FLUORESCEIN ANGIOGRAPHY-GUIDED SAFETY-ENHANCED
PHOTODYNAMIC THERAPY FOR CHRONIC CENTRAL
SEROUS CHORIORETINOPATHY

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Purpose: To evaluate the efficacy and safety of fluorescein angiography-guided safety-enhanced photodynamic therapy with half-dose verteporfin for central serous chorioretinopathy.

Method: This study was a non-randomized retrospective case series. All patients with symptomatic chronic central serous chorioretinopathy for duration of 6 months or more were recruited from March 2006 to June 2008. The results of fluorescein angiography-guided safety-enhanced photodynamic therapy in chronic central serous chorioretinopathy were retrospectively reviewed in 14 patients with 14 eyes. Changes in best-corrected visual acuity were analyzed and sub-retinal fluid was examined by optical coherence tomography.

Result: There were 14 eyes in 14 patients with chronic central serous chorioretinopathy. The age of these patients ranged from 38 to 84 years with mean age of 55.3 years. The ratio of male and female was 2.6:1. LogMAR visual acuity 3 months after PDT showed improvement of more than 3 lines in 7 patients (50%), improvement of 1 to 3 lines in 4 patients (28.6%), and stable condition in 3 patients (21.4%). The SRF on OCT after 3 months was negative in 13 patients (92.8%) and positive in 1 patient (7.2%). There was no obvious subjective adverse effect in 13 patients; only transient central scotoma was noted in 1 patient.

Conclusion: Fluorescein angiography-guided safety-enhanced photodynamic therapy demonstrates a beneficial effect on subretinal fluid resolution in management of chronic central serous chorioretinopathy. Our study demonstrated preserved or improved visual acuity in all cases after 3 months. Prospective studies with longer follow-up period are needed to evaluate complications and recurrence rate of this technique.

Keywords: Fluorescein angiography-guided, photodynamic therapy, chronic central serous chorioretinopathy

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