

Epidural blood patch

Indications

Epidural blood patch provides relief in the majority of patients with [Intracranial hypotension](#).

Some patients require more than one EBP and relief in [headache](#) may not be permanent.

If unsuccessful can repeat blood patch with the same or larger amount of blood. Positioning the patient in Trendelenberg position after injection aides in the movement of blood to cover more segments for increased effectiveness.

May not be effective in up to 25–33%.

● directed epidural blood patch to site of the leak if the above fails ● percutaneous placement of fibrin sealant at the site of the leak: can provide relief in patients that fail to improve with conservative measures and epidural blood patch

The epidural [blood patch](#) (EBP) is commonly used to treat postdural puncture headaches (PDPHs) from [spinal anesthesia](#), dural puncture with [epidural anesthesia](#), and diagnostic and therapeutic [lumbar puncture](#).

It uses autologous [blood](#).

[Unintended durotomy](#): Primary repair may be impossible in some situations (e.g. when the opening cannot be found or accessed, as is sometimes the case when it occurs on the nerve root sleeve) and alternatives here include placement of a fat or muscle graft over the suspected leak site, use of the patient's own blood for a "blood patch" (one technique is to have the anesthesiologist draw \approx 5–10 ml of the patient's blood from an arm vein, keeping it in the syringe for several minutes until it starts to coagulate, and then to have the anesthesiologist inject the blood onto the dura), use of gelfoam, fibrin glue... Some recommend that the wound not be drained post-op, with a water-tight closure of fascia, fat, and skin to add to the barrier. Others use a subcutaneous drain or epidural catheter. CSF diversionary procedures (e.g. through a drain inserted 1 or more levels away) may also be used.

Treatment for H/A following [LP](#)

Epidural blood patch. For refractory post-lumbar puncture or post-myelogram H/A. Works in one application in over 90% of cases, may be repeated if ineffective. Theoretical risks: infection, cauda equina compression, failure to relieve H/A.

Technique

[Epidural blood patch technique](#).

Case reports

A patient with [pseudotumor cerebri](#) ([idiopathic intracranial hypertension](#)) who had a [lumboperitoneal shunt](#) placed for persistent [headaches](#) and subsequently developed symptoms similar to a PDPHs that were successfully treated with an EBP. While the exact mechanism by which our patient was experiencing PDPH symptoms is unknown, the EBP administration proved to be both therapeutic and diagnostic by ruling out shunt catheter malfunction through a resolution of symptoms ¹⁾.

¹⁾

Ferns J, McCartney M. Epidural Blood Patch for Postdural Puncture Headache due to Lumboperitoneal Shunt Placement in a Patient With Pseudotumor Cerebri: A Case Report. A A Pract. 2018 Sep 26. doi: 10.1213/XAA.0000000000000897. [Epub ahead of print] PubMed PMID: 30272589.

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