Abstracts of the 7th 5-Continent-Congress
August 31–September 3, 2016
Barcelona
Welcome to the official journal of the SCC conference. The SCC is officially known as Lasers & Aesthetic Medicine on Five Continents, and over time, has become known as just the SCC. Since the onset, we have strived to make our meetings some of the most outstanding in all of the global aesthetic community. As we prepare for the 2016 edition of the SCC, we are confident that we have achieved our objectives, but will also promise that we will continually strive to make the SCC better each and every year, with new educational and social activities, new initiatives in learning, and to utilize informational technology to keep up with the changing pace and face of aesthetics around the globe.

Planning and organizing an international congress is not easy and finding new ways to teach and explore the various facets of our business remains a challenge for everyone associated with meetings and congresses, no matter where they are from. The SCC has achieved a global reach and that was always one of our prime focuses – to have leading clinicians from all over the globe present cutting edge technology and science to us all. And in 2016 we are pleased to announce that we have over 1400 incredible dermatologists, plastic and facial plastic surgeons, and aesthetic experts from over 30 countries and from all of the continents.

The meeting covers all aspects of energy based systems, of the injectable fillers and neurotoxins, as well as other facets of aesthetics – from peels to scars to photodynamic therapy. In addition, we have courses on the business of medicine – from social media to practice management and everything in between. In other words, there is something for everyone at the SCC, and we are thrilled to be hosting the 2016 edition in the beautiful city of Barcelona, Spain.

In addition to many new programs and initiatives, one of the most exciting for the SCC team is to launch this new journal – The Journal of the SCC. This Congress has been a several year endeavor with its fruition being this inaugural journal. We are pleased, proud, and humbled that we have been able to publish a journal which showcases the stories and talents of our esteemed faculty and guests from all over the globe.

In this inaugural edition, all of the abstracts that were brought to the 2016 SCC meeting are released here. Several of our wonderful faculty have shared with us their presentations in written form, and we are pleased to present their work here as well. We want this journal to showcase aesthetic medicine – from all reaches of the aesthetic globe, and in doing so we can share our incredible knowledge with each other, and show the true love of our aesthetic medicine.

Welcome to the journal of the SCC Congress!

MICHAEL H. GOLDF, MD
Congress President
WEDNESDAY, AUGUST 31, 2016

HOME-USE DEVICE SYMPOSIUM
CHAIR: GODFREY TOWN

2016 Home Use Devices - Survey Monkey
Dominique du Crest, France

Introduction / Objectives: The objective of this talk is to provide a brief overview of 2016 Home Use Devices (HUDs) survey monkey results and review key questions: What do physicians know about HUDs? What do HUDs need to do to gain credibility in the professional environment? Is the HUD segment a threat or an opportunity? To which type of regulations HUDs should comply?

Materials and Methods: Following the initial survey monkey done from July-August 2015 a second survey was initiated in June-July 2016 to better understand doctors’ understanding about Home Use Devices. The existence of the survey was promoted via LogiVent email data base and via Twitter.

Results: The majority of physicians recognize the existence of HUDs, and acknowledge that they mostly heard about them via a professional setting. Physicians would like to see more efficacy and safety published data. They don’t see HUDs as a threat for their business but as an opportunity. Beyond current HUDs segments (acne, anti-aging, body, cleansing and hair removal), they envision an even greater requirement for retailers to list products that are truly effective. The benefits and claims comes an even greater requirement for retailers to list products that are truly effective. The benefits and claims should be clearly and truthfully described to consumers. This presentation will highlight the key technical requirements for claims support that any developer of a home use device, using 5 j/cm² with cooling – it is important to expose the hair follicle to optical energy.

A New Generation of Home-Use Hair Removal, Combining Optical and Galvanic Energy
Moshe Mirzahy, Israel

It is well known that optical energy in the form of IPL or laser destroys hair follicles to achieve permanent hair reduction.

In professional clinics, laser and IPL platforms can generate 40-50 J/cm², combined with cooling of the upper layer of the skin. This high energy level can penetrate deep to destroy hair follicles up to 2 mm deep. In order to ensure the same level of efficacy in a home-use device, using 5 j/cm² with cooling – it is important to expose the hair follicle to optical energy.

The use of galvanic energy prior to the optical energy pulses opens the hair pores and exposes the hair shaft and follicle to the optical energy for better absorption of the pulse light by the melanin, thus achieving results similar to professional clinics.

In a study that was conducted in the US by Dr. Michael Gold – this combination also proved that dark-skinned people can also be treated safely.

Consumer Device Standards & Regulations
David Slepy, USA

Earlier this year the first international standard devoted to home-use devices was published by the Internation Technical Commission (IEC). This standard, known as IEC 60335-2-113, Edition 1:2014-6, was the first application-specific ("vertical") standard to address the safety of home-use skin-care devices. Although initially drafted by a project group of experts in biophysics and dermatologic lasers, the draft underwent numerous edits by IEC Technical Committee TCE1/Working Group 30, which made it more restrictive (and probably more vague, technically).

A key requirement of this standard is that a HUD incorporate a means for assessing the pigmentation level and for adjusting the output (if adjustable), which makes sense for visibly and some infrared wavelengths, but has no meaning for some longer infrared wavelengths. It does allow for a colour chart to serve as the means to assess skin pigmentation level rather than sensors. It also requires for devices without an adjustable output, that the manufacturer provide a validation study on human skin showing that bulk tissue damage does not occur. If the HUD passes the tests and requirements, it should be labeled as a Class 1C device, although the comprehensive definition provided in IEC 60825-1:2014 (the basic IEC laser-product standard) has been so simplified that it could be confused with the general definition of any Class 1 product. The new IEC standard is a step forward, but some important safety tests are not well defined, and independent test houses will be challenged to interpret some of the standard’s requirements.

On the regulatory scene, there are other actions underway. The European Commission Mandate on the safety requirements for consumer laser products will have an impact on HUD products. Also in Europe there is some expectation that the next regulations under the EU Medical Device Directive will include home-use laser and IPL devices as “medical devices.” In the USA HUDs are already considered medical devices and require clearance; but it is not clear if the US Food and Drug Administration will accept the Class 1C product concept or completely accept IEC 60335-2-113.

Hair Reduction from Prolonged Use of a Home IPL Device
Eric van Kempen, The Netherlands

Prolonged use of a home-use IPL device for hair removal has been investigated in a 2-years study. A qualitative interpretation of the long term efficacy results, based on a hair growth simulation model, will be presented.
**Invasive Radiofrequency Treatment**

Stephen Mandy, USA

The latest innovation in skin tightening and fat reduction is invasive radiofrequency. The technology is unique in providing both precise deep tissue temperature at the point of the cannula and simultaneous skin surface temperature via thermography. By utilizing the variant between the two, it is possible to achieve outstanding fat reduction and skin tightening at the same time. This can be employed in the submental region and lower face, arms, abdomen and thighs with minimal invasion, little morbidity and excellent outcomes.

**EUROPEAN LED ACADEMY SYMPOSIUM**

**CHAIR: MICHELE PELLETIER**

**Biofilms and Cold Inflammation**

Patrizia D’Alessio, France

**Introduction:** Inflammation is characterized by 4 fundamental signs, respectively rubor, tumor, calor and dolor, associated with diminished organ function. When these signs become generalized, they are called chronic or “silent inflammation”. In that case, detrimental effects are known to promote accelerated cell senescence and play an important role in thetisclerosis, cardiovascular disease and metabolic syndrome. Still, some forms of inflammation lack one or more of the above mentioned characteristics, such as absence of fever and sometimes even no pain. Here we propose a new terminology for those forms i.e. “cold inflammation”.

