Macular Photocoagulation Study Group (MPSG): subfoveal neovascular lesions

In 1986, the MPS started two studies[(12,13)] to determine the efficacy of laser photocoagulation in subfoveal choroidal neovascularization.

In the first study, the effect of laser photocoagulation (Argon or Krypton) was evaluated in eyes with subfoveal exudative AMD not previously treated; in the second study, the efficacy of laser treatment in subfoveal recurrence in eyes with extra or juxtafoveal membranes was evaluated.

The results of this study and treatment recommendations generated a great deal of controversy.

In fact, treated eyes displayed a very marked loss of vision immediately after treatment.

After 4 years, 30% of treated eyes and 60% of non-treated eyes displayed VA ≤ 20/400, whereas 45% of non-treated eyes and 23% of treated eyes has suffered severe loss of vision.

The efficacy of this treatment in terms of the number needed to treat was 4.5[(20)].

A large percentage of ophthalmologists did not agree with the MPS recommendations for treating subfoveal lesions.

In fact, patients were losing 3 lines immediately after treatment.

The MPS re-evaluated treatment efficacy in terms of lesion size and difference from baseline VA, having established treatment groups and criteria according to these two variables[(13)].

Ophthalmologists could advise their patients and help them choose whether or not to undergo treatment according to lesion size and baseline VA.

With the emergence of photodynamic therapy with Verteporfin, laser photocoagulation for subfoveal lesion became obsolete.

It remains indicated only for extrafoveal lesions and the angiographic control should be performed 15 days after treatment.

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