Hani I. Kuttab, MD; Mark Chottiner, MD; Asadolah Movahedan, MD; Nadim M. Hafez, MD; John Purakal, MD

0196-0644/$-see front matter

https://doi.org/10.1016/j.annemergmed.2018.08.442

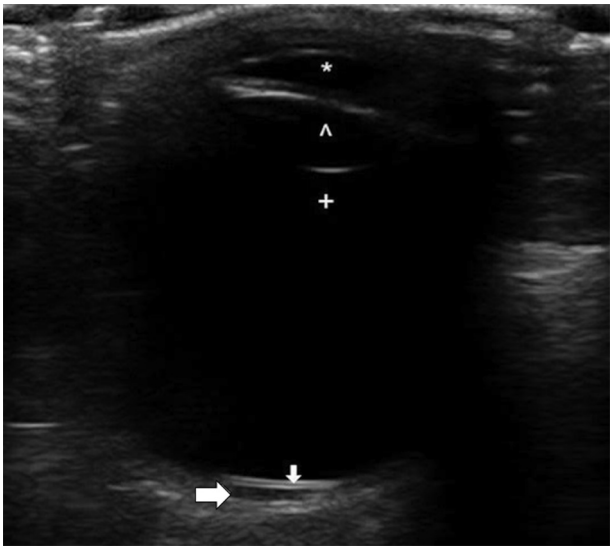

Figure 1. Axial/transverse ocular ultrasonography of the left eye, with the anterior chamber (asterisk), lens (arrowhead), vitreous (plus sign), retina (downward arrow), and area of hemorrhage beneath the retina (rightward arrow).

Figure 2. Funduscopic examination of the left eye, demonstrating the optic disk (arrowhead), fovea (plus sign), and area of hemorrhage beneath the fovea (rightward arrow).

[Ann Emerg Med. 2019;73:e13-e14.]

A 38-year-old woman presented with vision loss in her left eye after assault 9 days prior. Visual acuity in the affected eye was 20/400, and the remainder of the ophthalmic and neurologic examination was unremarkable. Bedside ocular ultrasonography was performed (Figure 1). Given the extent of vision loss, ophthalmology was also consulted for further evaluation in the emergency department.

For the diagnosis and teaching points, see page e14.
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(continued from p. e13)

DIAGNOSIS:

Choroidal rupture with subretinal hemorrhage. Bedside ocular ultrasonography revealed elevation of the macular retina, with a thin, hypoechoic fluid collection beneath it (Figure 1). On funduscopic examination, a 2-disk-diameter area of deep choroidal hemorrhage was evident underneath the fovea, confirming the diagnosis (Figure 2).

In blunt ocular trauma, anteroposterior compression of the eye stretches the posterior pole because of hydraulic displacement of the vitreous, which may lead to choroidal rupture.[1] In our patient's case, the hemorrhage was beneath the fovea, explaining the extent of vision loss. In most instances, no immediate treatment is necessary. Patients should be followed closely because of the risk of choroidal neovascularization and should be given return precautions for worsening vision because this may suggest its development. Should this develop, intravitreous injections of antivascular endothelial growth factor agents can be used to prevent further vision loss.[2,3] Our patient followed up with a retina specialist the next week to evaluate the need for these agents and for possible surgical intervention. She was ultimately not offered surgical intervention or intravitreous injections. She later expressed that she had regained some vision in her left eye.

Author affiliations: From the Department of Medicine, Section of Emergency Medicine (Kuttab, Chottiner, Hafez, Purakal), and the Department of Ophthalmology and Visual Science (Movahedan), University of Chicago Medical Center, Chicago, IL.

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