Biofilms are the most common form of habitat of microorganisms constituting 80% of the microbial biomass of the planet. In biofilms, bacterial cells are maintained inside a matrix of biomolecules. The matrix is composed of: extracellular matrix, extracellular DNA, extracellular RNA and extracellular polymeric substances. Bacterial cells are protected from the immune system and are resistant to antibiotics.

**Material and methods:** From mouth to colon, microflora populating the gut is organized in biofilms in humans. Biofilms inhibit the growth of other microorganisms. Biofilms shield bacteria from the host immune system, antibiotics and antiseptics. Biofilm is not accessible to observation, except in the dental plaque, which is reconstituted day after day. Indeed oral infections become more and more difficult to eradicate due to increased resistance to antiseptics and antibiotics. An alternative unspecific mechanism consists of using Photodynamic Therapy (PDT). In presence of photosensitizer (non toxic dye) and light, the generation of oxygen species is able to damage bacterial structures and exert an antiseptic effect.

**Results:** PDT has been shown to be useful in the treatment of periodontal disease by disrupting biofilms from the root surface of teeth. The dyes shown to be active with low power lasers are methylene blue, toluidine blue, malachite green or indocyaanine green at the proper wavelength they induce free radicals and singlet oxygen which are toxic to bacteria.

**Conclusion:** Light has been used as therapy since the antiquity. Once forgotten, it was rediscovered at the beginning of the XIX Century. In order to be effective photosensitizers must not be toxic to host cells and present toxicity only after activation by light. They must remain excited long enough to lead to the production of cytotoxic species (mostly ROS) able to kill bacteria.

Light, photosensitizers and oxygen, the three major actors of phototherapy can be used to affect biofilms hosting microorganisms, which are entertaining some sort of cold inflammation reaction, without fever, pain or edema. At the current state of technical development, this intervention is limited to the oral mucosa, but numerous targets could be imagined i.e. at pulmonary and gut mucosa.

**How Blue LED Can Be Effective On Acne Disorders**

Linda Fouque, France

We are no longer in the dark ages as far as acne treatments are concerned.

**What do I mean by that?**

Many of the treatments for acne cause secondary effects. For example resistance to antibiotics, depression with Rosacutane, scars due to incompetent treatments and so on.

We no longer have to accept that. There is a more modern solution. At my clinic I created and tested a combination treatment that produces consistently excellent results with no side effects. For example, I have one patient that tells me how grateful she is that I cured a problem she had been suffering with for twenty years. She was thirty-five when I met her. Her acne has started at age fifteen. She had tried every treatment without success. I used her as an example because she is typical of the day of what is called persistent acne in adult women.

The way I treated her is based on my research and clinical tests of the past eight years, which focuses on and treats the multifactorial causes of acne in two primary ways: first LED photobiomodulation (PBM) and secondly creams and peeling when needed.

**Conclusions:** It is well known that Propionibacterium Acnes (P.acnes) is the main cause of acne lesions and the persistence of acne. LED PBM is efficient on acne lesions due to the antibiotic and anti-inflammatory effects of blue light, which are well documented.

I collaborate with Ashland Laboratory has allowed me to identify other positive effects. These studies were confirmed by a multicenter clinical study of LED Academy clinicians.

**In my talk I will give details of all my findings and results.**

**Low-Level Light Therapy on Tissue Repair**

Klaus Fritz, Germany

The use of low level laser (light) therapy (LLLT) has recently expanded to cover areas of medicine that were not previously thought of as the usual applications such as wound healing and other inflammatory conditions.

Since it is agreed that mitochondria are the principal photoreceptors present inside cells, and it is known that muscle cells are exceptionally rich in mitochondria, this suggests that LLLT should be highly beneficial in muscle injuries and tendons as well as the skin.

**Low intensity light therapy is effective in the improvement of collagen fibers organization of the skin and collagen content making it ideal for speeding up wound healing and preventing hypertrophic scarring.**

The ability of LLLT to stimulate stem cells and progenitor cells means that muscle satellite cells may respond well to LLLT and help to repair. Furthermore the ability of LLLT to reduce inflammation and lessen oxidative stress is also beneficial in cases of muscle fatigue and injury. The presentation will summarize results of studies and clinical experience.

**How to Manage Inflammation After Aesthetic Procedures?**

Susanne Hausdorfer, Belgium

Fractional ablative lasers or radiofrequency devices are responsible for important oedema post treatment because of the epic dermal injury, especially in the face and neck area. Down time with no adjuvant treatment goes up to 3 weeks with social ejection.

Ablative laser light on these ablative treatments in the same treatment session drastically reduces the downtime to only 48 hours. Treating on Friday and working on Monday.

The same wavelength (850 / 630) can also be used once oedema has installed to shorten down time, such as in rhinoplasties, blepharoplasties, contact eczema following esthetic procedures such as injectables and mesotherapy. The healing process will be quicker and down time shorter.

**Photobiomodulation and Clinical Parameters**

Michèle Pelletier-Aouzerate, France

The use of LED entered our practice by photodynamic therapy. The treatment of diffuse acne is a therapeutic benefit widely. These “precancerous” lesions (Secondary mechanism) are caused by genetic alterations found pathological all around. It is connected to repeated exposure to various carcinogens. The background (Primary mechanism) is the seat of deregulation that amplifies degeneration. This is the field of carcinization.

Photobiomodulation of a lesion is first, photobiomodulation of a field. Photobioregulation, loco-regional and delay effects are other facets.

The reported clinical case allows us to discuss a strategy, OCRler a beautiful illustration of our discussion in this respect:

- To evaluate the pathological level of injury
- • Assess the area and the field of the latter
- • The patient’s general health condition
- • The irradiation parameters

Photobiomodulation efficiency is strongly dependent of clinical diagnosis. Photobioregulation, loco-regional and delay effects could be starting points of a preventive medicine...
European data shows that 1 in 5 women are thinking about doing facial treatments. Aesthetic medicine is booming, but the economic crisis is a reality. Patients can’t afford expensive treatments, so doctors need to develop cost-effective techniques.

I will explain how to achieve this without diminishing quality and safety. My technique is effective and efficient. Combining injections with different densities of AH fillers on strategic points. Working with facial proportions it permits a lifting of the face without getting too much volume. The results are natural, long lasting and without downtime.

Getting efficient results on a smaller budget ultimately improves client satisfaction.

**The Longevity of Fillers: What Do We Tell Our Patients?**

Ryan Greene, USA

The past decade has seen an exponential increase in the number of facial filler treatments performed worldwide. This can be attributed to patient awareness, the desire for non-surgical rejuvenation, and an increase in filler options and indications.

Despite the ubiquity of these treatments, most patients lack an adequate understanding of what these treatments entail. Their understanding and expectations of these filler treatments come from patient brochures and clinical trials data, which are often based on subjective clinical observations.

While these clinical trials seek to simplify filler longevity, there are numerous patient-related factors that can affect the perceived clinical outcome. It is vitally important that treating physicians not only understand the concepts surrounding filler longevity, but also impart this knowledge to their patients as well. It is clear that patient satisfaction is enhanced if they better understand filler longevity as it applies to their own anatomy and other intrinsic factors. All of these issues will be presented, with a review of the scientific literature as well, with the aim of increasing the overall understanding of this vital topic.

**Hyaluronic Acid: A Multi-Talented Polysaccharides**

Christine Kreiner, Germany

**Introduction and objectives:** Hyaluronic acid-sodium salt with the international short name hyaluronan is a natural substance which exists in an identical form in all organs and liquids of vertebrates. Hyaluronic acid is not only found in the various areas of our body but also in all animals, fungi, bacteria and even viruses. Hyaluronan, worldwide used in medicine, has essential cytobiological functions and plays an important role in the regulation of intracellular signal transfer, cell proliferation and cell migration. Depending on the molecular weight and in this way on the length of the linear chains hyaluronic acid takes on different biological functions, which has to be considered if used for medical application.

