Ophthalmic Images

Central Retinal Artery Occlusion With Cilioretinal Artery Sparing

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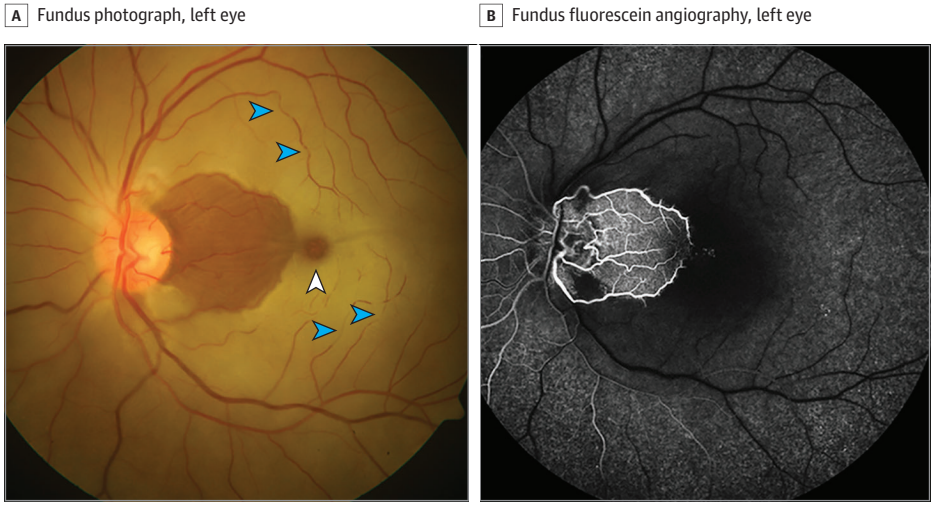

Figure. A, Fundus photography showing central macular sparing in the left eye with "box carring" of the retinal vessels (blue arrowheads) and a cherry-red spot (white arrowhead). B, On fluorescein angiography, mild retinal perfusion is noted nasally, which spared a central island, indicating a patent cilioretinal artery with central retinal artery occlusion.

A patient in their early 30s presented with decreased vision in the left eye (6/60) for 1 week and a relative afferent pupillary defect. Fundus examination revealed "box carring" of the retinal vessels, a cherry-red spot, retinal opacification, and a small island of normal retina temporal to the optic disc (**Figure**, A). An embolus was not visualized within the central retinal artery.

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Fundus fluorescein angiography showed almost no retinal perfusion except for mild perfusion nasally, which spared a central island, indicating a patent cilioretinal artery (CLRA) with central retinal artery occlusion (CRAO) (Figure, B). The patient was a cigarette smoker and had hypertension. As the patient did not have a headache or temporal scalp tenderness and their erythrocyte sedimentation rate was within normal limits, giant cell arteritis was ruled out. Echocardiography (transthoracic) and computed tomography of the neck vessels yielded normal results. Although CRAO can cause profound vision loss, the presence of CLRA (in about 30% of individuals) can be associated with preservation of central vision, as this vessel derives from the posterior ciliary artery system.[1-4]

ARTICLE INFORMATION

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