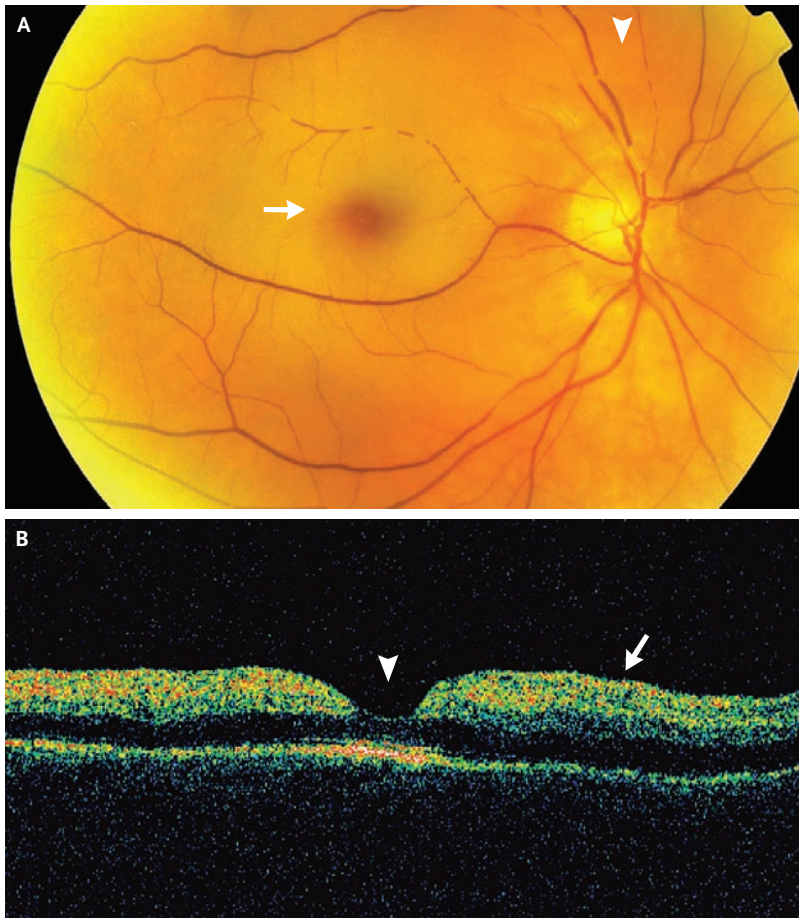


IMAGES IN CLINICAL MEDICINE

Central Retinal Artery Occlusion



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A 76-YEAR-OLD MAN WITH HYPERTENSION PRESENTED WITH A SUDDEN, PAINLESS, AND PROFOUND LOSS OF vision in the right eye. Visual acuity was light perception only in the affected eye, with a positive relative afferent pupillary defect. Ophthalmoscopic examination revealed diffuse retinal whitening, constriction of the arteriole and venule with segmentation (Panel A, arrowhead), and a cherry-red spot in the macula (Panel A, arrow) — all signs compatible with the diagnosis of central retinal artery occlusion. A horizontally oriented optical coherence tomograph of the macula (Panel B, arrowhead) demonstrated increased thickness and reflectivity of the inner bands, indicating ischemic damage to the nerve fiber and adjacent layers (Panel B, arrow).

Therapy for this condition remains unclear. However, given the sight-threatening nature of the lesion, ocular massage and paracentesis of the anterior chamber were performed but were unsuccessful in improving the patient's vision. Further evaluation for an underlying cause was unrevealing, with a normal erythrocyte sedimentation rate, C-reactive protein level, and echocardiogram. Ultrasonography of the carotid arteries demonstrated stenosis of less than 50% on the right side.

Central retinal artery occlusion is associated with a variety of medical conditions, including embolic events and rheumatologic conditions, such as temporal arteritis. Since no specific cause was identified in this case, the patient was given antiplatelet therapy only. Optic atrophy developed within 12 weeks, and the patient has continued to perceive only light in the affected eye.

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