The biological functions, the biocompatibility of linear as well as of crosslinked Hyaluronan and the pros and cons will be presented and discussed.

**Materials and methods:** In relation to the intended use, specific properties of Hyaluronan were selected, e.g. cross linkage degree and the degradation time by Hyaluronidase as well as the suitable viscosity were tested and optimized.

**Results:** The results of our investigations showed that an important factor are the “intrinsic viscosity” and that the degradation time of Hyaluronan by hyaluronidase depends strongly on the chemical properties such as cross-linked monomeric or biphatic or linear free chain which is an important factor for the stability and volumizing effect of dermal fillers.

In addition the amount of pendants in relation to the completely crosslinked Hyaluronan chains influence the bio-compatibility of dermal fillers.

**Conclusion:** Hyaluronic acid, an ubiquitously existing polysaccharide which is responsible for a series of different cytobiological functions through interaction with the cells. This forms the basis for a multitude of possible applications of this simply built multi-talent, from mere viscoaugmentation to the possible treatment of tumors.

**Anatomy of Aesthetics**

Stephen Mandy, USA

Recent observations of anatomic variations not previously known or understood have altered approaches to aesthetic treatments.

Variations in the location of the angular artery, direct connection to the retinal artery by vessels in the periorbital region, location of fat pads and retaining ligaments all have an impact on the procedures and techniques we employ.

**Illegal Permanent Fillers: Complications and Treatment**

John J. Martin, Jr., USA

**Introduction:** There have been an increased number of reports of illegal permanent fillers being administered to patients by non-physician injectors over the last few years. This has been a growing problem in the United States, where one person has even been arrested for injection of toxic substances such as fix-a-flat and cement for bucktooth enhancement. There have also been multiple deaths and serious complications from these injections.

Most of the injections with illegal permanent fillers have been biopolymer, a type of silicone. It is usually injected in large volumes into the face, breasts and buttocks. While some patients have an immediate inflammatory response to the substances, some patients have late migration and inflammatory nodules which develop several months later.

**Methods:** Multiple patients who have had illegal fillers injected into the face have been examined and treated with a variety of modalities. These have included steroid injections, laser lipolysis and Ulthera.

**Results:** Many patients show some improvement with steroid injections. However significant softening and shrinkage of the nodules has been seen with Ulthera. In some cases surgical excision has been used to remove the nodules.

**Conclusion:** Illegal fillers into the face can produce significant disfigurement. While there is no way to remove the substance injected, improvement can be seen using a variety of modalities.

**Illegal Permanent Fillers: Complications and Treatment**

Pierre Nicolau, Spain

Injecting any product within the human skin induces a reaction, either to eliminate or to encapsulate it.

With time it has appeared through clinical practice that many fillers induce unwanted and unfavourable reactions, including those allegedly supposed not to induce such reactions, like Hyaluronic Acids or Acrylic Gels. These clinical findings are substantiated by histological proofs allowing to a better understanding of the mechanisms leading to unfavourable reactions.

Here are presented the mechanisms leading to these reactions, which can be beneficial, provided the injected filler has been specifically designed for this purpose.

We can then understand why some products achieve almost all of the requirements for a long lasting filling effect with minimal risks, and explain the difference between true safe bio stimulation (new mature collagen Type I) and Fibrosis (collagen type III).

**Biological Effects of Fillers**

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Facial Treatment with Acoustic Wave Therapy (AWT) to Improve Facial Skin Texture, Pores and Wrinkles
Maurice A. Adatto, Robyn M. Adatto-Neilson, Switzerland

The objective was to determine the efficacy and safety of AWT using Extracorporeal Pulse Activation Therapy (EPAT) for facial signs of aging.

Materials & Methods: Twelve patients were treated with acoustic wave therapy (AWT), ten female and two male patients. The mean age was 53 years. All patients received six treatments at one week interval. The treatment was performed with the CellActor SC1 “Ultra” (Storz Medical AG, Berlin, Germany) on the face. Five patients received a treatment with the D-Actor handpiece, 10,000 pulses, 1.2 bar and six patients received the treatments with the C-Ac tor handpiece, 10,000 pulses, 1.2 bar. All patients had no parallel treatments i.e. peels, injections or topicals. Pictures were taken with the Antera 3D camera (Miravex Ltd, Dublin Ireland) before the treatments and six weeks after the last treatment to compare skin texture roughness, pore size and depth of wrinkles. Pictures were also taken with a conventional digital camera and the patients provided self-assessment.

Results: Although pictures with the conventional digital camera did not show big differences, all patients showed measurable and significant results with the Miravex Ante ra 3D camera. Skin roughness showed an overall improvement of 28%, pore size was reduced by 48% and wrinkles depth and width decreased of 24%. All patients felt a difference by touching their skin. It felt firmer, tighter and plumper. No patient had side effects or problems after the treatments. Some patients had a little redness, which disappered within 2 hours. No sun protection was required as it is not a light based treatment. All patients would recommend the treatment.

Conclusions: AWT using EPAT for facial treatments is a safe and effective method for reducing signs of skin aging on the face.

Histologic Evaluation of Mechanism of Action of the New Fractional Handpieces of Picosecond Laser 532 and 1064 nm in Human Skin for Rejuvenation
Adriana Ribe, Spain

Background: Fractional laser treatments were first introduced by Dr. Manstein in 2004 with non-ablative lasers. Currently, the new laser technology with picoseconds devices, first created to remove tattoos, provides fractional hand pieces to treat fine wrinkles, acne scars and melasma. The underlying mechanism of action at histological levels has not been extensively studied yet.

Study: 3 female patients (ages 45-65 y/o) with photoaging were selected for the study. They were divided in 3 groups and received 1 laser treatment. Group I: 4 passes treatment with the 1064nm Resolve hand piece at 2mJ. Group II: 4 passes treatment with the 532nm Resolve hand piece at 0.5mJ. Group III: 3 passes treatment with the 1064nm Resolve hand piece at 2mJ and 3 passes treatment with the 532nm Resolve hand piece at 0.3 mJ. A 3 mm punch biopsy was performed on the skin of the neck immediately after the treatment.

Result: Clinically, patients experienced erythema which resolved within 1-3 hours after the treatment. Histologically the punch biopsy after the laser treatment showed:

• Group I: intraepidermal vacuoles with intact stratum corneum. Dermis with ectatic vessels and lymphatics, extravasation of red cells and some collagen denaturation at 300µm.
• Group II: Dermis with ectatic vessels and lymphatics, extravasation of red cells and some collagen denaturation at 300µm.
• Group III: Dermis with ectatic vessels and lymphatics, extravasation of red cells and some collagen denaturation at 300µm. Minimal changes in the epidermis.

Conclusion: Histological skin analysis immediately after laser treatment with the new fractional hand pieces 532 and 1064nm of picosecond lasers showed changes in the epidermis and dermis with intact stratum corneum. These changes in the skin due to the photothermal effect might traduce in neocollagenesis, breakdown of fibrosis in scars and pigment breakdown in melasma. Correlating with the histologic and clinical results in photoaging, melasma and acne scars are necessary. The histological results are promising since they demonstrate significant changes in the epidermis and dermis with intact stratum corneum which will translate in clinical results with minimal or no down time.
The anchorage of cones in the adipose tissue (while waiting for the fibrous tissue production, which will render the cones no longer necessary) has proven to be an efficient support system for soft tissues. After meticulous skin disinfection, local anaesthetic is injected only in the entry and exit points. 1.5 cc of anaesthetic solution with adrenaline is sufficient per thread.

