



# On the Pulse

**Vicky Eldridge** reports on the Lumenis UltraPulse Workshop and User Meeting at the Royal Society of Medicine, London, and finds out how Mr Max Murison and Dr Gerd Gauglitz are using the system to get impressive results in full facial rejuvenation and the treatment of burn scars

Lumenis recently hosted a one-day UltraPulse Workshop and User Meeting at the Royal Society of Medicine, London where delegates heard from leading laser experts and Lumenis KOLs Mr Max Murison and Dr Gerd Gauglitz about how they are using the fractional CO<sub>2</sub> device in their practices with impressive results.

After a welcome and introduction by Eddie Campbell-Adams, regional sales manager for Lumenis Aesthetic, the meeting kicked off with a history of CO<sub>2</sub> lasers and their evolution given by Mr Murison. He spoke about the advantages of fractional CO<sub>2</sub> systems like the UltraPulse. He commented, "Fractional photothermolysis has meant that CO<sub>2</sub> laser treatments can be performed to limit the downtime but still maximise the clinical benefit. The addition of the non-sequential

scanning system of the Lumenis laser system reduces the complications and maximises the results."

The remainder of the day saw a mixture of live demonstrations, including a full face resurfacing and treatment of burn scars, interactive discussions about the use of the system with the audience and presentations by both Mr Murison and Dr Gauglitz, where they shared their experiences of using the system in their practices and showed the results that could be achieved through case studies.

Dr Gauglitz said, "CO<sub>2</sub> laser is absorbed really well in water and that makes it an ideal instrument for precise ablation. It is also a very well studied laser system and is very frequently referred to as the 'laser scalpel' because you can work very precisely and it has a big advantage that it also creates some hemostasis by small vessel coagulation."

The Lumenis system has excelled in its ability to treat burns scarring and the results have been repeated in many centres across the world  
MR MAX MURISON

"The principle of fractional photothermolysis is pretty well understood these days. It is really just fractionating the laser beam so you have some intact skin. This is critical in determining the downtime and also the risk of side effects. However, it is important to remember that by increasing density and energy with the fractional CO<sub>2</sub> laser you are going to increase side effects and downtime even though you are working with a fractionated device."

Talking about the benefits of the system in facial rejuvenation, Mr Murison said, "I don't think there are many other technologies that allow you to be this accurate. It gives really natural results – you can't guess what they have had done. The results speak for themselves. In general patients are looking for certain things, they have their own criteria, but everybody wants a safe, minimum risk procedure. They like the natural results that you get with this machine."

"You can do it with minimum or no discomfort. Most of these are done as an outpatient procedure. Occasionally patients come to me and their skin has been so badly neglected that the chances of us fixing it in one go are pretty tough. Or occasionally they are frightened of pain so we have the facilities to do the treatments as an in patient procedure, under general anaesthetic, but that is uncommon for us to do it that way."

"There is always some downtime with treatments but you have to tailor the patient's request with the downtime. We usually come to agreement with what downtime they are going to get with what results we can achieve. Of course this is all repeatable to keep up with the ageing process."

As well as demonstrating how the laser was an effective tool for wrinkles and full facial rejuvenation, there was a strong focus on its use in the treatment of scars, and in particular burns scars, which both physicians specialise in. They demonstrated not only an improvement in the aesthetic appearance of such scars but also in their functionality and movement.

Dr Gauglitz commented, "I originated from the burns world so, although for the last couple of years I have mostly focussed on aesthetics and lasers, I have still had a great interest in the treatment of burn scars."

"A couple of years ago at a conference I saw Dr Matteo Tretti Clementoni demonstrating some very interesting results with regards to treating burn scars with fractional CO<sub>2</sub> laser, with regards to aesthetic improvement. I thought this is really amazing – if I can only reach half of this success

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DR GERD GAUGLITZ



in my patients it would be something I would definitely be interested in. Also there was great improvement in the range of motion, which in my opinion is much more important for patients where a surgical approach has its limitations.

"We now have two fractional CO<sub>2</sub> lasers in my dermatology department."

Mr Murison added, "The Lumenis system has excelled in its ability to treat burns scarring and the results have been repeated in many centres across the World."

One of the things Dr Gauglitz was keen to stress was the ability of fractional CO<sub>2</sub> laser to induce collagen synthesis. He said, "If you are talking about a fractional CO<sub>2</sub> laser I

think it is very important to talk about collagen. This has been studied in detail. Clinically we see initial collagen shrinkage visible as skin tightening and that is what you see very nicely, especially if you work in areas where the skin is very thin, like around the eyes. But, more importantly, the collagen remodelling process is actually ongoing and this makes it an interesting and attractive procedure for a couple of different indications and in particular, the treatment of burns scars."

Mr Murison added, "The advantage of this over non-ablative resurfacing is that you get immediate tightening at the time of treatment plus you get this collagen stimulation which induces remodelling of the skin. With the ActiveFX end of the spectrum you have got at least eight months of new collagen generation and with the MaxFX, the higher-energy, that remodelling has been proven to last for at least four years, so the patient will continue to see improvements for a four-year period after a single treatment and I don't think there is anything else on the market that can come anywhere near that kind of result." AM

>> **Mr Max Murison** is a consultant plastic and reconstructive surgeon at The Welsh Regional Centre for Burns and Plastic Surgery, Morriston Hospital, Swansea. He has a special interest in scar treatment with lasers, injectable compounds including chemotherapy, silicone and pressure garment therapy.



>> **Gerd Gauglitz** is a senior physician and head of the Department of Aesthetic Dermatology and Laser Medicine and Scars Consultation at the Department of Dermatology and Allergology at the Ludwig-Maximilians-University in Munich.