

Dr Miguel Montero talks vascular treatments with M22

M22 by Lumenis is a modular multi-application platform for the treatment of over 30 skin conditions and hair removal. Used by physicians around the world, M22 enables you to treat more types of patients and conditions with better outcomes. Dr Montero is one of the UK's leading doctors on the subject.



The M22 has four different modules, which ones do you use?

I use the long pulsed Nd:YAG and the IPL as I mostly perform vascular treatments. With the IPL I can treat pigmentation, offer photo-rejuvenation for sun damage and treatments for rosacea, acne, and telangiectasia. I use the long pulsed Nd:YAG to treat telangiectasia anywhere in the body, including the face, as well as reticular veins in the legs.

With regards to the IPL, what treatments do you use it for and how do you rate its usability and results?

I use it for a variety of indications, the most popular being rosacea, pigmentation and photo-damage. I have been using a Lumenis IPL very successfully for the last eight years and regard it as the workhorse of my clinic. I chose it because it is the easiest device to use, changing the filter is very simple, and the pre-set parameters are pretty good starting points. I am very happy with the results, and my patients are also very satisfied as they keep returning for various aesthetic treatments.

How do you compare the Lumenis technology to other systems that you have used previously?

My Lumenis IPL was the first machine I ever bought eight years ago and it has since been an essential part of my clinic. The list of indications Lumenis technology treats is pretty comprehensive, and the results that I have got through the years have been very good, so I've never needed a more expensive machine like a PDL. I am getting excellent results not only in vascular conditions but also in many pigmented ones. I don't need to produce purpura to achieve a great result, and many of my patients who have been treated before with other systems comment how easy it is to resume their activities with minimal downtime, while also emphasising how comfortable and effective the treatments are.

Multiple-Sequential Pulsing (MSP), available in both the Nd:YAG and IPL modules on M22, enables cooling between

a sequence of pulses. Do you feel this has had an impact on patient comfort and your ability to treat more safely and achieve desired results?

The ability to cool the skin down in between pulses was a very important deciding factor when I purchased the machine. In my practice I use multiple pulses most of the time, I would say that about 90% of my treatments need MSP, since the targets are usually deep. It does allow me to use higher energy levels without causing any burns or blisters, whilst selectively targeting the deeper lesions. There are many IPL systems out there, which have also incorporated this technology with more or less success, but to my knowledge the M22 is the only one which has specific vascular filters and settings, not forgetting the possibility to add the long pulsed Nd: YAG. This is probably the most underrated module in the system. In my opinion, it is an essential complement to the IPL, which I use all the time to deliver consistent vascular results. In addition, because of its ability to produce MSP, it delivers brilliant results very safely. The only exception in the use of MSP with the Nd:YAG laser is the treatment of facial telangiectasia. For safety reasons, single pulses of no more than 90 J/cm² should be used in the face, avoiding, if possible, the stacking of pulses, as this would defy the objective. I have performed this treatment hundreds of times with only bruising presenting as the main complication, and I have hundreds of satisfied patients.

Do you change the pulse duration and delay to suit your own specifications?

Yes. I find that the Lumenis pre-sets are usually a very safe starting point, but for some patients we need to change the pulse duration, the pulse delay or both to be able to effectively treat the problem that they are presenting to us. The Lumenis interface allows me to very easily change those parameters, so I can be more aggressive if I need to, or more conservative for the darker skin types if, for whatever reason, the skin is reacting and needs more protection. In most cases, I increase the fluence treatment on treatment, but I don't alter the other parameters.



Do you use cooling post treatment; a) on all skin types and; b) do you think it reduces PIH?

As well as the cooling provided by the equipment in the form of cool light guides, and the pulse delays built-in in the MSP which allow skin cooling in between pulses, as an extra safety measure I use air cooling provided by a Zimmer Cryo during and after the treatment for a few minutes in all skin types. I find that I don't need to use any steroid tablets, creams or masks by doing so. Occasionally I use a kojic acid-based tyrosinase inhibitor when I treat skin type IV-V as a prophylaxis against PIH for extra security. The combination of all these measures has allowed us, through the years, to have a very low incidence of PIH, even though more than 30% of our patients have a skin type V.

Has the Nd:YAG module lived up to its promises treating leg veins, telangiectasia, and haemangioma? Tell us about your experience.

I have been treating telangiectasia and reticular veins practically from the minute I got the machine. I use the Nd:YAG to treat reticular veins, feeder veins (which carry blood from the reticular or deeper veins to the more superficial lesions) and some of the larger telangiectasia in the legs. I find that the combination of the MSP with the extra cooling allows me to use higher settings to treat the deeper veins and this has increased my success rate. I don't treat any veins larger than 3 mm with laser, if there are any varicosities they need to first be corrected surgically to improve the chances of a successful laser treatment of the more superficial veins. For some patients I also use microsclerotherapy to reduce the size of the larger reticular veins prior to laser. I'm finding that since I'm doing this, the treatments are more comfortable as the size of the target is reduced. I combine the treatments of the long pulsed Nd:YAG with the IPL, which allows me to treat the more superficial telangiectasia. I tend to also use MSP with the IPL, as recommended in the settings preloaded in the system. I find that IPL is particularly effective for the finer telangiectasia matting and is the only tool that safely can be used around and below the ankles. I have treated many small haemangiomas, Campbell de Morgan spots, venous lakes in the lips, spider angiomas and similar vascular lesions all over the body safely and successfully using the 6 mm spot size of the Nd:YAG.

Have you discovered any other uses for the Nd:YAG module?

Well, they are not my discoveries, but since it has been reported in some papers that the long pulsed Nd:YAG can be used to treat

viral warts and verrucae and also fungal nail infections, I have done my own small trials to find out if I could replicate those with my equipment. I have had successful clearances of all the above, and I am now offering these treatments as part of my treatment portfolio.

How do you typically treat rosacea?

Laser and IPL are only part of a more comprehensive treatment, which includes, for some people, oral and topical antibiotics, topical antioxidants and vitamin A, and mandatory sun protection. Educating patients is essential as most of them don't know about the condition, and I find that once they learn about it, they also learn to live with it, and most of my patients cope much better with the symptoms of this chronic condition. I follow Dr Crouch's protocol of triple pass, triple pulse. Using the 560 or 590 nm filters, followed by the 615 and 695 nm filters, from superficial to deep, we get a very comfortable and effective treatment which help us reduce the severity of the flushes as well as a reduction treatment on the facial erythema and telangiectasia. When I want to get an even faster reduction in the telangiectasia I combine the long pulsed Nd: YAG using single pulses.



Born in Almeria, Spain, Miguel has practiced medicine in England since 1994. Initially working in North-West hospitals developing his surgical and medical skills, for 11 years he worked as a GP in Burnley and is now combines his knowledge of surgery, medicine, skin health and laser technology in his full time role as our medical director and principal practitioner.

Miguel is a member of the European Laser Association, British Medical Laser Association, British Medical Acupuncture Society and British College of Aesthetic Medicine. He is the lead in CPD and one of only a few Doctors to hold a Post Graduate Diploma in Cosmetic Medicine from the University of Leicester.

Miguel is on the lecture team at UCLAN teaching Doctors and Dentists on various aspects of Aesthetic Medicine; works closely with and presents for Lumenis, a world renown laser company; is a speaker at Aesthetic Medicine conferences worldwide and contributes to industry publications.



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