Spasticity, headaches, and seromas: The use of fibrin glue in persistent CSF leak.

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Abstract:

Introduction: Intrathecal drug delivery systems (IDDS) are used to treat spasticity and severe pain. Although beneficial they can be associated with multiple complications. Case Information: A

43-year-old female with severe spasticity from Multiple Sclerosis underwent uncomplicated

placement of an intrathecal baclofen pump. After 1 week the patient noted pain and swelling in her

lumbar region, associated with mild positional headaches. A fluid-filled mass was found under her

healed incision. Evaluation of the mass confirmed it as a sterile CSF seroma. The seroma worsened

over 4 weeks of conservative management and an epidural blood patch was performed without

improvement, followed by a second blood patch with injection of doxycycline into the seroma pocket

to stimulate tissue adherence. Again the seroma reformed. After months of failed conservative

treatment the patient returned to the OR for catheter revision, where the anchor was noted to be

loose. It was secured and oversewn with fascia to prevent seroma formation. After several days the

seroma reformed, with worsening of the patient's positional headache. A third blood patch was

unsuccessful. We performed a percutaneous dural patch under fluoroscopic guidance by injecting

fibrin glue into the epidural space. By 2 days post-procedure the patient reported significant

improvement in her headache without redevelopment of the CSF leak or headache at 6 months

follow-up. Discussion: This case highlights the uncommon complications of CSF leak, seroma, and

PDPH, resistant to traditional treatments. The use of fibrin glue in this setting is unique, yet proved

successful.