

# IMCAS Annual Meeting in Paris Features Scientific Excellence and Product Innovation

*By Birgit Hansen, Contributing Editor*

The annual *International Master Course on Aging Skin* (IMCAS) held in Paris from January 6 – 9 has once again shown itself as a high level platform for scientific exchange, industrial news and medical teaching. In its 7th year after foundation, IMCAS 2005 welcomed more than 1,200 dermatologists, plastic surgeons and other practitioners in the aesthetic field, as well as 150 key speakers from 50 countries and 60 international exhibitors at the associated industrial fair.

According to the IMCAS founder and scientific director Benjamin Ascher, M.D. (France), "IMCAS is one of the major European based international events that covers all leading subjects on aging skin treatment. The Master Course has made a decisive contribution to reducing the gaps of international scientific and industrial exchange in this field." Indeed the manifold scientific program reflected this intention – ranging from Botulinum Toxin, filler and implant applications, laser and light treatment, radiofrequency (RF), ultrasound, drug therapies and multiple combinative treatment through to the regenerative medical approach of stem cell therapy. Parallel to this, many companies have chosen IMCAS for new international product introduction or European market launches.



Benjamin Ascher, M.D.

No less than five new intense pulsed light (IPL) systems were exhibited, accompanied partially by study presentations, live treatment sessions and satellite symposia on a variety of applications. "IPL systems are now taking over lasers for hair removal to an ever greater extent," said the chairman of the plenary hair removal session Peter Bjerring, M.D. (Denmark). After some years of experience, many manufacturers now claim to have attained the ideal properties required for hair removal. "These properties – long pulses of 30 - 35 ms with a high square pulse design, constant wavelength and homogenous energy distribution at the lowest possible energy setting (10 – 16 J/cm<sup>2</sup>) for increased patient tolerance and reduced side-effects are highly effective in our iPulse system," said Mike Kiernan of U.K. manufacturer Cyden. Two xenon lamps integrated in the handset that are flashing in sequence or in parallel allow for the most accurate shaping of the

pulse pattern. "This small, lightweight, tabletop machine could indeed satisfy many requirements of the medical and aesthetic markets in the near future," commented Mario Trelles, M.D. (Spain) who, in cooperation with Jean Luc Lévy, M.D. (France), presented preliminary study results on iPulse hair removal in the armpits of ten patients with one month follow-up and daily control. "We must however carry out more treatments with long-term follow-up in order to evaluate the final effectiveness and establish accurate treatment protocols."



Mario Trelles, M.D.

The N-Lite laser series manufactured by EU Photonics (U.K.) introduced Chromolite, a new air cooled IPL for hair removal and superficial skin treatment, distributed in the medical as well as in the cosmetic fields. Further new IPL systems with a broader application range, tailored specifically for medical aesthetic practice, were presented by three companies from France, Switzerland and the U.S. Novalight Plus (Ultramed, Switzerland) enhances the Novalight series' triple pulse technology using a new and powerful handset with an integrated closed water cooling circuit, allowing operation in the infrared band with some good effects on stretch marks, as the first treatment results have shown.



Jean Luc Lévy, M.D.

The French MD One pulsed light system (by M.D. Light) comes with two handsets and combines several virtues of advanced IPL technology, such as the square mono-pulse design at 15 J/cm<sup>2</sup> fluency, multi-pulse setting options, handset integrated water cooling and a user friendly computer touch screen. "This system was exclusively developed for medical practices, allowing, besides hair removal and skin rejuvenation, effective treatment of vascular and dermatologic pathologies," declared manufacturer spokesman Alain Charron.

Yet another application is targeted by Palomar's (USA) new Cellulux pulsed light system for superficial adipose cellulite and orange skin treatment. "This system offers a complementary treatment to surgical lipoaspiration on the body contours and an effective alternative for those zones that are contraindicated to lipoaspiration," explained Ghislaine Beilin, M.D. (France), in her presentation of the Harvard Medical School's study results. The 80 – 2000 nm wavelength Cellulux was pre-launched at IMCAS and was officially introduced to the market at the AAD meeting in New Orleans in February.

