Fractional, non-ablative skin resurfacing using a 1565 nm fiber laser

Interview with M. Tretti Clementoni, Milan (Italy)

Dr. Matteo Tretti Clementoni, born in 1968, graduated in 1993 with first-class honors at the University of Bologna and finished afterwards his course in specialization in Plastic and Reconstructive Surgery, beside working and expanding in the laser field. After working as a Medical Officer for the Italian National Military Police, he continued his medical career as Plastic Surgeon, first at the Multimedica General Hospital and afterwards at Casa di Cura Santa Rita in Milan. Having started an own professional practice simultaneously with his hospital career, he concentrated his activities exclusively on it from 2007 onwards. We talked to Dr. Tretti Clementoni about his experiences using a new fractional, non-ablative 1565 nm fiber laser.

Aesthetic Dermatology:
Dr. Tretti Clementoni, you are one of the first users worldwide of the M22 ResurFX, a non-ablative, fractional 1565 nm fiber laser. Tell us about your experiences with the device so far.

Dr. Tretti Clementoni:
When I received the laser in May 2013, it really surprised me, because the results I had on stretch marks were really good from the beginning. A lot of patients are now asking for this kind of procedure and they are very happy about the results. This technology is now my first choice to treat stretch marks and it allows me also to offer a new procedure for facial skin rejuvenation. IPL devices work very well on pigmented and vascular lesions but there is only a medium new collagen formation. With the fractional CO₂ you can obtain fantastic results but it requires 5-6 days of downtime. ResurFX stays in the middle. It allows obtaining better results than an IPL treatment with a shorter downtime than you can observe with a fractional CO₂.

Aesthetic Dermatology:
What are the main differences between ResurFX and for instance Fraxel system?
Dr. Tretti Clementoni:
I currently do not have a Fraxel device, but I tried to use it and applied it as well. Advantages are: ResurFX has non-disposable tips – which is important from the economical point of view. ResurFX allows me to be extremely precise during my treatments, and the most important thing is that you can vary not only the energy, but also the shape of the shot and the number of micro-beams. Therefore with a single pass I can decide whether to be more or less aggressive and avoiding the time consuming multiple pass technique. Also the lasing is very important. Its advantage is that micro-beams are emitted in a random modality. Having not a stamping emission as well as having not a sequential emission, I can use high energy avoiding any risk to deliver too much heat going simultaneously very deep in the skin. The Fraxel was invented in 2006/2007, but with a newer laser device you have some more advantages.

Aesthetic Dermatology:
When do you apply the ResurFX, and when would you rather use a CO₂ laser?

Dr. Tretti Clementoni:
There are different parameters to be acknowledged. Regarding the downtime, CO₂ lasers always have a longer downtime. In terms of the results, you have better results with CO₂ lasers and you may in some cases only need one session of treatment.

With a CO₂ laser you are normally having 5 days of downtime with crusts, where people cannot go outside and lead their regular social life; there will be very good results. Meanwhile the ResurFX downtime is shorter, but you will need more than one session of treatments.

But we should not compare non-ablative with ablative lasers because they have different indications. So I would never use a CO₂ laser on stretch marks again – I will always use the ResurFX, the non-ablative option. Maybe the non-ablative laser will have a future also on acne scars, but also the CO₂ laser is very effective on them. I think that the ResurFX can be used on treatment of scars as well as CO₂, but for different kind of scars. Speaking of rejuvenation, we are facing two different types of patients: on the one hand we have patients who are willing to accept moderate results with a non-ablative laser after the first treatment. And then there are patients who rather prefer more obvious results after a longer downtime, who would then be treated with the CO₂.

Aesthetic Dermatology:
Which laser do you currently use for scars on the body?

Dr. Tretti Clementoni:
It is depending on the scars. I’m always a little worried to use a CO₂ laser on the body in terms of hyperpigmentation. So if I have a thick scar like a hypertrophic, burn scar, a post-traumatic one – a second intention healing scar, my mind goes rather towards the CO₂ laser. If we have a recent red scar, why not start with the non-ablative laser?

Aesthetic Dermatology:
You often combine the application of the ResurFX with IPL. Which indications can be treated successfully with this combination?

Dr. Tretti Clementoni:
I think that the future will be dominated by combined therapy, combining different technologies to obtain very good results, reducing simultaneously the risk of adverse effects. Like treating with antibiotics, we are combining different drugs to have very good effects and less adverse effects.

The ResurFX is in my opinion not able to treat vascular lesions. So if you look at an aging face, you can have three features: lentigos/pigmented abnormalities or irregularities, there can be very small vessels and wrinkles. ResurFX can treat pigments and fine lines, while the IPL is fantastic for treating the vascular conditions. By combining the two treatments we can treat all three features of an aging face. And we are not increasing the downtime, which is an important issue. The only thing that has to be considered is
that when you use the ResurFX, you will have oedema for a few minutes – oedema of the skin means that there will be much more water inside the skin. So using the IPL immediately after the ResurFX is not recommendable. I prefer to do the ResurFX and then wait some days and then do the IPL. But I also try to combine both treatments during one session by using the IPL first, because it does not produce any swelling and then afterwards use the ResurFX.

**Aesthetic Dermatology:**
**What are the main benefits of ResurFX for doctors and for patients?**

**Dr. Tretti Clementoni:**
The advantages for doctors are very good results with a non-aggressive procedure. Advantage for patients would be definitely the better appearance of the face with a shorter downtime. ResurFX is also a very good opportunity for women offering very good results on stretch marks.

**Aesthetic Dermatology:**
**How long is the downtime, and in particular how long does it take for the irritation to fade?**

**Dr. Tretti Clementoni:**
It usually depends on the energy settings you apply. Normally less than two days, but patients mostly have only micro-crusts, which can be covered with make-up and so it is not affecting the social life. The CO₂ laser gives you fantastic results but you have to accept a longer period of downtime.

**Aesthetic Dermatology:**
**Please explain how and why you use ResurFX on stretch marks. How effective is it?**

**Dr. Tretti Clementoni:**
At the beginning I was not happy with the results I had with other devices and they just didn’t convince me at all and neither my patients. But the ResurFX is another story. I started to notice some preliminary very good results on stretch marks and already treated patients were asking me to treat them again. I consider stretch marks as scars and the idea is trying to modify the tissue and not only the color. We must have new collagen as well as a remodeling of it.

Trying to focus onto the majority of cases I have in my office every day, I started to treat white stretch marks. On them we obtained very good outcomes, but I did a few cases also on red stretch marks. I have no complete judgment on this kind of indication yet, so I cannot recommend it, but my preliminary results are really promising also on these lesions.

**Aesthetic Dermatology:**
**Dear Dr. Tretti Clementoni, thank you very much for taking the time to talk to us!**

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*The interview was conducted by M. Lengenberg.*