Correspondence

Comment on: Crossover to Photodynamic Therapy or Micropulse Laser After Failure of Primary Treatment of Chronic Central Serous Chorioretinopathy

EDITOR:

WE READ WITH INTEREST THE RECENT ARTICLE BY VAN RIJSsen and associates[1] regarding their REPLACE Trial. The PLACE Trial randomized eyes with chronic central serous chorioretinopathy (CSCR) to either half-dose photodynamic therapy (HD-PDT) or high-density subthreshold micropulse laser (HSML). The reported outcomes favored the HD-PDT group.[2] More recently, van Rijssen and associates[1] conducted the REPLACE Trial, where patients with persistent subretinal fluid exiting the PLACE trial were invited to participate. Those eyes that had failed HD-PDT were treated with HSML and those that had failed HSML were treated with HD-PDT. Again, the reported outcomes favored the HD-PDT group.

Before accepting these results, we need to clarify certain details regarding the treatment. The authors claim that the subthreshold micropulse laser was delivered in a dense pattern of small adjacent nonoverlapping laser spots using a 810 nm laser.[2] In a later publication of the same trial, the authors report that the micropulse laser spots were delivered with overlapping spots.[3] If the spots were intentionally overlapping, maybe some of the undertreatment could be lessened if the treatment area was small. However, if the treatment area was large, overlapping spots do not guarantee total area coverage, because the burns are invisible. Can the authors clarify and state whether the laser burns were overlapping or nonoverlapping?

To the best of our knowledge, none of the currently available 810 nm lasers are able to deliver laser spots using an automated multispot pattern scan. A multispot pattern scan would be advisable to ensure adequate placement of the laser spots, particularly if the number of spots is large. In the PLACE trial the HSML group received a mean 187 ± 209 laser spots, which is a considerable number if one is trying to place "invisible" spots next to one another. If a multispot pattern scan was not used in the PLACE trial, it is very likely that eyes in the HSML group were undertreated, since it is practically impossible to place the spots, given the lack of visibility of the spots themselves. The authors suggest that by increasing the laser power one may overcome a possible undertreatment.[3] However, as Luttrull[4] argued, one cannot increase the therapeutic effect of HSML simply by increasing the power. Therefore, it becomes important for the authors to specify the laser manufacturer and if a multispot pattern scan was used or not.

Several lasers from different manufacturers with multispot and micropulse capability are currently commercially available. These may be perfectly suited for HSML. Before we discard HSLM for CSCR, further studies using this technology are warranted to completely assess its role, if any, in the treatment of CSCR.

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WE THANK DRS WU AND ROCA FOR THEIR INTEREST regarding our studies on chronic central serous chorioretinopathy (CSC), including the PLACE trial and the REPLACE trial.[1,2]

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