The procedure starts by creating an entry point with an 18G intramuscular needle in the middle of the path. With the first needle of the suture, we insert the first half of the series of cones into the subcutaneous tissue. From the same entry point, with the second needle, we insert the second series of cones in the opposite direction. Finally, using a sterile pair of scissors, the needle is cut off from the residual thread. The same procedure is repeated for all the sutures. The procedure is completed with fat compression to achieve the desired result.

Results: The author will present the European experience with Silhouette Soft treatment, along with its indications and results in the face, neck and brow.

Conclusion: The non-surgical anti-aging facial procedure, together with fillers, botulinum toxin and rejuvenating, stimulates treatments, is now enhanced with bidirectional sutures to address tissue sagging.

Absorbable Suspension Threads with Cones: 4 Years Experience
Roberto Pizzamiglio, Spain

Introduction: Silhouette Soft is a well-known procedure for the creation of the double eyelid in the patient. The non-surgical anti-ageing facial procedure, together with fillers, botulinum toxin and rejuvenating, stimulates treatments, is now enhanced with bidirectional sutures to address tissue sagging.

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In the past complete ablative resurfacing was commonly used for skin rejuvenation. Although results were dramatic, risks and side effects were high (mainly the risk for hypopigmentation and scarring).

The introduction of fractional resurfacing technologies both ablative and non-ablative, has introduced a tremendous change in our abilities and understanding of skin resurfacing. This revolution has changed our scope.

In this presentation we will discuss ablative and non-ablative technologies of skin resurfacing. The new and upcoming technologies together with our current understanding of wound healing mechanisms.

NEW DIMENSIONS IN COSMECEUTICALS & SKIN CARE
CHAIR: JOEL SCHLESSINGER

It has been shown that a high fluence Q-switched ns-domain system was more effective than a low fluence ps-domain system for pigment removal, so it would appear to be necessary to increase fluences for ps-domain systems, at least for the Nd:YAG systems. Likewise, the existing 1064 nm and 532 nm wavelengths still leave something to be desired when treating multicoloured tattoos, or tattoos which have proved recalcitrant to ns-domain laser removal, with a ps-laser.

The addition of a visible yellow and visible red handpiece, combined with higher pulse energies, would therefore increase the potential range of indications of the ps-domain laser, and make it more attractive to the practitioner. The addition of the picosecond domain does not automatically make picosecond lasers superior to a good ns-domain system, especially when the pulsewidths of current ps-domain lasers are still in the high end of the picosecond range, and very much at the high end of the price range.

Er:YAG Laser for Treatment of Enlarged Pores Woraphong Manusakti, Thailand

Dilated (enlarged) skin pores refer to conditions that present with visible topographic changes of skin surfaces. Although not a medical concern, enlarged pores are a cosmetic concern for a large number of individuals, especially in women. Possible causative factors of enlarged facial pores include many exogenous and endogenous factors, such as sex, genetic predisposition, aging, chronic ultraviolet light exposure, comedogenic xenobiotics, acne, and seborrhoea.

Therapies to attenuate facial pores include medical and procedural treatments. A variable square pulse (VSP) Er:YAG laser resurfacing has proven effective in wrinkles and atrophic scars. A recent study using VSP Er:YAG laser for treatment of dilated pores in a series of 19 patients with 6-month follow-up period will be presented. Significant improvement of dilated pores was noted starting at one month after two treatments. Maximal improvement was observed at one month after four treatments. No adverse effect was found at any follow-up visits. A proposed mechanism of Er:YAG laser for the treatment of female pattern hair loss subjects that were identified as non-responders to 5% topical minoxidil foam utilizing the previously reported sulfotransferase assay. A novel topical solution of 15% minoxidil was applied daily during 3 months. Preliminary results of our pilot study have demonstrated clinically significant response based on hair counts increase from baseline (over 15%) as well as global photographic assessment compared to baseline. None of the subjects experienced significant hemodynamic changes. To the best of our knowledge, this is the first study to demonstrate the potential beneficial effect of higher concentration of minoxidil in female pattern hair loss subjects that fail to respond to topical 5% minoxidil.

Synthetic Hair Implant in Androgenic Alopecia Ghislaine Benih, France

Hair Transplant and prosthetic hair implantation suffer from many drawbacks. While hair transplantation is adopted by the medical community as an accepted procedure for hair restoration the implantation of prosthetic hair fibers is controversial. The commercially available prosthetic hair fibers are in the market since the late 90’s but they are not widely used. The drawbacks include a single hair implantation technique, which leads to long and stopgap procedures and implantation of a significant foreign body. A new and innovative technology is aiming to revolutionize the hair implantation field and change the way it is perceived.

The new technology offers a minimal invasive, simple and innovative technology is aiming to revolutionize the hair implantation field and change the way it is perceived. The new technology offers a minimal invasive, simple and innovative technology is aiming to revolutionize the hair implantation field and change the way it is perceived.

This discussion will focus on evening out and brightening the individual’s skin tone, hydrating the skin and protecting the skin. The ultimate goal is to slow down cutaneous aging as much as possible.

I will discuss cosmeceuticals and nutraceuticals, proper application and managing patients’ expectations. Excellent standard medical photographs are mandatory. Physicians and cosmeceutical companies need to understand mechanisms of action, product claims and what consumers want.

Finally, use of a dermatology – tailored strict topical regimen is very helpful to patients that are serious about controlling and reducing their hyperpigmentation.

HAIR – DISEASES, REGROWTH, REMOVAL & RESTORATION CHAIR: BRADLEY BLOOM

Hair Diseases
Mohamed Amer, Egypt

Hair diseases are a very common disorder that faces each dermatologist daily. How to diagnose the right disorder and to handle patients needs a lot of effort to sort out the best treatment that helps patients, especially females whom complains of their hair daily.

Stem cell topical or injection became one of the very common methods used to increase hair and deal with many hair diseases and gives great result.

This talk will cover the effect and results of stem cells injection for hair.

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Hair Transplant and prosthetic hair implantation suffer from many drawbacks. While hair transplantation is adopted by the medical community as an accepted procedure for hair restoration the implantation of prosthetic hair fibers is controversial. The commercially available prosthetic hair fibers are in the market since the late 90’s but they are not widely used. The drawbacks include a single hair implantation technique, which leads to long and stopgap procedures and implantation of a significant foreign body. A new and innovative technology is aiming to revolutionize the hair implantation field and change the way it is perceived.

The new technology offers a minimal invasive, simple and quick procedure for simultaneous implantation of many implants, utilizing single button disposable cartridges preloaded with hair implants. The purpose of this presentation is to introduce the new technology, results from a histological study and interim results from an on-going multi-center clinical study.

Minoxidil Dose Response Study in Female Pattern Hair Loss Patients Non-Responders to 5%
Andy Goren, USA

Topical minoxidil is the only FDA approved drug for the treatment of female pattern hair loss. The maximum strength of the legally marketed topical minoxidil in the US (5% minoxidil topical foam) is effective in regrowing hair in only a minority of women i.e., approximately 30%; thus, the majority of female pattern hair loss patients remain untreated.

Previously, we have demonstrated that non-responders to 5% topical minoxidil foam are low metabolizers of minoxidil; thus, we hypothesized that increasing the bioavailable minoxidil to low metabolizers will increase the number of responders to topical minoxidil without increasing the rate of adverse events. In this study, we recruited female pattern hair loss subjects that were identified as non-responders to 5% topical minoxidil foam utilizing the previously reported sulfotransferase assay.

