What You Should Know About Eccentric Disciform Lesions
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An eccentric disciform lesion is an abnormal blood vessel growing beneath the peripheral retina. The retina is the neural lining of the eye, as illustrated in figure 1. The light entering the eye through the pupil is focused by the lens onto the retina, where photoreceptors convert light into nerve signals traveling to the brain via the optic nerve. Beneath the retina, a normal layer of nutritive blood vessels is present called the choroid. The choroid and retina are separated by a thin barrier membrane called Bruch’s membrane. In some elderly patients, a crack forms in Bruch’s membrane, and abnormal blood vessel sprouts grow through the crack to form a mass of vessels under the retina. These sprouts of vessels are fragile and can bleed or produce scar tissue. These lesions may be discovered incidentally on a routine eye examination, or the onset of hemorrhage can cause symptoms of blurring and floaters leading the patient to seek medical attention.

Figure 1. Eye Anatomy

Naming Confusion

Eccentric disciform lesions are uncommon, and many different names have been given to them. All of the following names apply to the same condition: eccentric disciform degeneration, eccentric disciform scar, extramacular disciform degeneration, hemorrhagic detachment of the peripheral retinal pigment epithelium, and peripheral exudative hemorrhagic chorioretinopathy. Figure 2 depicts an eccentric disciform lesion.

Clinical Profile

Most patients with eccentric disciform lesions are elderly. The average age of diagnosis is 72 years. Seventy-five percent of patients are female. Caucasians seem more predisposed to this condition than people of African or Asian ancestry. Hypertension, far sightedness (hyperopia), and use of the blood thinner warfarin may be associated factors.
Masquerade Syndrome

The biggest clinical dilemma is differentiating these lesions from intraocular melanoma or metastatic cancers. Sometimes the distinction is easy. Other times differentiation may be difficult. Eccentric disciform lesions more commonly have blood at the base of the lesion, are more commonly pale in color, and usually are flatter and have an irregular surface. Melanomas are usually darker colored. Melanomas and metastatic cancer to the eye more commonly have associated subretinal fluid. Besides an eye examination, ancillary studies may be helpful, such as ultrasound and fluorescein angiography, in which a series of pictures is taken after injection of dye in the vein of the arm.

Association with Age Related Macular Degeneration

Approximately 25-40 % of patients with eccentric disciform lesions have age related macular degeneration. The wet form of macular degeneration involves the same sort of abnormal blood vessel growth as is found in eccentric disciform lesions. For this reason, the ophthalmologist will examine a patient with an eccentric disciform lesion carefully to detect the presence of macular degeneration.

Treatment

If bleeding from an eccentric disciform lesion breaks through the retina, spreads throughout the vitreous gel, and is slow to clear, an operation called vitrectomy may be recommended. In a vitrectomy, three holes of about 1 mm diameter are made in the white wall of the eye (sclera) through which cutting instruments and fiber optic lights are inserted to remove the bloody vitreous and
replace it with clear saline. If subretinal bleeding spreads under the macula, the
center of the retina, the chance of recovering good vision goes down, but this is
rare. In most cases, only observation is recommended, because in most cases
neither surgery nor laser would improve the outcome.

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References

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