2 was relatively solid but appeared hollow ultrasonographically. We advise that UBM be used for assessment of caruncular tumors, as it provides high-resolution imaging to submillimeter levels and can delineate tumor extent and configuration. However, we caution that both cystic and densely packed solid tumors can appear echoluent.

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Three weeks following laser photocoagulation, the patient’s VA deteriorated further to 20/400 OS. The FA showed recurrence of subfoveal CNV, which was then treated with photodynamic therapy. The patient required 4 sessions of photodynamic therapy, 2, 5, 10, and 13½ months after ERM removal. The FA 17 months following surgery showed subretinal fibrosis with no evidence of leakage. At the 2-year follow-up, the patient’s VA remained poor, at 20/800 OS.

Comment. In this series, we report 3 cases of CNV that developed after idiopathic ERM removal. Three additional cases have been reported in the literature. Preoperatively, there was no evidence of age-related macular degeneration in any of the patients. The mean duration of the ERM before surgery in the 6 cases was 22.6 months (range, 5 months to 4 years). Choroidal neovascularization was diagnosed between 1 month and 2 years postoperatively. The mean preoperative VA was 20/65 (range, 20/50-20/200). The CNV complexes were predominantly classic and were initially extrafoveal or juxtafoveal. Management included surgical removal, photocoagulation, and photodynamic therapy. The mean follow-up after CNV treatment was 1 year (range, 4-24 months). The mean final VA was 20/270 (range, 20/40-20/800). The visual outcome was largely poor when the follow-up interval was longer, and variable at shorter follow-ups.

The cause of CNV and its relation to ERM surgery is not entirely clear. It is intriguing that 3 of the 6 patients developed intraretinal or preretinal hemorrhaging in the perioperative period. While peeling the membrane from the macula, tractional forces transferred to the underlying retinal pigment epithelium and Bruch membrane could have resulted in a direct break or localized trauma reflected by areas of hemorrhaging. Causes for variable times of CNV onset postoperatively are uncertain, but may include the amount of induced trauma and the patient’s predisposition to developing CNV.

Another possible explanation is that subclinical CNV coexisted with the ERM when the patient was initially seen. Gass described 2 patients with idiopathic macular pucker who developed CNV.

Figure 1. For case 1, fundus photographs of when the patient was initially seen, showing an epiretinal membrane (ERM) with macular striae (A), and 2 months after ERM removal, showing elevation of the macula by a new and extensive subretinal membrane (B).

Figure 2. For case 1, a corresponding fluorescein angiogram 2 months after epiretinal membrane removal documents intense focal hyperfluorescence consistent with fibrovascular ingrowth in the nasal macula (A) and a fundus photograph 2 weeks after subretinal membrane removal shows an improved macular appearance (B).
years later and 1 patient who had an ERM and CNV on initial examination. However, the results of a fundus examination in our patients did not reveal any clinical signs of CNV before ERM surgery. In addition, 1 patient (case 2) underwent FA 1 month after ERM removal, which showed no hyperfluorescence in the macula.

We do not believe FA is necessary before performing ERM removal to rule out preexisting CNV. However, FA is valuable in examining patients postoperatively when they develop a decreased VA and metamorphopsia. Because of the limited number of reported cases, there is no consensus about the best treatment modality. Each patient should be examined and treated based on the CNV characteristics and available treatment options.

In summary, CNV is a rare complication of ERM surgery that is likely secondary to iatrogenic trauma that is transferred to the outer retina and Bruch membrane during ERM removal. Ophthalmologists who perform ERM surgery should consider CNV a possible cause of poor visual outcome in the early and late postoperative periods.

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Plasmapheresis for Lupus Retinal Vasculitis

Systemic lupus erythematosus (SLE) is a potentially lethal, chronic autoimmune disease that can involve the eye. It is characterized by the production of numerous autoantibodies, some of which are pathogenic. Retinal vasculitis is the most serious of ocular manifestations; it is potentially blinding and associated with a decreased survival rate.

Immunosuppressive therapy is the mainstay of treatment but plasmapheresis can be helpful acutely by rapidly removing circulating immune complexes and immune reactants while the patient is receiving immunomodulators. We present 2 cases of severe retinal vasculitis due to SLE that were treated successfully with a combination of plasmapheresis and immunosuppression.

Report of Cases. Case 1. A 54-year-old white woman was admitted because of renal failure and changes in mental status. A month earlier the patient had complained of decreased vision in both eyes and was diagnosed as having “retinal lesions” by her ophthalmologist. On admission, findings from the medical examination revealed pericardial effusion, rash, arthritis, and pancytopenia. The visual acuity was 20/50 OD and 20/100 OS and dyspnea developed; pulmonary hemorrhage was discovered. However, the pancytopenia improved and a single intravenous infusion of cyclophosphamide (750 mg) was added to the regimen. No improvement was noted. The results of blood tests revealed high levels of antinuclear antibodies, soluble interleukin 2 receptors, circulating immune complexes, and decreased interleukin 2 receptors, circulating immune complexes, and decreased complement levels. The diagnosis of SLE was proposed based on the clinical symptoms and these laboratory findings. Plasmapheresis was administered for 5 days followed by a single intravenous infusion of cyclophosphamide (750 mg). The patient’s overall medical status improved dramatically. She became capable of fluent communication, her creatinine levels decreased rapidly, and there were no retinal lesions.

Case 2. A 29-year-old white woman was admitted because of fever, pericardial effusion, rash, and neurologic symptoms. On admission, findings from the medical examination revealed pancytopenia, increased CRP, and an ESR. Plasmapheresis was performed for 5 days, and the patient’s overall status improved rapidly, and there were no retinal lesions.

Figure 1. Case 1. Fundus photograph of the right (A) and the left eyes (B) at examination show multiple cotton-wool spots and dot/blot hemorrhages in the posterior pole, bilaterally.