A novel topical solution of 15% minoxidil was applied daily during 3 months. Preliminary results of our pilot study have demonstrated clinically significant response based on hair counts increase from baseline (over 15%) as well as global photographic assessment compared to baseline. None of the subjects experienced significant hemodynamic changes. To the best of our knowledge, this is the first study to demonstrate the potential beneficial effect of higher concentration of minoxidil in female pattern hair loss subjects that fail to respond to topical 5% minoxidil.

ACNE & ACNE SCARS TREATMENT – MY BEST RESULTS
CHAIR: DAVID GOLDBERG

Acne Treatment via Selective Photothermolysis of Sebaceous Follicles with Laser and Gold Microparticles Maurice A. Addato, Switzerland

Background and Objective: Selective photothermolysis of sebaceous follicles by enhancing the follicular contrast by localized delivery of inert gold microparticles chromophore has been demonstrated (Ref. 1). In this study, a clinical investigation was undertaken to evaluate effect on inflamed acne.

Methods: An Ethics Committee approved study was conducted. Sub-micron inert gold microparticles, engineered for strong near-IR light absorption, were formulated for selective delivery into sebaceous follicles. The formulation was applied topically and massaged into facial skin. This was followed by 810 nm laser optical pulses (Palomar Vectus). Six subjects (mean age 22 years, skin types 1-3, 50% female) were treated three times at 1-week interval with radiant
exposure 25-32 J/cm2, pulse-width 30 ms, spot 12x12 mm, and 2 passes. Subjects were asked to rate discomfort on 0-10 scale. Inflammatory lesion counts and Investigator’s global assessment (IGA) of severity were performed at base-line, 8- and 12-weeks. Retreatment was planned if lesion count change did not reach -40% threshold at 12-weeks.

Results: At 8-weeks post baseline, the mean inflammatory lesion count change was -51% (N=6, SD=27%). At 12-weeks post baseline, the mean inflammatory lesion count change was -60% (N=5, SD=13%). Individual changes were -69%, -61%, -44%, -76%, and -50%. This compares favorably with Study 2 (Ref 2, mean change -49%). All reached -40% lesion change; and no retreatments were necessary. At 12-weeks post baseline, 4 of 5 (80%) subjects showed reduction in the IGA score. Transient erythema and edema were noted after treatment. Treatment was tolerated well (mean discomfort 4).

Conclusions: A treatment of topically delivered chromophore consisting of near-IR-absorbing gold microparticles, followed by 810-nm optical pulses appears to be successful, well tolerated, and safe for treating acne vulgaris.


Combined Non-Ablative Laser and Vacuum Systems in the Treatment of Acne Vulgaris

Maria Angels Nkhatro, Dubai

Acne vulgaris affects millions of people worldwide and has a potentially significant psychosocial impact on patients. Though the exact pathogenesis of acne is still unknown, many studies have suggested it is a disorder of the pilosebaceous unit that includes three main factors: increased sebum production, obstruction of the follicular orifice, and proliferation of Propionibacterium acnes. The resultant inflammatory lesions including papules, pus-tules, nodules and cysts may lead to long-term sequelae and sometimes unmet need in the cosmetic arena. Difficulties include the variety of scar types with different physiologies, as well as the volume loss that often accompanies scars. Combination therapy has long been touted as the best route for results, yet this can be a very expensive endeavor as well as time consuming for the patient and often can result in significant downtime. Many, many of the treatments only improve the scars by a fraction, even if half, yet most acne scar sufferers would prefer a more complete improvement, due to the their emotional toll the scars exact on their psyche.

Newer treatments, such as radiofrequency or plain microneedling offer less downtime, whereas new fillers which are very long-lasting are helping to correct volume deficits. Together these newer treatments offer less risk, and downtime possibly lower economic impact and a higher percentage of improvement than older treatments.

WHAT PDT CAN DO FOR YOUR PATIENTS

Chair: Jared Jagdeo

Adjunctive Role of Light-Emitting Diode Phototherapy for the Aesthetic Surgeon

R-Glen Calderhead, South Korea

Since the development of the NASA LED in 1998, the light-emitting diode has attracted interest in LED-low level light therapy (LED-LLLT) as a stand-alone monotherapy approach for rejuvenation and wound healing. However, and even more interesting, LED-LLLT has achieved what is proving to be a valuable adjunctive role in aesthetic, cosmetic and antiaging medicine. In particular, the deep-penetrating wavelength of 830 nm in the near-infra-red has attracted a great deal of attention for its ability to produce excellent results in skin rejuvenation and to accelerate and enhance post-procedure wound healing.

830 nm LED-LLLT is delivered from planar panels of LEDs. The main targets for this wavelength are the dermal cells: mast cells, macrophages, neutrophils and fibroblasts, and also the vascular system. Epidermal keratinocytes are also an interesting target since the epidermis also needs to be renewed in any antiaging or rejuvenation procedure. Post-procedure treatment is delivered immediately after treatment and then at 24 and 72 hr later. Subsequent sessions can be given twice per week as required.

830 nm LED-LLLT has been proved to work well at tissue, cellular and subcellular levels, is easy to deliver, side-effect and pain-free, and is well tolerated by patients of all ages and skin colours. Furthermore, it is clear that 830 nm LED-LLLT at appropriate parameters has a powerful role to play in the daily practice of the plastic, aesthetic and antiaging practitioner.

Acne Scarring: New Devices and Fillers

Amy Taub, USA

Reduction of acne scarring continues to be a very important and somewhat unmet need in the cosmetic arena. Difficulties include the variety of scar types with different physiologies, as well as the volume loss that often accompanies scars.

Combination therapy has long been touted as the best route for results, yet this can be a very expensive endeavor as well as time consuming for the patient and often can result in significant downtime. Many, many of the treatments only improve the scars by a fraction, even if half, yet most acne scar sufferers would prefer a more complete improvement, due to the their emotional toll the scars exact on their psyche.

Newer treatments, such as radiofrequency or plain microneedling offer less downtime, whereas new fillers which are very long-lasting are helping to correct volume deficits. Together these newer treatments offer less risk, and downtime possibly lower economic impact and a higher percentage of improvement than older treatments.

Enhancement of Photodynamic Therapy for Medical and Cosmetic Indications

Amy Taub, USA

Photodynamic therapy is used worldwide for the treatment of actinic keratosis, non-melanoma skin cancer, acne, photorejuvenation and a host of other medical treatments. Many different techniques have been adopted to enhance the results by making each treatment more effective, have less downtime or pain, or require fewer treatments to achieve effects.

These effects include improving penetration of the photosensitizer such as with microneedling or pretreating with various prescription or non-prescription creams, increasing the yield of sensitizing agent by heating the skin during incubation and reducing discomfort by using day-light or short exposure light exposure.

There are many different effective strategies to improve effectiveness and reduce side effects of photodynamic therapy.

HYPERTHEROSIS – ONE GOAL, MANY WAYS

Chair: Hector Leal Silva

How to Fight Unwanted Sweating? An Overview on Treatment Methods

Dirk-Harald Gröne, Germany

This lecture will serve as introduction and will give an overview over treatment methods whether pharmaceutical, cosmetically or surgical. In the author’s point of view, subgroup detection of patient subgroups facilitates the process of determining the optimal method of treatment or combination of treatments for the patient.

GAERID – INTIMATE AESTHETIC SURGERY & REJUVENATION: WHY, WHEN, HOW?

