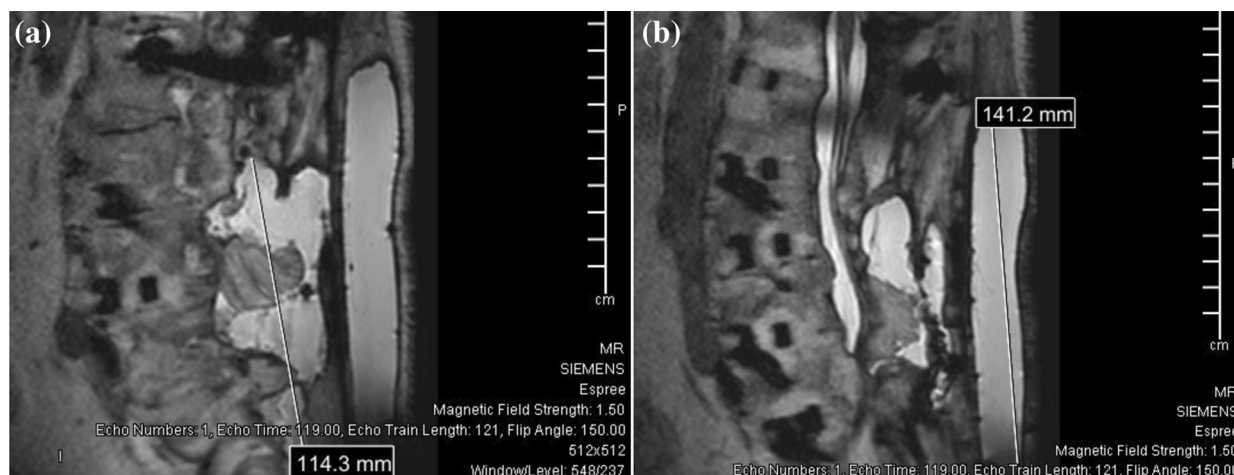


Fig. 1 **a** A T2-weighted sagittal magnetic resonance image demonstrating the extent of the pseudomeningocele. A cranio-caudal measurement of the subfascial component of the pseudomeningocele is included. **b** A T2-weighted

sagittal magnetic resonance image demonstrating the extent of the pseudomeningocele. A cranio-caudal measurement of the subcutaneous component of the pseudomeningocele is included

pseudomeningocele, or a collection of cerebrospinal fluid (CSF), typically presents as a postoperative complication [1]. Spinal pseudomeningoceles can be asymptomatic and resolve spontaneously, though some present with headaches, low back pain, or radicular symptoms [2]. These are the radiographic findings of a female with chronic low back pain status post multiple spinal surgeries, most recently an L4–L5 revision laminectomy complicated by a CSF leak. She presented with paresthesia's, subjective weakness, and an occipital headache. An MRI revealed a $4.5 \times 4.8 \times 11.4$ -cm CSF collection communicating with a $2.8 \times 11.7 \times 14$ -cm subcutaneous soft tissue fluid collection (Fig 1a, b). A small defect at the level of L5–S1 connecting the spinal canal to a posterior fluid collection was determined.

The best management of spinal pseudomeningocele is debated, but important considerations include nerve root involvement, pseudomeningocele size and location. Revision surgery and dural tear repair may be an important option in symptomatic patients. In patients who are asymptomatic, nonsurgical management can result in spontaneous resolution of the pseudomeningocele with scar

formation over time [3, 4]. Informed consent for publication was obtained from the participant.

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Compliance with Ethics Guidelines. Informed consent for publication was obtained from the participant.

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