

# Diagnosis and Management of Ophthalmic Emergencies in the Hospital



Rebecca A. Wu, MD<sup>a,\*</sup>, Paul Grant, MD<sup>b</sup>, Jonathan Trobe, MD<sup>a,c</sup>

## KEYWORDS

- Papilledema • Optic disc edema • Sudden vision loss • Third cranial nerve palsy
- Third nerve palsy • Endophthalmitis • Endogenous endophthalmitis

## HOSPITAL MEDICINE CLINICS CHECKLIST

1. Papilledema is defined as bilateral optic disc swelling caused by increased intracranial pressure.
2. Papilledema is most commonly caused by intracranial mass lesions, idiopathic intracranial hypertension, hydrocephalus, intracranial hemorrhage, venous thrombosis or obstruction, meningitis, and cerebral edema.
3. Emergent neuroimaging of the brain is critical in diagnosis of the patient with papilledema.
4. Vision loss caused by giant cell arteritis should be treated immediately with corticosteroids to prevent involvement of the second eye.
5. In complete third cranial nerve palsy with pupil involvement, the affected eye is turned out and slightly down, with a paralysis of adduction, elevation, and depression, ptosis, and a dilated unreactive pupil.
6. Third nerve palsy may be an early sign of a neurologic emergency, such as an intracranial aneurysm, pituitary apoplexy, uncal herniation, or giant cell arteritis.
7. In third nerve palsy, computed tomography (CT) and CT angiography should be performed emergently to rule out aneurysm.

**CONTINUED**

<sup>a</sup> Department of Ophthalmology and Visual Sciences, University of Michigan Health System, Kellogg Eye Center, 1000 Wall Street, Ann Arbor, MI 48105, USA; <sup>b</sup> Department of Internal Medicine, Division of General Medicine, University of Michigan Health System, 1500 East Medical Center Drive, 3119 Taubman Center, Box 5376, Ann Arbor, MI 48109, USA; <sup>c</sup> Department of Neurology, University of Michigan Health System, Kellogg Eye Center, 1000 Wall Street, Ann Arbor, MI 48105, USA

\* Corresponding author.

E-mail address: [beckyw@med.umich.edu](mailto:beckyw@med.umich.edu)

**CONTINUED**

8. If these imaging studies are negative according to review by an experienced radiologist, then magnetic resonance imaging should be performed if the patient is at low risk for a microvascular ischemic cause.
9. Endogenous endophthalmitis is a rare disease, with potentially devastating consequences. Early recognition and treatment are essential to improve the chances of preserving vision.

**PAPILLEDEMA****Definitions***How is papilledema defined?*

Papilledema is defined as bilateral optic disc swelling caused by increased intracranial pressure (ICP).

**Differential Diagnosis***What is the differential diagnosis of optic disc swelling?*

Causes of optic nerve swelling are listed in **Box 1**.

Optic disc swelling can be mimicked by congenitally anomalous, elevated optic discs. Unlike optic disc swelling, congenitally anomalous discs do not usually show disc margin blurring, hemorrhages, or cotton-wool spots. They usually do not cause vision loss and do not show leakage of intravenously injected fluorescein dye.

**Epidemiology***What are the most common causes of papilledema?*

**Box 2** lists the causes of papilledema, grouped by frequency.

*Can medications cause papilledema?*

Yes, tetracycline, minocycline, vitamin A derivatives (isotretinoin), growth hormone, and steroid withdrawal can cause papilledema.

**History and Examination***Which symptoms are associated with papilledema?*

- Headaches (may be positional and worsen with Valsalva maneuvers)
- Nausea and vomiting
- Pulsatile tinnitus
- Transient visual obscurations (often bilateral, lasting for seconds, and may be precipitated by changes in position)
- Diplopia (most commonly from sixth nerve palsy, and may be unilateral or bilateral)

Download English Version:

<https://daneshyari.com/en/article/3474263>

Download Persian Version:

<https://daneshyari.com/article/3474263>

[Daneshyari.com](https://daneshyari.com)