Chair: Allan Wu

Fractional CO2 Laser Treatment for the Symptoms of Vulvovaginal Atrophy and Vaginal Rejuvenation in Premenopausal Women

César Arroyo and Konika Patel Schallen, Spain

Background and Objective: Vulvovaginal atrophy is a common and underreported condition that can occur at any time in a woman’s life cycle. Fractional laser systems with dedicated gynecological handpieces have become available as a nonsurgical approach for treatment of dryness, irritation, soreness, and dyspareunia associated with this condition. This prospective study investigated the effects of fractional CO2 laser in premenopausal women treated by resurfacing and coagulation of the vaginal canal tissue and mucosal tissue of the introitus.

Method: The study included 21 premenopausal women (mean age 45±7 years) treated both internally and externally up to three times with a fractional CO2 laser system. The Vaginal Health Index (VHI) was used by the investigator to assess changes in vaginal elasticity, fluid volume, urine pH level, epithelial integrity and moisture. A subject questionnaire reported on sexual function, satisfaction and improvement at a 12-week follow-up post final treatment. A 10-mm visual analog scale was used to measure discomfort associated with treatment.

Results: Vaginal health and subject assessment of vaginal symptoms improved with successive treatments. At 12 weeks following the third treatment, 82% of the patients showed a statistically significant improvement in the VHI score, with an average difference from baseline of 2.6±2.4 (p<0.05). Additionally, 81% of subjects reported an improvement in sexual gratification, 94% in vaginal rejuvenation, and 100% reported satisfaction with treatment and 94%...
would recommend the procedure. Most patients (97%) reported that both internal and external treatment phases were accompanied with none to mild pain. Immediate treatment responses were mild and transient, resolving within 1-2 days and included: burning (20%), itching (20%), bruising (4%), swelling (4%), twinning sensation (4%), numbness (4%) and purpura (2%).

Conclusions: Fractional CO2 laser treatment is associated with improvement of vaginal health and amelioration of symptoms of vulvovaginal atrophy, resulting in improved satisfaction with sexual intimacy in premenopausal women. Treatment time is quick and there is minimal discomfort associated with treatment. Investigation of clinical outcome in a postmenopausal population is warranted.

RF vs. Laser – What Is More Effective?
Dirk-Harald Grüne, Germany

In May 2016, the first international congress of the European Society of Aesthetic Gynecology (ESAG) was held in Rome, gathering world renowned experts discussing cutting edge techniques and new approaches ultimately leading to improvements in function, self-confidence and quality of life.

Parallel thereto new laser and radio frequency systems were introduced on the market; both technologies receiving FDA approval. But what is more effective technology in the treatment of female rejuvenation? This lecture will give an overlook of the state of the art use of these technologies in female rejuvenation, encompassing either symptoms of incontinence and dysparnia, prolaps, pelvic floor anatomy and vaginal relaxation syndrome.

RF for Improving Vaginal Laxity & Sexual Function
Santiago Palacios, Spain

Importance: Vaginal laxity (VAL) negatively impacts sexual function for millions of women. Low-dose cryogen-cooled monopolar radiofrequency (RF) therapy of the vaginal introitus provides an out-patient, non-surgical option for women with VAL.

Objective: To evaluate the safety and efficacy of cryogen-cooled monopolar RF therapy for the treatment of VAL.

Design, Setting, and Participants: A prospective, longitudinal, randomized, single-blind, and sham-controlled study was carried out in nine centers in Europe and Canada. Data from one center in Spain is included in this sub-analysis. Women presenting with VAL were invited for study screening. Informed consent was obtained. Major study inclusion criteria were: pre-menopausal, ≥ 1 full-term vaginal delivery, and normal gynecologic exam.

Intervention: Enrolled subjects were randomized (2:1) to receive low-dose, cryogen-cooled RF therapy vs Sham delivered to the vaginal introitus.

Main Outcomes and Measures: Endpoints included mean change from baseline related to Sexual Distress.

Results: The six-month Sexual Distress score improved by 3.91 in the Active group (N=32) versus worsening by 0.53 in the Sham group (N=18). There were no serious adverse events associated with treatment.

Conclusions & Relevance: A single treatment of cryogen-cooled monopolar RF therapy is safe and effective for the treatment of VAL. Data from a sham-controlled study supports the use of a novel therapy for a prevalent & undertreated condition.

Multi-Polar RF for Advanced Feminine Rejuvenation
Allan Wu, USA

Introduction: The growing menopausal and postmenopausal population have distinct and unique aesthetic and rejuvenation issues, which require a different surgical tool and tool set than those of reproductive age. Often tissues are ill prepared for standard aesthetic surgical procedures and practitioners may be restricted from standard estrogen based priming therapies secondary to a history of estrogen sensitive cancer. Non hormonal minimally invasive technology, such as multipolar Radio-Frequency (Fiore by Venus Concept) offers practitioners an easy method of regenerating and rejuvenating difficult and complicated cases of vaginal atrophy. Fiore RF can function as a solo or adjuvant therapy unlocking treatment capabilities and demographics previously inaccessible. The clinical science behind intimate multipolar RF technology, novel cases and surgical techniques incorporating use of this technology will be presented.

Methods: Meta analysis using cellular models were exposed to pulsed heat shock and pulsed electromagnetic fields (PEMF) and measured for Collagen I and III and MTOR gene up regulation using quantitative PCR analysis. KGF, FGF 7 and 10, WNT 5 and Collagen IV, V and II, TIMP1 and vitronectin gene expression was measured at 14 and 21 days post PEMF exposure. t-tests were used to determine statistically significance.

Combined therapy of multipolar RF and PEMF were applied in the rodent model and human subjects under IIRB and HSRR approved studies. Punch biopsies were obtained and analyzed with standard special staining and histomorphometry measurements. Clinical photo documentation was obtained by standard digital imaging without subsequent image manipulation.

Results: Clinical improvement in both appearance, mucosal moisturization and sexual function was noted on patient selfreported surveys. Histomorphometry revealed considerable improvement in keratinocyte organization and pluristratification. Pulsed heat shock unregulated Col lagenh I and III (p < 0.01). PEMF upregulated FGF 2, 7 and 10, WNT 5 and Collagen IV, V and II, TIMP1 and vitronectin gene expression (p < 0.01). MTOR pathway up regulation was also elicited by PEMF.

Conclusion: Both clinical end points including self-reported aesthetic improvement and biologic markers are significantly improved with RF and PEMF therapy on a tissue and cellular basis. Preliminary clinical experience with the Fiore multipolar RF and PEMF device presents clinicians with a novel method of nonsurgical minimally invasive in-timate rejuvenation that is easy to use, safe and clinically effective in pre- and post-menopausal patients.

Body Contouring & Rejuvenation – From Head to Toe: Chair: Barry DiBernardo

Non-Surgical Treatments for Upper Arms
Diane Duncan, USA

For many years, brachioplasty has been the standard operation for women with “bat wings”, crepey lax skin, and lipodystrophy of the upper arms. Many women decline this operation because of permanent, visible, and unattractively scar. While most state they strongly desire the ability to wear sleeveless clothing without embarrassment, few have sought treatment because of the common belief that excisional surgery is disfiguring.

Clinical complaints include pendulous skin that wiggles while stretching, wrinkles and crepey skin, especially on the anterior upper arm, and excess fat in the volar aspect. Non-surgical options for treating the upper arms range from external MRI or radiofrequency based devices to minimally invasive RF devices or laser assisted liposuction.

While “bulk heating” is often dismissed as ineffective, new scientific studies show that it actually can restructure the aging soft tissue that results in the pendulous character of the volar upper arm. MRI both reduces fat and offers focal tightening. This approach is not frequently used due to high cost and discomfort. External RF, when viewed at the SEM level, creates a new collagen scaffold for the aging subcutaneous layer over time. Minimally invasive RF, with or without simultaneous liposuction, can achieve a more definitive change. LAP can also tighten the stroma, which will improve the fasciidity and pudendosity of the upper arms.

