"Making Waves"
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PTERYGOPALATINE FOSSA BLOCK FOR HEADACHE IN SPONTANEOUS CSF LEAK WITH SPINAL HEMATOMAS AND POSSIBLE INTRACRANIAL HYPERTENSION

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The patient:

- 53 year old female presents with "worst headache of my life" after forceful vomiting from acute gastroenteritis.
- Positional bilateral headache, visual disturbance, pulsatile tinnitus, neck stiffness, back pain.
- Exam revealed bilateral papilledema → concern for coexisting intracranial hypertension.

Imaging:

- Multiple blood-filled Tarlov cysts.
- Eccentric anterior epidural CSF collection, T12–L5.
- Multifocal spinal subdural/subarachnoid hematomas; at T11–12 hematoma encircles the cord → moderate central canal stenosis.

The Intervention:

- Bilateral pterygopalatine fossa (PPF) block under continuous ultrasound guidance on hospital day 3
- Patient received 100% relief for ~15 hrs, then 50–70% sustained relief. Discharged opioid-free on day 7.

Why not a blood patch?

- Hematoma causing moderate central canal stenosis
- Possible intracranial hypertension, risk of worsening

Rationale:

- PPF block interrupts parasympathetic/sphenopalatine ganglion output,
- producing cerebral vasoconstriction and dampening neurogenic inflammation symptomatic relief without correcting the leak.

When EBP is contraindicated, the PPF block is a low risk procedure that may be considered for treatment of spontaneous CSF leak headache. The PPF block is under active study for other acute headache syndromes (e.g., BLOCK-SAH).

A bilateral pterygopalatine fossa (PPF) nerve block relieved a disabling CSF-leak headache when a blood patch was too dangerous to do.

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