The Argument for Laser in 2021

Clear Benefits and Good Outcomes

by Brooke Herron

hen discussing treatment for macular pathologies like diabetic macular edema (DME) and central serous chorioretinopathy (CSCR), injection burden is a term that often appears. This, of course, is in reference to the monthly anti-VEGF injections required to keep disease progression at bay, a treatment that can come at a high cost to both patients and physicians.

Thankfully, there are other treatments available that are both safe and effective — specifically, subthreshold lasers like the Easyret[®] SubLiminal[®] laser from Quantel Medical (France).

Dr. Kenneth Fong is a vitreoretinal surgeon and managing director of OasisEye Specialists in Kuala Lumpur and the co-founder of the newly formed Subthreshold Ophthalmic Laser Society (SOLS). He recently discussed the benefits of subthreshold laser and its value as a treatment option in 2021 and beyond.

Personal experience shows clear results

"Subthreshold laser has been around

for about 10 years and Quantel Medical is one of the companies to pioneer this treatment," said Dr. Fong. "It has a durable effect, and can also be combined with anti-VEGF injections or implants," he continued.

Subthreshold laser works by changing the microenvironment through stimulation of RPE cells. This therapy offers a similar efficacy to classic laser photocoagulation, while preserving the retinal tissues.

"The benefit of the Easyret® laser is that is uses the 577nm wavelength, which is the ideal wavelength for treating the macula because of low xanthophyll absorption, good penetration through opacities like cataract and the need for very low power," he explained.

With the Easyret®, users can choose between SingleSpot, MultiSpot or SubLiminal® mode. "I use the MultiSpot mode most commonly because I have many proliferative diabetic retinopathy (PDR) patients who need peripheral treatments like panretinal photocoagulation (PRP)," he said. "If I'm doing PRP, I can use MultiSpot mode and patients have very little discomfort."

SubLiminal® laser for DME and CSCR

Switching gears to SubLiminal® laser for DME, Dr. Fong says three types are suitable for treatment with subthreshold laser: "The first is extrafoveal macular edema; the second is fovea-involving mild edema but with good vision; and finally — and what I use most commonly — is combination treatment for thick macular edema, where I inject anti-VEGF first and then do laser two months later."

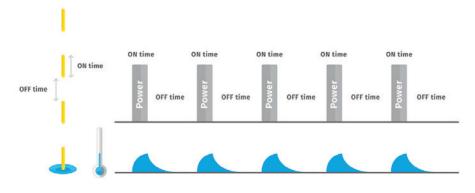
He then presented several DME patient cases who received laser treatment — all showed no scarring, good vision and resolution of edema at three-month follow-up.

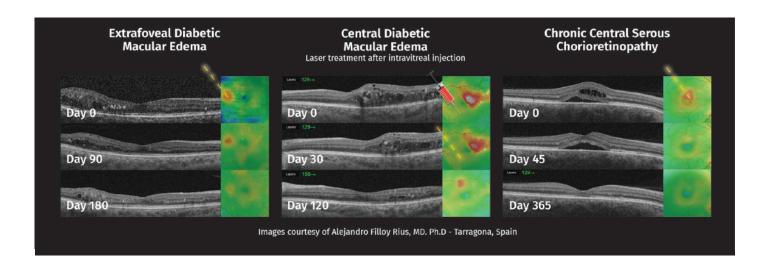
CSCR can be treated as well, using the same protocols for DME, said Dr. Fong. "For patients with CSCR, the yellow subthreshold laser has a more beneficial effect on visual acuity than half dose PDT (photodynamic therapy) — it's also cheaper and more convenient for the patient."

He continued that it's relatively easy to learn to perform, it will help patients with DME or CSCR rely on fewer intravitreal injections, and can be repeated. "There's no discomfort at all with subthreshold laser — but patients need to wait at least three months to see a treatment effect in reducing edema," said Dr. Fong.

Is 2021 the year of the laser?

Although anti-VEGF has replaced laser as the main treatment option for macular diseases, we still need laser, said Dr. Fong. "Many countries, like Malaysia where I work, cannot continue giving unending anti-VEGF injections ...





there are also many cases of DME and CSCR that do not respond to anti-VEGF injections," he shared.

However, the acceptance rate of laser as a treatment remains low. This is due to the prolific use of anti-VEGF injections worldwide and the cost barrier in purchasing a suitable laser machine, explained Dr. Fong.

"There are also different protocols used by different laser machines and a learning curve," he added. This is one of the reasons that the Subthreshold Ophthalmic Laser Society (SOLS) was created: To raise awareness and educate

physicians on the rising role of laser as an effective and safe alternative to anti-VEGF for macular disease.

New Society on the Block: SOLS

In April 2021, ophthalmologists gained a new resource in the subthreshold laser sphere in the form of SOLS — or Subthreshold Ophthalmic Laser Society.

SOLS was created to raise awareness of subthreshold laser as a viable option for macular diseases like DME; to encourage further global research in this area; and to formulate standardized protocols for treatment, based on consensus from global key opinion leaders in this area, explained Dr. Fong.

Members can expect education and engagement from SOLS. Their website will host guidelines and meetings, and the society will participate in regionally planned webinars and symposia at major ophthalmology and retina meetings.

"SOLS was set up by clinicians to further research in this area and any ophthalmologists who wish to join are most welcome," said Dr. Fong.

Don't miss this new society launch!

Subthreshold Ophthalmic Laser Society (SOLS)

and their introductory symposium at C&PE...

Do We Still Need Subthreshold Laser for Macular Diseases? June 18, 6-7 pm SGT, Track 1



Dr. Kenneth Fong

Moderator



Dr. Victor Chong
Moderator



Dr. Lihteh WuWhat is subthreshold laser?



Dr. Jay ChhablaniSubthreshold laser for CSCR



Dr. Alejandro Filloy Rius
Subthreshold
laser for DME

Panel discussion: Different technologies, treatment guidelines, combination use with anti-VEGF, pearls and pitfalls

Presented by:





