Fibrin glue to treat spinal fluid leaks associated with intrathecal drug systems.

Authors: Freeman E.D., Hoelzer B.C., Eldrige J.S., Moeschler S.M.

Publication Date: 2014

Abstract:

Intrathecal drug delivery systems (IDDSs) are used to treat resistant pain states as well as intractable spasticity via medication delivery into the spinal fluid. Risks associated with implantation of these devices include infection, bleeding, intrathecal granuloma formation, and neurologic sequelae similar to other neuraxial procedures. Intrathecal catheter placement creates the additional risk of persistent spinal fluid leak, which can lead to postdural puncture headaches as well as seroma formation and may require subsequent surgical exploration or explantation. This retrospective case series examines 3 patients at a single institution with persistent spinal fluid leak after IDDS placement (and explantation in one case) resulting in headache and/or seroma formation that were treated with epidural fibrin glue. Three patients underwent IDDS implantation with baclofen for spasticity. In 1 patient, a cerebral spinal fluid leak developed at 1-week postoperatively. After several unsuccessful epidural blood patches and surgical exploration with a catheter revision, she was ultimately treated successfully with a fibrin glue patch. The second patient received an IDDS and did well until a seroma developed 1 year later. He was likewise treated with an epidural fibrin glue patch after 2 failed blood patches. In a third patient, a spinal fluid leak developed after explantation of an IDDS and was treated with an epidural fibrin glue patch as initial therapy.