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Sir,

Comment on 'Comparison of subthreshold micropulse laser (577 nm) treatment and half-dose photodynamic therapy in patients with chronic central serous chorioretinopathy'

In their interesting article, Scholz *et al*[1] compare 2 treatments for chronic central serous chorioretinopathy (cCSC) on the basis of changes in central retinal thickness (CRT) and resolution of subretinal fluid (SRF) at 6 weeks after treatment. The authors conclude that significantly more patients showed a treatment response to subthreshold micropulse laser (SML) treatment and that SML leads to a greater decrease in CRT in comparison with half-dose photodynamic therapy (PDT). There was no statistically significant difference in complete SRF resolution and best-corrected visual acuity between the 2 groups after a post-treatment follow-up period of 6 weeks.

In cCSC, a complete SRF resolution may be an important anatomical outcome parameter of treatment because such a resolution reconstitutes the normal relationship between photoreceptors and retinal pigment epithelium, and persistent SRF appears to be an important risk factor for long-term vision loss.[2] In the study by Scholz *et al*, the percentage of patients who showed complete resolution of SRF on OCT in both the SML and the half-dose PDT group was remarkably low as compared with previous large retrospective studies, which describe complete resolution in 41–100% of cCSC cases.[3,4] The authors indicate that this could have been caused by a relatively long disease duration in the included patients. Indeed, the clinical definition of cCSC and treatment inclusion criteria for cCSC is variable and subject to debate, and may influence the likelihood of treatment success.[3] The relatively short follow-up period of 6 weeks to evaluate treatment success may have also influenced the rate of SRF resolution.[4] Also, abnormalities on indocyanine green angiography (ICGA) in cCSC are often more extensive than those on fluorescein angiography, indicating primary choroidal dysfunction, and may therefore favour ICGA-based treatment to increase the likelihood of complete SRF resolution.

A wide variety of treatments has been advocated for cCSC, underlining the controversy surrounding cCSC therapy.[5] On basis of the available retrospective evidence, SML and PDT appear the most promising candidate treatments.[5] As indicated by the authors, large prospective multicenter randomized controlled treatment trials are pivotal to establish the optimal treatment modality for cCSC. Treatment with both 577 nm and 810 nm SML has been used in cCSC and no clear preference can be advocated based on the available literature.

In collaboration with the authors, we are currently conducting a prospective multicenter randomized controlled treatment trial (the PLACE trial) comparing half-dose PDT with 810 nm SML in cCSC.[6] In this trial, both anatomical outcome parameters such as a complete resolution of SRF and functional outcome parameters such as visual acuity, microperimetry, and Visual Functioning Questionnaire-25 score are taken into account, within a follow-up period of up to 8 months.[6] The results of these studies may hopefully lead to an evidence-based best-practice guideline for the treatment of cCSC.

Conflict of interest

The authors declare no conflict of interest.

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Sir,
Response to 'Comment on 'Comparison of subthreshold micropulse laser (577 nm) treatment and half-dose photodynamic therapy in patients with chronic central serous chorioretinopathy''

In their comment, EHC van Dijk and CJF Boon address an important issue in our article, the high rate of patients without complete resolution of subretinal fluid (SRF) after therapy. As they state, the complete resolution of SRF should be the aim of any treatment for central serous chorioretinopathy (CSC) to restore the normal retinal architecture and to prevent long-term vision loss.[1]

To achieve this goal, two important issues are still unclear. First, to find the best treatment for CSC. Randomized trials such as the PLACE trial[2] will further help us to improve our understanding of CSC therapy. Second, to find the best time point for treatment. An early treatment might show the best results but it would mean overtreating all those patients with a high chance of spontaneous resolution of SRF. A later treatment on the other hand could mean that some patients would already have crossed the line with irreversible changes.

CSC is frequently still considered as a benign self-limiting disease, and therefore a treatment is often postponed until a permanent vision loss occurred. Our cohort contained a lot of patients with a long history of CSC, which could be responsible for the low-response rate in our study.[3]

It is very difficult to compare the results of different studies regarding the outcome of treatments for chronic CSC since there is no consent regarding the clinical definition of chronic CSC.[4]

So, apart from finding the best treatment for CSC, it is also very important to establish a classification for CSC and chronic CSC, which will help to find the right treatment time for the daily practice and allow the comparison of treatment outcome in different studies.

Conflict of interest

The authors declare no conflict of interest.

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