Images in Ophthalmology is intended to highlight the visual aspect of ophthalmology. We welcome your submission of high quality photographic prints or slides (in triplicate) which illustrate an ophthalmic condition, a surgical or laser procedure, or the management of a case. The photographs and legends standing alone should adequately present the point, but to enhance the presentation, a case history or clinical description of 350 or fewer words, and limited references (maximum of 5), is required.

Among the sources of contributions to this section would be well-prepared ophthalmic training program grand rounds cases illustrating an important point or offering a unique perspective.

We look forward to frequent presentation of memorable images of ophthalmic patients and issues.

Submissions for this section should be addressed to the Editorial Office.

Spontaneous Resolution of Submacular Hemorrhage With Marked Visual Improvement

**Figure 1.** A fundus photo of the right eye showing the large submacular hemorrhage. Visual acuity was 20/400.

**Figure 2.** Right eye 1 month later. Note the reabsorbing subretinal clot. Visual acuity had improved to 20/50.

**Figure 3.** At the 3 month follow-up, the submacular hemorrhage had essentially resolved leaving only minimal retinal pigment epithelial changes. Visual acuity was 20/30.

**Figure 4.** Twenty months later, the posterior pole showed; minimal subretinal fibrosis and retinal pigment epithelium changes. Visual acuity was 20/20.
A 49-year-old female presented with a 3-week history of sudden loss of vision in her right eye (OD). Four years earlier she had undergone laser treatment for a juxtapfoveal choroidal neovascular membrane in her left eye (OS) from presumed ocular histoplasmosis syndrome. The initial best corrected visual acuity was 20/400 OD and 20/20 OS. Examination of the right eye revealed a large submacular hemorrhage (Figure 1). The left eye showed the healed juxtapfoveal scar with periphery histo spots. Fluorescein angiography of the right eye showed blocked fluorescence from the submacular hemorrhage. Indocyanine green angiography was not performed. The patient denied aspirin intake or any physical exertion. After discussion of treatment options, including surgery, it was elected to observe the patient.

One month later, visual acuity OD had improved to 20/50. Dilated exam showed resolving subretinal blood (Figure 2). At the 3-month follow-up, visual acuity was 20/30 and the submacular hemorrhage had mostly resolved, leaving only minimal retinal pigment epithelial changes and no clinical sign of a choroidal neovascular membrane (Figure 3). Fluorescein angiography was not performed because of the absence of clinical signs of a neovascular membrane. On her follow-up at 20 months after the hemorrhage, visual acuity was 20/20. The posterior pole showed minimal subretinal fibrosis and retinal pigment epithelial changes (Figure 4).

COMMENT

Glatt and Machemer demonstrated irreversible damage to rabbit retina within 24 hours of onset of subretinal hemorrhage. In published clinical studies, the reported visual outcomes are variable and depend upon the underlying disease process. Risk factors associated with poor visual outcome include presence of age-related macular degeneration, thick hemorrhage, hemorrhage with choroidal neovascular membrane, and presence of blood under the retinal pigment epithelium. With current vitreoretinal surgical techniques, it is now possible to remove submacular blood. However, Ibanez et al. reported variable and usually disappointing visual results with surgical intervention for submacular hemorrhage. The present case demonstrates that large subretinal hemorrhages may undergo spontaneous resolution and achieve an excellent visual outcome. The Submacular Surgery Trial, a multi-center prospective study, is currently evaluating surgical outcomes compared to the natural course of submacular hemorrhage in age-related macular degeneration.

Nauman A. Chaudhry, MD
Harry W. Flynn, Jr., MD
Mary Lou Lewis, MD

From the Department of Ophthalmology, Bascom Palmer Eye Institute, University of Miami School of Medicine, Miami, FL.
Address correspondence to Harry W. Flynn, Jr., MD, Bascom Palmer Eye Institute, PO Box 016880, University of Miami School of Medicine, Miami, FL 33101.

REFERENCES