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CORRESPONDENCE

Correspondence on: Efficacy and safety of subthreshold micropulse laser compared with threshold conventional laser in central serous chorioretinopathy

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To the Editor:

We commend Sun et al. [1] in trying to determine the efficacy and safety of subthreshold micropulse laser in the management of acute central serous chorioretinopathy (CSC). They recently conducted a non-inferiority trial of 88 eyes with acute CSC that were randomly assigned to treatment with conventional laser photocoagulation vs subthreshold micropulse laser photocoagulation. They reported that both treatment modalities were non-inferior to one another and that these treatments may improve the visual acuity.

The authors state that the main limitation of their work is the short follow-up time of 12 weeks. We would argue that the main limitation of the trial is their lack of controls not the follow-up. Their inclusion criteria included eyes with submacular fluid that had been present for ≤ 6 months. The average duration of submacular fluid of eyes in their study was around 10 weeks. Without a control group it is hard to assess the actual benefit of either treatment since a large percentage of eyes with acute CSC undergo spontaneous resolution [2]. In the pre-OCT era, in a series of 34 eyes all eyes experienced spontaneous resolution after 3–6 months [3]. In the current multimodal imaging era, Daruich et al. [4] reported that in 84% of their eyes the retinal detachment had resolved by 6 months. Furthermore it appears that in most eyes that have spontaneous resolution there are few visual sequelae [5].

We recognize that in some eyes even a short duration of subretinal fluid may cause a lasting visual deficit and these patients may benefit from treatment in the acute stage. Such patients may include patients with recurrent episodes or patients that may require a faster resolution of symptoms because of occupational needs. The authors should have selected these patients for study rather than indiscriminately randomizing all comers with acute CSC to either treatment. They could have selected their patients using factors influencing episode duration such as older age, higher subfoveal choroidal thickness and the degree of RPE alteration at the site of leakage [4]. By doing so the authors would have avoided subjecting the vast majority of patients to an unnecessary procedure.

Compliance with ethical standards

Conflict of interest The authors declare that they have no conflict of interest.

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References

1. Sun Z, Huang Y, Nie C, Wang Z, Pei J, Lin B, et al. Efficacy and safety of subthreshold micropulse laser compared with threshold conventional laser in central serous chorioretinopathy. Eye. 2019;34:1592–9.
2. Gilbert CM, Owens SL, Smith PD, Fine SL. Long-term follow-up of central serous chorioretinopathy. Br J Ophthalmol. 1984; 68:815–20.
3. Klein ML, Van Buskirk EM, Friedman E, Gragoudas E, Chandra S. Experience with nontreatment of central serous choroidopathy. Arch Ophthalmol. 1974;91:247–50.

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4. Daruich A, Matet A, Marchionno L, De Azevedo JD, Ambresin A, Mantel I, et al. Acute central serous chorioretinopathy: factors influencing episode duration. Retina. 2017;37:1905–15.

5. Wong R, Chopdar A, Brown M. Five to 15 year follow-up of resolved idiopathic central serous chorioretinopathy. Eye. 2004;18:262–8.