Ophthalmic Images

# Real-Time Visualization of a Transient Retinal Embolus

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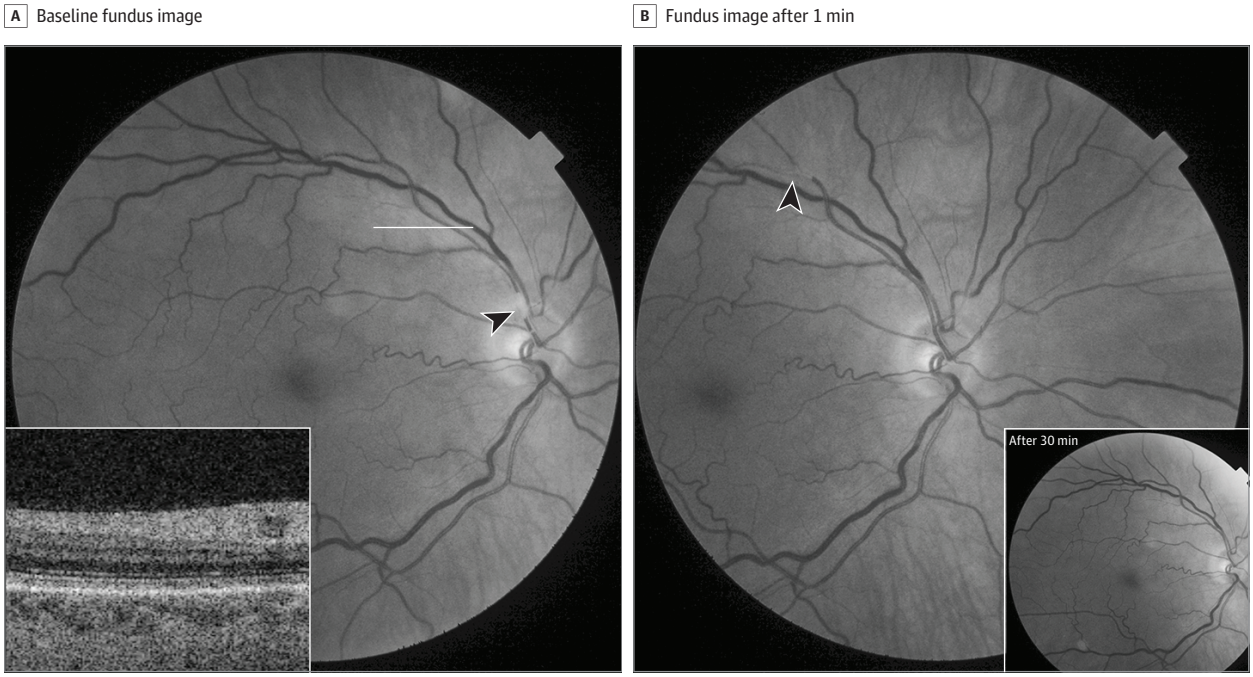


**Figure.** Red-free fundus images with real-time demonstration of a transient retinal embolus. A, The first image was captured approximately 10 seconds after the patient noted transient monocular lower altitudinal visual field loss. A 550-µm-long embolus, likely composed of platelets and fibrin, was noted in the superior temporal arteriole (arrowhead). Optical coherence tomography scan through the pale retina at time of the first image (lower inset) revealed above-normal hyperreflectivity and thickness of the retinal nerve fiber layer. B, A disc-centered image, taken 1 minute after the first image (approximately 45 seconds after remission of symptoms), shows that the embolus had migrated to a vessel bifurcation (arrowhead). A slightly pale appearance of the retina corresponding to the supply of the occluded arteriole was seen in both images and remained 30 minutes after the first image was taken (lower inset), when the embolus no longer was apparent.

**A 64-year-old male** presented for evaluation of episodes of monocular vision loss in his right eye lasting 20 seconds. He had undergone biological aortic valve implant surgery recently and took rivaroxaban, 20 mg, daily. The patient reported experiencing a new episode of inferior altitudinal visual field defect approximately 10 seconds before undergoing macula-centered imaging, which revealed a 550-µm-long whitish embolus in the superior temporal arteriole, with a pale appearance of the retina distal to the embolus, presumably from inner retinal ischemia (**Figure**, A). A disc-centered image, 1 minute later, revealed distal migration of the embolus (Figure, B). The embolus no longer was apparent 30 minutes after the initial image, but the pale retinal appearance persisted. Although it is unknown if the inner retinal edema was due to the embolus visualized or previous emboli that no longer were apparent, the case shows how quickly an embolus can move distally.



ARTICLE INFORMATION

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**Conflict of Interest Disclosures:** Dr Bjerager reported receiving speaker fees from Roche Denmark outside the submitted work. No other disclosures were reported.

**Additional Contributions:** We thank the patient for granting permission to publish this information.