Microneedling, especially with topical agents, can significantly improve skin quality. A topical with a protein signaling defensin complex offers very significant improvement. Any treatment that creates holes in the skin can be used with this topical, including hybrid laser or light fractional laser treatments.

Radiofrequency assisted needling can cause a 10-15% skin surface area reduction, but seems most effective in treating the anterior upper arm for crepey laxity.

The most significant improvement for aging upper arms can be obtained with minimally invasive approaches such as RFA and LAL. While LAL can cause a 13-17% skin surface area reduction, published studies show a 26-50% focal skin surface area reduction with RFA. Limitations of this approach apply to those with a pendulosity index of over 5cm. The Temourian classification can be used as a guideline for treatment recommendations for the upper arms, but on occasion patients formerly recommended for brachioplasty can be successfully treated with less invasive options.

Brachioplasty: How to Achieve an Inconspicuous Scar
Pierre Nicolau, Spain

Brachioplasties bear a poor reputation mainly due to the often very unsightly scars. But knowledge of local particularities, such as fat compartments, skin retraction, lymphatic vessels position, axillary looseness, allows for achieving pleasant results, with improved scar quality and visibility, and reduced complications.

Surgical decision and planning rely on a precise analysis of all these components. Technique is exposed step by step, starting with extensive liposuction in limited areas, maintaining a precise level of dissection, marking skin excess differently according to each zone, suturing and limited dressing.

Each condition is presented: from minimal slackening up to “bat wings” deformity and the decisional algorithm is explained. Cases do give excellent results with great pati-
**Aesthetic Medicine – What’s Beautiful and What’s Next?**

**Chair: Marina Peredo**

**The Holistic Approach of the Patient in Aesthetic Dermatology: “The Seven S of Skin®” Concept**

Victor Gabriel Catic, Romania

We are living in a world that constantly changes, with one exception – everyone wants to be young and look good! Health and beauty are strongly connected, so our beauty represents the best parameter for our inner health. The skin, our largest organ, is continuously under “double fire” - one from inside and other from outside.

Our life style, sun exposure, smoking, diet, skin care etc. and our habits (stress and sleep) are directly associated with the main features of beauty (fine lines and rhytides, spots and broken vessels, enlargement of pores and laxity etc.).

The “Seven S of Skin®” Concept represents an holistic approach to evaluate patient before any kind of Energy Based Devices treatment.

The “Seven S of Skin®” Concept approach is about sun exposure, smoking, diet (sugar), skin care, sleep and stress for each patient of Aesthetic Dermatology. The last S is about time, the age of the patient and the need of time for the full effects of EBD treatments.

The concept focusses on the impact of every “S” on health and beauty, and on the outcome of the EBD treatments. Further, the “Seven S of Skin®” Concept focusses on both quick and comprehensive evaluation before any EBD interventions, and the change of life style in order to achieve or remain health and beauty.

**How to Avoid Femi..." Concept**

Ekaterina Gutop, Russia

The majority of our patients in aesthetic practice are ladies. It should be noted that quantity of male patients is constantly increasing.

When treating male patients, it is essential to avoid femini- zation or hypercorrection of the male face. To this end it is important to base the treatment on individual peculiarities of the person. Requests, aesthetic, anatomical, psycho- logical, physiological and sociological characteristics of male patients should be taken into account.

The strategy of correction is the creation of a more masculi- line and fresh appearance.

The main method of treatment for the upper face is Botu- linum toxin injections. For this kind of treatment higher doses of BoNT-A should be used and care has to be taken to avoid the lifting of the lateral part of the brows, which would create an unnatural look.

The volumizing of the lower facial contours, chin and an- tero-medial part of the mid face are prevalent in the stra- tegy of the volume treatment. The HA product with high G’ and high lifting and volume capacity in appropriate quan- tity has to be used.

To avoid feminization of the male face, the volume treat- ment of the lateral part of the mid face with a special ac- cent on the “apex” point, the changing of the proportion between mid and lower part of the face, the smoothing out of the lower contours of the face, augmentation of the male lips in the feminine style should not be done.

It is vital to pay particular attention to a natural look and feeling after treatment for the male patients.

**NEWS FROM 5 CONTINENTS**

**Chair: Valerie Calleender**

**Everything Gets Smaller: Nano-Fractional RF**

Vichai Hongcharu, Thailand

While radiofrequency has been used medically for deca- des to treat a wide variety of conditions, its use therapeuti- cally to target conditions affecting the skin is relatively new. With the development of fractional radiofrequency, which allows for the heat energy to be delivered in a more tar- geted manner through the use of needles as electrodes, this technique is now the preferred medical treatment option for many skin conditions given the reduction in re- covery time and fewer number of reported side effects. The current study examined the clinical effectiveness of SmartScanTM Nano-Fractional RFTM treatment.

Participants included 12 healthy female volunteers who reported varying degrees of rhytides, hyperpigmentation, or acne redness. Participants each received one treat- ment of SmartScanTM Nano-Frational RFTM. The areas receiving treatment were photographed in a standardized way, using high-resolution macrophotography, at baseline (prior to receiving the treatment) and one month after treat- ment. Baseline and post-treatment photographs were then visually compared for treatment effects and analyzed through software-assisted quantification of variation in pigmentation and skin texture. The results indicated that this SmartScanTM technique for Nano-Fractional RFTM is effective in improving skin texture and pigmentation.

**Photoacoustic Photorejuvenation in Skin Types I to VI Using a Novel Dual Wavelength Laser in Fractional and Nonfractional Modes**

Vic. A. Narurkar, USA

Photo rejuvenation has been used primarily for photo- thermal modalities such as ablative laser resurfacing, frac- tional laser resurfacing, non-ablative photo rejuvenation with intense pulsed light and lasers. While these are highly effective, the photothermal effects predominate and may lead to unwanted thermal injury, resulting in pigimentary changes and scarring. We report the use of a novel appro- ach to photorejuvenation and have coined the name, pho- toacoustic rejuvenation, where the photoacoustic effects predominate over photothermal and the fractional modes of delivery are primarily dermal using LIOB (laser induced optical breakdown).

A novel dual wavelength picosecond laser with non-frac- tional (Picoway 532nm/1064nm) and fractional (Picoway Resolve 532nm/1064nm) was studied in 50 patients with mild to moderate photodamage of the face, neck, chest and hands in skin types I to VI. The entire surface area was treated in the fractional mode using the 1064nm wa- velengt...
tances to penetrate in different layers of the skin. So, with a short focal distance, we could penetrate to the deep reti- cular dermis. For other hand, with long focal distance we can penetrate to the superficial papillary dermis.

With this new technology now is possible to choose the area of the skin that you would like to treat with different symptoms like pigmentation, fine wrinkles or elastosis as well, without pain, redness and recovery time.

FRIDAY, SEPTEMBER 2, 2016
11:30 – 13.30h

EXPANDING YOUR TOXINS KNOWLEDGE AND USES
CHAIR: CHYTRA V. ANAND

Is Botulinum Toxin Effective for Hair Treatment?
Amin M. Amer, Egypt

Botulinum toxin became a very important drug in the past decade and is used worldwide for many reasons. This talk will cover a new indication for Botulinum toxin, which is hair falling. Hair falling is a very common comp-

The Use of Adipose SVF in Facial Rejuvenation and Repair: The FAMI Technique
Roger E. Arman, Spain

The search for long lasting symmetrical results after fat in-
jection leads us to develop 18 years ago, a new concept in fat transfer, insertion of processed fatty tissues into the facial muscle and under the skull periosteum.

