An 86-year-old woman had noted intermittent, transient “shading” and “hazing” of the vision in her right eye. Her best corrected vision in that eye was 20/20. She had pseudophakia from past cataract surgery. Numerous Hollenhorst plaques and arteriolar sheathing were seen on ophthalmoscopic examination. Duplex ultrasonography identified minimal to mild plaque formation and no carotid vascular blood flow problems. Laboratory studies revealed hypercholesterolemia; the patient’s serum total cholesterol level was 212 mg/dL; low-density lipoprotein cholesterol level, 138.8 mg/dL; and high-density lipoprotein cholesterol level, 49 mg/dL. Her serum triglyceride level was 121 mg/dL. Hollenhorst plaques are composed of cholesterol. They appear as small, bright, refractile, whitish or golden to yellow-orange crystals that are often lodged at arteriole bifurcations. These emboli rarely cause significant obstruction to the retinal arterioles. Although they are usually asymptomatic, plaque-induced chronic vessel wall irritation can lead to sheathing of the artery and amaurosis fugax, a brief period of transient monocular or partial blindness. The most frequent cause of these cholesterol plaques is carotid artery disease. In this setting, atheromatous ulceration and stenosis are most often seen at the bifurcation of the common carotid artery in the neck.

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