

Children's Mercy Kansas City

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Clinical Pathways

Evidence-Based Practice Collaborative

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### Post-Dural Puncture Headache

Children's Mercy Kansas City

These guidelines do not establish a standard of care to be followed in every case. It is recognized that each case is different and those individuals involved in providing health care are expected to use their judgment in determining what is in the best interests of the patient based on the circumstances existing at the time. It is impossible to anticipate all possible situations that may exist and to prepare guidelines for each. Accordingly, these guidelines should guide care with the understanding that departures from them may be required at times.

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**Abbreviations (laboratory & radiology excluded):**

CNS = central nervous system  
EBP = epidural blood patch  
HPI = history of present illness  
PDPH = post-dural puncture headache  
pt = patient  
tx = treatment  
W/U = workup

Symptoms\* of PDPH include:

- Bilateral frontal or occipital headache that worsens in the upright position and improves in the supine position
- Nausea, dizziness, neck pain, visual changes and occasionally tinnitus
- Hearing loss or radicular symptoms into the arms

\*Symptoms, especially headache, may also be worse with coughing and Valsalva maneuver, even in the supine position.

<https://www.ncbi.nlm.nih.gov/books/NBK430925/>

**Conservative treatment (timeframe: at least 24 hours) includes:**

- Strict bedrest in a supine position
- Adequate hydration (IV or PO) and the avoidance of dehydration
- Stool softeners (to avoid straining)
- Mild analgesics (acetaminophen, NSAIDs)
- Adjuncts for nausea/vomiting (ondansetron, diphenhydramine) as needed

**Contraindications for EBP include:**

- Coagulopathy (may order PTT/INR/Platelet count if indicated)
- Fever
- Bacteremia/sepsis
- CNS infection
- Intracranial pathology
- Infection at the site
- Fever, unless resolved for 24 hours with known source; Many pro-inflammatory or infectious conditions may preclude a safe epidural blood patch
- Patient/guardian refusal

**Discussion of risks includes:**

- Failure of the procedure to provide relief from PDPH, worsening of the headache, worsening of any neurological conditions originating at or near the site of the proposed epidural blood patch
- Infection in the epidural space, epidural bleeding and hematoma formation that may cause neurologic complications
- Acute (and less likely chronic) low back pain
- Lower extremity paresthesia or radiculopathy
- Anesthetic risks associated with the patient requiring sedation or anesthesia care during the procedure

