

Low dose photodynamic therapy for chronic central serous chorioretinopathy

Dosis reducidas de terapia fotodinámica con Verteporfín en el tratamiento de la coriorretinopatía central serosa crónica

Central serous chorioretinopathy (CSCR) is characterized by an accumulation of sub-retinal fluid which leads to the detachment of the neuroepithelium in the posterior pole. This pathology affects young patients, generally male, with type «A» personality.

In most cases CSCR is a self-limited process which is resolved in 3 months. However, a minority of patients experience a feeling of metamorphopsia, reduction of contrast sensitivity or a central scotoma.

Traditionally, treatment has been conservative. When the thermal laser was introduced, it was applied to CSCR to treat the exudation areas shown by angiofluorescein graphs (FA). However, thermal lasers are limited because their action involves only the retina pigmentary epithelium (RPE), while the congestion and hyper-permeability remain untreated.

Recently, several authors have introduced photodynamic therapy with Verteporfín (PDT) as a new therapeutic weapon for treating CSCR, with generally good results for final visual acuity (1). In order to minimize the toxicity for the retina caused by PDT, possibly due to the choroidal ischemia it produces (2) and which gives rise to a larger alteration in the already-altered RPE, compromising in time a reduction in best corrected visual acuity (BCVA) (3), and even the development of secondary neovascular membranes (4), some authors have modified the application of PDT in the treatment, halving the Verteporfín dosage, apply-

ing the laser for a shorter period of time and bringing forward the initial application thereof in order to reduce the accumulation of the drug in the RPE (5).

This paper presents a series of seven patients with CSCR treated with PDT in reduced dosages. In contrast with the previous description, the parameter we modified in the PDT consisted in a greater reduction of the laser application time, down to 70 seconds with an energy of 41 J/cm². In this way we endeavour to reduce choroidal ischemia and the destabilization of the secondary RPE.

In our series of CSCR treated as described, six of the seven patients exhibited a favorable evolution with anatomic improvements (study with Optical Coherence Tomography) (OCT) (fig. 1), functional improvements (best corrected visual acuity), and clinical improvements (improved metamorphopsia), and only one case remained unchanged. A four-month follow-up after the treatment was made in all cases. No VA deterioration was observed and the RPE study with OCT did not reveal changes at the neuroepithelial level.

We propose limited exposure PDT as a safe and efficient procedure because it involves a modification of conventional therapy which reduces the damage it causes on the RPE and the choroids. However, new studies will be necessary to determine which modifications render this technique more efficient and innocuous.

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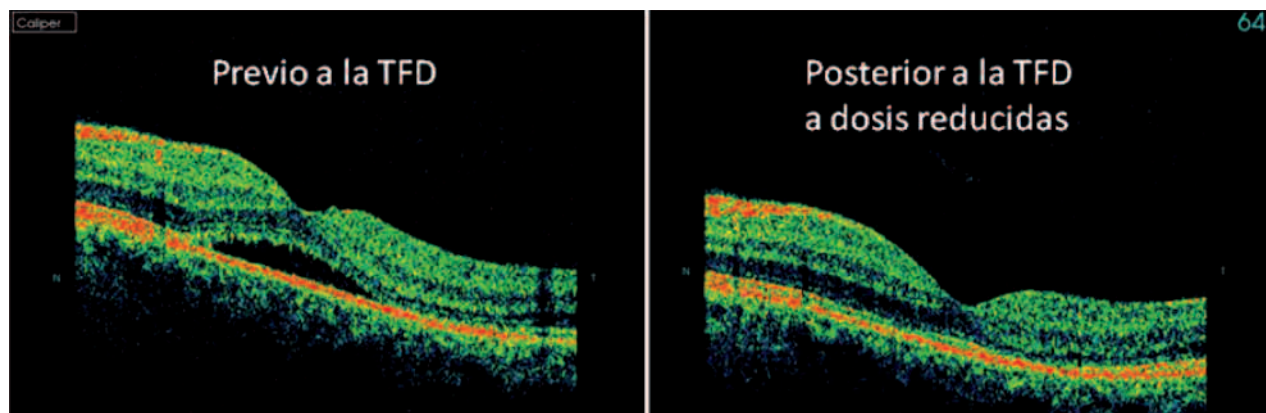


Fig. 1. Patient with CSCR treated with reduced PDF dosages.

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