A cellulite treatment that patients enjoy, as Evan Sherr, M.D. (USA) pointed out, "is possible with the newly introduced TriActive device (Cynosure, USA). This system combines rhythmic suction massage and low level diode laser stimulation through a water cooled skin contact head. Clinical study results on 36 patients show a moderate improvement of skin texture and tone after 12 – 15 treatments."

**The synergy** of different energy combinations is also effective in a new hair removal system. "Impedance controlled bipolar RF energy can be focused on the deep dermal tissue and follicle structures, while the 810 nm diode laser selectively targets the hair shaft," explained Annie Ejzenbaum (Syneron, Israel) on the concept of the Comet system.

Neither RF, nor laser nor IPL, but a light source operating in the 1100 – 1800 nm broadband spectrum is the heart of a new skin laxity treatment device

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known as Titan (Cutera, USA). "The absorption of near infrared light by water and the heating of the dermis results in dermal contraction. The dermal profile of the treatment is comparable to that of RF use," said David Goldberg, M.D. (USA), scientific coordinator of IMCAS, in the industry overview session, where the first good results of facial and abdominal skin laxity treatment using Titan were presented.

**Photodynamic therapy (PDT)** and other combined light-based approaches to skin rejuvenation and the treatment of acne sequelae were controversially discussed subjects at IMCAS.

Application of the photosensitizer, aminolevulinic acid (Levulan® from DUSA, USA or Metvix® from Photocare ASA, Norway) and activation by a light source in the blue or yellow spectral zone as an effective treatment of light to medium acne scars, skin texture and superficial rhytides was adopted in principle, but side-effect reduction and accurate treatment methods were hotly discussed. "In my aesthetics practice," insisted Daniel Cassuto, M.D. (Italy), "I give some preference to the application of Metvix, because it appears that the patient's downtime with strong erythema can be considerably reduced. This certainly also depends on the



Daniel Cassuto, M.D.

energy dose applied and exposure to this energy, and I prefer yellow light at rather short exposure times."

**Nathalie Fournier, M.D.** (France), in her presentation of study results on iClear XL (Curelight, Israel), a non-contact blue and near infrared light source, differentiated between acne treatment in the blue light band (405 – 420 nm) and a combined approach of blue light and near infrared band operation (850 – 920 nm) for skin rejuvenation and post-surgical augmentation of wound healing. "The moderate results of iClear XL skin rejuvenation with no downtime or side-effects for the patient make this device an enhancement for integrative aesthetic practices," concluded Dr. Fournier.

Much attention at IMCAS was paid to LED skin treatments with Omnilux/Omnilux Plus (Photo Therapeutics, U.K.) – on its own or in combination with other laser or IPL treatment. "This is a revolution in wound healing augmentation, because it seriously reduces downtime after more aggressive laser and combination therapy," reported Glen Calderhead, M.D. (Japan), on his LED experience. "In skin rejuvenation, however, the gentle LED approach needs more exploitation to define the most accurate protocols," found Ronald Moy, M.D. (USA), while Dr. Lévy pointed out the patients' demand for more visible results.



Glen Calderhead, M.D.

**An immediate hit** with the scientific audience was yet another approach to anti-aging – fractional thermolysis with the Fraxel laser (Reliant, USA). "I have never much been a laser guy," announced the scientific secretary of IMCAS, Bernard Rossi, M.D. (France), "but this concept of surrounding laser treated tissue zones with microscopic intact tissue zones during application is intellectually very intriguing. The results of this non-ablative skin rejuvenation treatment also look impressive, though we will have to gain another year of experience. So far, fractional thermolysis is still in the experimental phase."

