

CASE REPORT

Unexpected Therapeutic Response to Lumbar Puncture Leading to the Diagnosis of Idiopathic Intracranial Hypertension in a Patient Previously Diagnosed with TMJ Dysfunction

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BACKGROUND

Idiopathic intracranial hypertension (IIH) raises intracranial pressure without a mass, hydrocephalus or other secondary cause.[1] It can look like worsening migraine or facial pain,[2,4] and papilledema may be subtle or absent — so diagnosis is often delayed.[3]

THE PATIENT

40-year-old woman (BMI 27.3) with migraine with sensory aura (improved on topiramate) and a diagnosis of **temporomandibular joint (TMJ) dysfunction** for jaw pain, ear pressure and facial numbness. She developed a new, severe occipital headache with right pulsatile tinnitus, visual disturbance and diplopia.

LESSONS

1. **IIH can mimic migraine and TMJ pain.** A new headache phenotype in a known migraineur deserves a fresh look.
2. **Relief after lumbar puncture (LP) is a diagnostic clue** — here it happened twice, before IIH was recognized.
3. **Absent papilledema does not rule out IIH** (IIH without papilledema).[3]
4. **Pulsatile tinnitus points to raised pressure** once vascular causes are excluded.

Jaw pain that improves after a lumbar puncture may be **intracranial hypertension**, not TMJ.

In a patient with migraine and a TMJ diagnosis, relief after draining cerebrospinal fluid (CSF) — **twice** — unmasked IIH, even with normal imaging and no frank papilledema.

EACH TIME CSF PRESSURE WAS LOWERED, SYMPTOMS EASED



Schematic of the reported course — not measured data.

Take a picture to read the full case report

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CASE TIMELINE

~1 yr before	Ear pressure, jaw pain, facial numbness → stroke work-up negative → **diagnosed TMJ dysfunction**
Months later	Abrupt occipital headache ("punched in the back of the head"), visual disturbance, right pulsatile tinnitus → CTA raises aneurysm concern
LP #1	Opening pressure (OP) **23 cm H_2O**; subarachnoid hemorrhage excluded → **immediate, marked relief** of headache and jaw pain
LP #2	Weeks later, diplopia → OP 12 cm H_2O → **relief again**, lasting ~2 weeks
Recurrence	Morning pressure headache, worse lying flat, bending or exertion; better with head elevated. MRI, MRA, CTA, CT normal; mildly blurred optic disc margins only; neuro-ophthalmology exam unremarkable
Outcome	**IIH diagnosed** → acetazolamide titrated, topiramate reduced → symptoms improved

THINK IIH WHEN YOU SEE

- Positional headache, worse supine
- Pulsatile tinnitus
- Transient diplopia or visual change
- Relief after CSF drainage

What's new: IIH has been linked to facial pain and trigeminal neuralgia,[2,4,5] but to our knowledge not to TMJ-type pain. The jaw pain is thought to be pressure-mediated, not true joint dysfunction.

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