Evidence-based clinical practice guidelines on postdural puncture headache: infographics

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SUMMARY
Postdural puncture headache (PDPH) may occur after spinal anesthesia, epidural analgesia, or neuraxial procedures. Typically, it presents with headaches, neck stiffness, and hearing symptoms. Additionally, it can be associated with potential complications such as subdural hematoma, cranial nerve dysfunction, or persistent headaches. The two infographics (figures 1 and 2) provide brief highlights of the recently published multisociety guidelines on PDPH.1 2 The report offers a structured, evidence-based approach to understanding and managing PDPH. It also recognizes limitations in the evidence, indicating the need for

Methods
- A multi-society international working group developed 10 review questions relevant to PDPH
  - Following a literature search via MEDLINE (Ovid), recommendations were graded using US Preventative Task Force definitions

Risk Factors for PDPH
- Younger adults
- Female sex
- Cutting needles
- Wider-gauge needles

Diagnosis
Suspect PDPH if:
- Headache and/or neurological symptoms (e.g. stiff neck, subjective hearing symptoms) develop within 5 days of a neuraxial procedure
- Symptoms often improve when lying down

Prevention
To reduce the risk of PDPH:
- Wherever possible, use non-cutting spinal needles for lumbar puncture in all populations
- If cutting needles, use a narrower gauge

**Treatment**
- Regular multimodal analgesia, including acetaminophen and NSAIDs
- Caffeine in the first 24h of symptoms

**Epidural Blood Patch (EBP)**
- An EBP should be offered if PDPH doesn’t respond to conservative therapy and impairs daily living activities

An EBP should be performed:
- Using a strict aseptic technique
- With informed consent on potential risks
- 15-20 ml blood injected slowly and incrementally and stop if headache or backache develops

**Procedural Interventions**
- Evidence does not support routine use of sphenopalatine ganglion blocks
- Greater occipital nerve block can help in certain cases of PDPH.* However, headaches may return, requiring an EBP

*PDPH following lumbar puncture with narrow gauge spinal needle (22 G or smaller)

**Complications & Follow-up**
- Inform the patient about PDPH sequelae and contact information
- Arrange appropriate follow-up until the headache resolves
  - Inform primary care and other physicians about management
  - Refer to appropriate specialist and neuroimaging if worsening headache, new neurological symptoms/deficits or change in headache

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**Figure 2**
Further research to refine recommendations and improve the management of PDPH. Overall, it serves as a valuable resource for medical professionals dealing with PDPH, offering guidance for diagnosis, prevention, and treatment while acknowledging the gaps in current knowledge.

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