The well attended sessions, workshops and training courses on Botulinum Toxin for facial and neck wrinkle treatment reflected the high and still rising popularity of BTX applications worldwide. Two of the major issues discussed concerned combinatory treatments with BTX-A and fillers in the same facial areas, on the one hand, and safety aspects with regard to the study situation and legal authorization of BTX products currently marketed on the other. "Botox Cosmetics or Vistabel (Lab. Allergan, USA) are backed by a full body of clinical studies and is legally authorized in 25 countries. Dysport (Lab. Ipsen, Germany) is clinically

tested and documented as well, and is presently undergoing a large study directed by Berthold Rzany, M.D. (Germany). But we have to remain aware of the internet distribution of rather dubious BTX products in quality and purity, mainly from China," emphasized Dr. Ascher. Similarly, the CE mark practice in Europe was critically discussed in terms of fillers. "Unlike the FDA approval practice in the U.S. the CE mark clearance process does not demand animal testing or a strictly defined clinical study. We should actually seriously consider adaptation of an FDA kind of regulation in Europe and a reform of the present CE practice for our own sake and our patients' safety," said Dr. Rossi summing up the legal discussion.

**Combination of BTX-A** and filler application mainly aims at prolonging the duration of treatment results as well as more satisfactory results in deep wrinkle reduction e.g. on the forehead and the nasolabial fold. For good results on the forehead with simultaneous avoidance of frozen face effects, BTX-A is administered to the glabella and three to four weeks later a hyaluronic acid is applied to fill the lines. The choice of filler type depends mainly on the necessary thickness of the filler, patient acceptance and tolerance. Especially when collagen fillers are used, thorough allergy testing is mandatory. "While e.g. Restylane/Perlane (Lab. Q-Med, USA) are popular fillers for their effectiveness and easy administration, they should not, however, be used on rosacea patients. In such cases Juvederm of the same brand name could be used as an alternative to reduce side-effects," said Gary Monheit, M.D. (USA) in the plenary filler session. U.S. studies on Juvederm are currently in progress. When it comes to patient acceptance cultural aspects are of importance. "Cosmoderm and Cosmoplast (Lab. Inamed, USA) for example which have good results and are widely accepted in the U.S., are often rejected or not even proposed to patients in Europe, because of their human cadaver tissue origin. Similarly, porcine collagen such as Evolence (Lab. Colbar, Israel) or Hydrofill (Lab. Inamed, USA) is not accepted by Jewish and Islamic patients. These reasons are of psychological, moral or religious nature and do not correspond to the quality of the mentioned products," was commented by Dr. Rossi. Here, new products of non-animal biotechnological origin such as Esthelis (Lab. Anteis, Switzerland), introduced to the European market at IMCAS could become alternative options.

The demand for skin tightening and wrinkle reduction is accompanied by a growing demand for volume



Gary Monheit, M.D.

restoration. Skeletization, mainly in the mid-face as part of the aging process or as a consequence of HAART therapy in HIV patients is widely treated with exogen volumetric fillers. Although patient fat implantation still shows the best results in terms of tolerance, sufficient volume restoration and durability, the rather invasive procedure under total anesthesia, and the relatively long patient downtimes often do not match

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modern life 'up and go' patient mentality. "In these patients polylactic acids such as NewFill or Sculptra (Lab. Dermik, Sanofi Aventis Group, France) or polyacrylamide gels (e.g. Aquamid) can be administered. I personally prefer the new hyaluronic acid, SubQ (Lab. Q-Med, USA), for my experience of fewer side-effects," reported Dr. Ascher.

**A completely different** perspective of anti-aging processes, enthusiastically discussed at IMCAS, was opened by the concept of regenerative medicine. "Within about three years, the dynamic regenerative properties of adipose tissue derived stem cells could become utilized for therapy in all medical fields," said John Fraser, Ph.D. (USA) of Macropore Biosurgery (USA). Adipose tissue derived stem cells are capable of differential development into bone, cartilage, muscle, adipose and neuronal cells. "Although this concerns all parts of the body and medicine in general, the regenerative approach is genuinely anti-aging, but in quite another dimension than any other known anti-aging procedure so far," concluded Dr. Ascher, chairman of the plenary session on stem cells and plastic surgery. ■

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