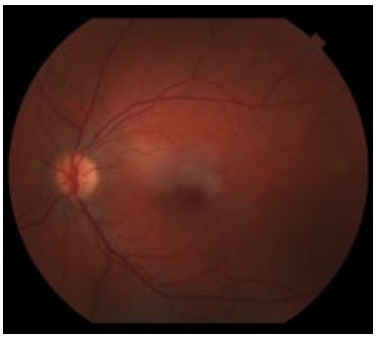
Case of the month: October 2010



GP, a 36-year-woman presented with “a spot in the middle of my left eye” for the past three days. “I can’t see through it.”

MedHx – Pregnant, in 8th week of gestation.

Past MedHx: two prior miscarriages; cardiac septal defect

Ophthalmic examination:

(Best corrected) Visual Acuity: 20/20 OD; 20/30 OS

Slit lamp examination: clear OU

Fundus: OD normal; white embolus associated with retinal infarct in the left fovea (See figure)

Dx: Embolic branch retinal vein occlusion

Discussion: (Harry Engel, MD, Clinical Professor of Ophthalmology, Albert Einstein College of Medicine)

The ophthalmic findings indicate a branch arteriole occlusion in superior macula associated with a white non-refractile embolus (consistent with platelets and/or fibrin).

Branch retinal artery occlusion in a young individual is frequently associated with cardiac septal and valvular defects. A trans-thoracic echocardiogram may reveal no abnormalities, but a trans-esophageal study may demonstrate a patent foramen ovale in the absence of other cardiac lesions. Often, a history of migraine is elicited. Embolic disease is more likely to develop in individuals with both cardiac septal defects and an underlying cause for hypercoagulability. Pregnancy,, smoking and malignancy potentiate clotting. The patient’s history of multiple miscarriages also suggests an underlying coagulopathy, eg, the anti-phospholipid syndrome.

Recommended therapy: Start low dose ASA immediately. Cardiac and hematologic evaluations needed to address underlying cause of embolic retinal stroke, with special emphasis on atrial abnormalities and clotting disturbances.

Ref: Wisotsky B, Engel HM: Transesophageal echocardiography in the Diagnosis of Branch Retinal Artery Occlusion. Am J Ophthalmol 1993; 115; 653-6.

Editor's Note: Laboratory testing confirmed presence of an anti-phospholipid antigen. The patient was begun on low dose heparin. The embolus and retinal whitening cleared over two weeks, but a central scotoma remained.