

loss from AMD have the exudative form (with manifestations of choroidal neovascularization or pigment epithelial detachment). One natural history study of AMD found that 70% of eyes with subfoveal vessels had acuity of 20/200 or worse within 2 years. However, when the vessels extended more than 200 μm beyond the center of the foveal avascular zone, only 4% of eyes maintained that relatively good vision.

Conservative observation and laser photocoagulation for subfoveal choroidal neovascular membranes in AMD result in a decrease in visual acuity and an absolute central scotoma.¹⁻³ Because of these limitations, recent efforts have focused on surgical removal of CNVMs with the goal of recovery or stabilization of foveal vision. In this study, we investigate the efficacy and safety of the surgical removal of subfoveal CNVMs in patients with AMD.

MATERIAL AND METHODS

Totally, 6 eyes from 5 patients were used in this study. The mean age of these 5 patients was 65.8 years (range, 55-73 years); 2 patients were women and 3 were men. The average symptom duration before surgery was 2.3 months (range, 1-4 months). The mean follow-up time after surgery was 30.3 months (range, 24-37 months) with a median of 29.5 months from March 1995. The initial visual acuity ranged from CF/10 cm to CF/80 cm.

The impression of all 6 eyes was AMD with CNVMs (visual acuity less than 20/200) that had become a poor candidate for treatment with photocoagulation because of its thick, nonpigmented, and fibrotic characteristics. The fibrotic tissue appeared anterior to the pigment epithelium. In some cases, the fibrotic tissue was elevated enough to produce neurosensory detachment of the foveal retina with subsequent decreased central visual function. The preoperative fundigrams and fluorescein angiograms are illustrated in Figs. 1-4.

All eyes underwent surgical removal of subfoveal CNVMs,⁴⁻⁸ and surgical specimens were examined by histopathologists. Post-operative ocular examinations were followed up for at least 24 months.

Our surgical method to remove subfoveal CNVMs of AMD can be divided into 8 steps. (1) A standard

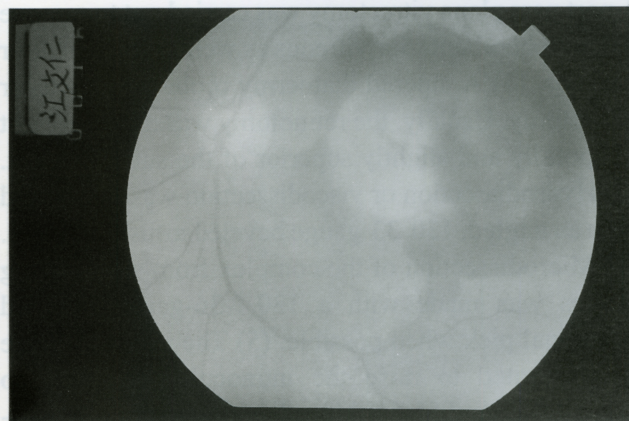


Fig. 1. Preoperative fundigram appearance of case one. Massive subretinal hemorrhage and a fairly well-defined fibrotic membrane can be noted.

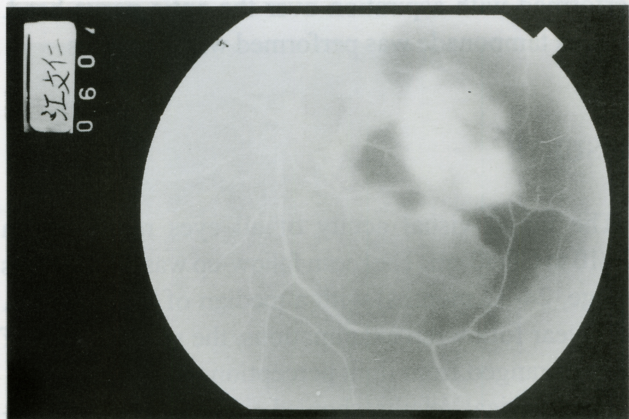


Fig. 2. Preoperative fluorescein angiogram of case one. Hemorrhage masked the underlying choroidal fluorescein and showed occult CNVMs.

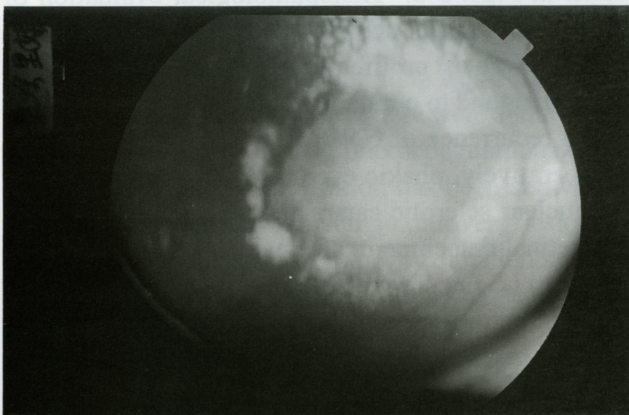


Fig. 3. Preoperative fundigram appearance of case two. The central advanced disciform lesion and massive subretinal exudation can be noted.