


INTERACTN CASE SUMMARY

The case of a 19-year-old woman with headache, papilledema, and diplopia

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Summary of Case

A 19-year-old woman with chronic headaches presents with 1 month of worsening headache and diplopia. Her headache is associated with photophobia and phonophobia, is worse in the supine position, and recently associated with nausea and vomiting. She has horizontal diplopia improved by covering either eye, as well as pulsatile tinnitus. Her exam is remarkable for intact monocular vision acuity, mild bilateral abducens nerve palsies, and mild-to-moderate bilateral optic disk edema (Figure 1). She had an MRI of the brain showing mild flattening of the posterior sclera of the globes (Figure 2) and narrowing of the transverse venous sinuses bilaterally. Ocular coherence tomography (OCT) showed bilateral increased thickness of the retinal nerve fiber layer (RNFL) to 333 and 356 μm . A lumbar puncture was notable for an opening pressure of 29 cm H_2O .

Diagnosis: Idiopathic intracranial hypertension.

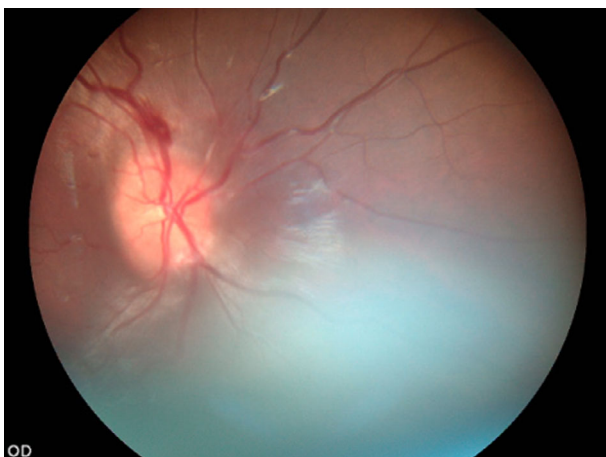


Figure 1. Optic disk swelling on fundoscopic examination of the right eye showing blurred disk margins, particularly on the nasal border of the optic disk, as well as optic disk hyperemia and flame hemorrhage.

Take-Home Points

- Symptoms and signs of elevated intracranial pressure (ICP) can include positional headache, nausea and vomiting, diplopia and sixth nerve palsies, blurred vision, and pulsatile tinnitus.
- When concerned about elevated ICP, urgent neuroimaging to rule out a structural mass lesion, followed by lumbar puncture, is recommended.
- Neuroimaging is required to exclude alternative causes of headache and elevated ICP such as structural mass lesions and cerebral venous sinus thrombosis.

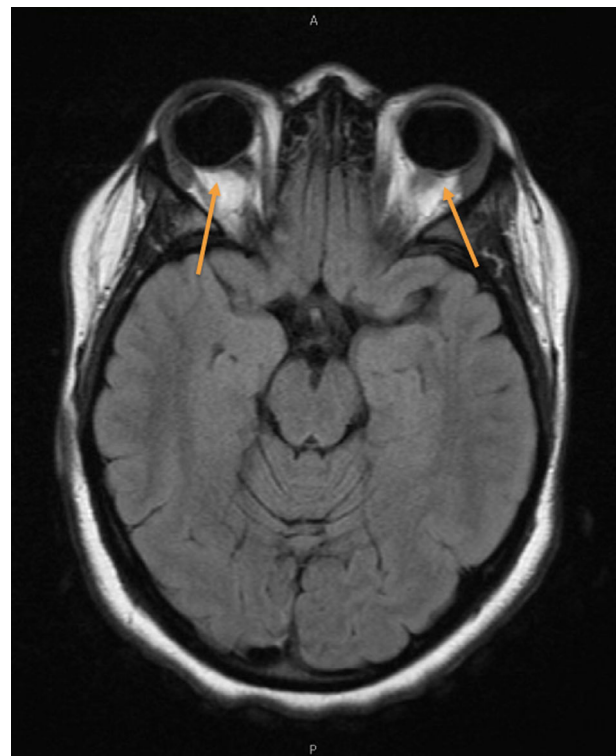


Figure 2. Mild flattening of the posterior aspect of the globes bilaterally, as seen on MRI of the brain.

- Imaging findings in idiopathic intracranial hypertension (IIH) include flattening of the posterior aspects of the globes, transverse venous sinus stenosis, and optic nerve sheath dilation.
- Long-term management of IIH includes weight loss, acetazolamide, therapeutic lumbar punctures, and close monitoring for symptom recurrence, including alterations in visual acuity and visual field deficits.