

# Review of: "Short-term comparison between navigated subthreshold microsecond pulse laser and oral eplerenone for chronic central serous chorioretinopathy"

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This article has compared the short term efficacy of the subthreshold microsecond pulse laser(SML) and oral eplerenone for the treatment of chronic central serous chorioretinopathy (cCSC). (1) Its results conclude that both of the treatment modality has comparable outcome. We would like to congratulate the authors for their great work and addition of this invaluable information to the existing pool of literature.

Major reviews already suggest that cCSC responds to laser therapy. (2–4) Over period of time this, the types of lasers used for treatment have varied from spectrum and moreover, there has been more focus on delivery on pulsed methods. (5)With introduction of subthreshold- also synonymous with subluminal, micro pulse, endpoint managements or SP-Mode (which are trademarks/registered techniques of major companies marketing the subthreshold retinal laser consoles), there has been a paradigm shift on treatment plans. Although these words are interchangeable, we believe that ophthalmologists/physicians or technicians need to use appropriate terminologies. For e.g. the term "Micro pulse®" a mark that is registered trademark with United States Patent and trademark office (USPTO) of IRIDEX .Other examples include - "Subluminal® " by Quantel , SP-Mode by LightMed and End Point Management (EPM)by Topcon. Hence use of term "Micro pulse" may not be appropriate to be used with NAVILAS. Instead they have been found to commonly express this feature as microsecond pulse laser mode.

Irrespective, with these features, Ophthalmologists can treat areas in the macula and sometimes even very close to the fovea which were previously thought to be damaging or "retinotoxic" using conventional methods. (2,3,5)Numerous reports analyzing the outcomes – both quantitatively and qualitatively are available and based on the reports, it is safe to say that lasers have established them as the "ultimate" choice in chronic and resistant

However, one must remember that even with the advancements and now subthreshold lasers leaving next to zero "imprints" of distinctive "anatomical" disruption- they should still be cautiously delivered as it may still affect "functional" .Reports are available which indicate decrease in the contrast or color sensitivity. (6)However , in our opinion, it is still very early to a firmly establish these associations to be laser treatment related and needs further exploration as these could instead be related to the pathology of the macula.

One of the newer modality of treatment, still under investigation is the oral eplerenone. Recently, this drug has gained popularity for the treatment of cCSC. but has many unanswered questions related to it. (7,8)There are several studies showing its efficacy in the treatment of cCSC . But there are also some conflicting reports a recent randomized controlled trial (RCT) suggesting that its efficacy no better than a placebo.

The exact mechanism of how eplerenone might work in cCSC is not yet fully understood. There is a great variation not just in its dosing and duration of treatment, but also in its long-term efficacy- hence lacking a proper standard protocol regarding its use. These aspects of this drug need to be explored further to limit itself from being just an “off-label prescription”.

The major advantages of eplerenone – as indicated by many studies is that it resolves the subretinal fluid rapidly when compared to laser therapy. (1,7,8) This can be studied as a “privilege” and large multicenter RCT can be conducted to understand the indications, contraindications, pattern, dosing and duration. With this in place, a standard treatment protocol can be devised.

Things which are less understood always lift many brows initially. But with developments, they tend to gain greater acceptance. Similarly, the future of both subthreshold lasers and eplerenone holds great potential for management of cCSC. The ideas of using combined modality treatment, use of one over other in special scenarios, addition of one over another as an adjunct -are the few of many regimens which we could be seeing in the coming days. Another most important factor -irrespective of the treatment used is recurrence. This is another less visited but one of the most important aspects to be evaluated in the coming days. Subthreshold lasers vs eplerenone cohort on long term outcomes and rate of recurrence would definitely add a lot of value to existing knowledge to help ophthalmologists and practitioners decide.

To conclude, human brain is engineered to compare and the debate of which is superior will always continue. However, at this stage with the available science on both, we believe both subthreshold lasers and eplerenone have their own benefits. Hence they should not be considered as contenders to each other but rather the focus be made to yield the maximal benefit that could be achieved by their synergistic action.

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