High affinity for adipose tissue. Proprietary energy modu-
lization of the laser energy delivery elevates the tissue to the required temperature, sustains that temperature to allow for cellular disruption, whilst protecting the epider-

Light and subtle transitions to the parts of the body that have little or no fat.

Body Shaping and Volume Reduction with a Novel 1060nm Diode Laser
Maurice A. Adatto, Switzerland

The technology and supporting clinical research for a no-
vel 1060nm non-invasive hyperthermic laser treatment for body shaping will be discussed. Historical research has demonstrated prolonged exposure of adipocytes to 42-47°C can cause injury with subsequent elimination of these damaged cells from the body in the weeks follow-

The original method was published in 1999 in the French journal, “Les Annales de Chirurgie Plastique”, has been improved in 2002 with the extensive use of mesenchymal cells or adult stem cells and published in Dermatology Sur-
gery and Aesthetic Plastic Surgery Journal.

Cryolipolysis: 5 Year Experience with Different Devices and Effective Adjuvant Treatments
Markus Steirer, Germany

With rising demand of patients for fat reduction, a broad treatment spectrum of non-invasive body shaping proce-
dures is offered to meet well-being and attractiveness. High claims on aesthetic body shaping require qualitati-
ve sophisticated methods to enhance effective results in fat reduction. Adequate body shaping techniques require tools to enable experienced professionals to make gentle and subtle transitions to the parts of the body that have not undergone treatment yet.

The increased risk of complications from more inva-
sive procedures such as liposuction, Cryolipolysis is of-
fering a promising method for nonsurgical fat reduction and body contouring. Cryolipolysis has emerged as a gentle, effective and safe non-invasive body contouring method using controlled cooling to selectively destroy fat cells.

Five years experiences with different devices and effective adjuvant treatments show the benefits of this efficacious method: optimal use of this smooth medical-aestheti-
cal body shaping procedure allows the removal of fatty deposits with high effectiveness in the lower and upper abdomen, inner and outer thighs, flank area, and back. Continuous innovative development enables further im-
provement of this almost painlessly technology to fulfil the high expectations to the future body shape.

Skin Cancer – Cutting-Edge Treatment Options
CHAIR: MERETE HAEDERSDAL AND JOEL COHEN

A Non-Invasive Method for Early Melanoma Detection
Klaus Fritz, Germany

Visual examination, with or without dermoscopy, is nor-

mal sufficiently when identifying most types of lesions. Ho-

wever, when it comes to atypical lesions, a clinical diagnosis based on only a visual examination may pose a challenge, leading to unnecessary excisions or – even worse – missed melanomas. In such cases Nevisense provides additional and unique information from an objective analysis – a new way to increase accuracy in melanoma detection.

Nevisense is the world’s first objective diagnostic support tool for non-visual detection of malignant melanoma. By gathering and analyzing precise electrical measurements in the epidermis and dermis, it provides reliable informa-
tion unavailable through any other method. Through one simple procedure, it allows you to objectively evaluate sus-
picious lesions prior to excision.
Laser Treatment for Scars
Keyvan Nouri, USA

The use of lasers for the treatment of various conditions in dermatology as well as medicine as a whole is centered around the theory of selective photothermolysis which utilizes the concept that the emitted wavelength of light by the laser or light system should match the absorption peak of the targeted molecule or chromophore relative to other optically absorbing molecules. In dermatology, lasers are commonly used now for the treatment of vascular and pigmented lesions, scars, and hair removal. This lecture will be focusing on laser treatment for scars.

We have done multiple studies using the pulsed dye laser for the treatment of surgical scars, starting on suture removal day. In conclusion, results showed significant improvement compared to control. The use of fractional ablative lasers used for scar revision will also be covered during this lecture.

Update on Home-Use Devices
Godfrey Town, United Kingdom

An informal political agreement has been reached by the European Commission (EC) on new Medical Device Regulations (MDR) which captures infra-red, visible light and UV devices including coherent and non-coherent sources such as lasers and intense pulsed light equipment intended for use on the human body. It is expected that the new MDR will be finalised in September 2016 with a 3-year implementation period.

Manufacturers of home-use devices will have to comply with the new regulation i.e. comply with relevant standards, implement a quality management system, a post-market surveillance system, system risk management and reporting of incidents / in-field remedial action. This means compliance with medical device standards rather than any other classification (toys, appliances, etc.). Companies like Philips, Lyndian, CyDen, etc., are already doing this.

Individual countries will have to decide whether to implement any national regulatory changes as the regulation will not be harmonised. The MHRA will not be interested in implementing the new regulation immediately after implementation.

As a consequence of the proposed new MDR and new safety standards for consumer laser products, some international standards will require revision.

Laser Assisted Hair Transplantation
(Micro Folicular Unit Transplantation)
Laser Assisted Follicular Unit Transplantation (LAFUT)
Ahmed A. Youssif, Egypt

Introduction: Secondary Cicatricial Alopecia (SCA) cases are known for being difficult to treat. It has been estimated that the percentage of acceptance of transplanted hairs is reduced in scarred tissue by less than 50% (compared with >90% growth rate in normal non Cicatricial tissue) (Epstein et al, 2003). This is due to limited vascular supply in areas of Cicatricial alopecia, which affects graft viability. In addition to graft failure, sterile tissue also increases the risks of infection, ischemia, hypoxia, and necrosis due to the inadequate vasculature (Rose et al, 2004). Fractional carbon dioxide laser resurfacing (FxCR) has a remarkable effect on scar remodeling and revitalization of tissue. We hypothesized that our LASER Assisted Follicular Unit Transplantation (LAFUT) technique would increase the number of viable grafts in cases of SCA.

Materials & Methods: Eighteen patients diagnosed with SCA after previous surgeries &/or traumas were treated by FxCR using variable parameters to allow deep fractional ablation for 2-3 sessions; 1-2 session within one month before the date of surgery for induction of revascularization and last session on the same day of surgery immediately before the implantation step to determine the density plan and prepare holes for follicular unit insertion in the recipient area. Trichoscopy Evaluation for hair density was done immediately after implantation, 10 days after surgery and 9 months after surgery. Photographic evaluation was made for comparison of pictures before and after 9 months.

Results: Significant improvement for all cases with signs of revitalization (e.g. Elasticity, Colour, Texture) as well as rapid hair regrowth with more than 90% graft regrowth.

Discussion: Compared to previous studies, our results showed both higher density of hair implantation in SCA recipient areas and higher graft regrowth on using deep fractional ablative.

Conclusion: LAFUT is a new promising technique for optimizing results of Hair Transplantation in cases of SCA. Further studies should be done for providing histopathological evidence of improvement in LASER treated areas compared to untreated areas after Hair Transplantation.

In summary from clinical studies and experience, Nevisen has been shown to be an accurate and safe diagnostic support tool, to be used in patients with suspicion of melanoma.

Laser for Treatment of Skin Cancer
Keyvan Nouri, USA

Skin rejuvenation with intense pulsed lasers that specifically target these superficial telangiectasias are thought to decrease tumor burden or eliminate the tumor altogether with minimal damage to surrounding tissue.Lasers may be particularly effective for patients who cannot tolerate the inflammatory side effects of topical agents, those who are poor candidates for surgery, and those with multiple cancerous lesions.

Conclusion: Lasers have been shown to be a safe and efficacious option for the treatment of skin cancers in certain clinical settings. However, more research is needed to confirm these observations, and to optimize the treatment parameters.

Rejuvenation Updates
Peter Bjerring, Denmark

Non-invasive skin rejuvenation with optical methods have become extremely popular because their benefits outweigh their risks. Skin rejuvenation with intense pulsed light and Nd:YAG laser cover almost the entire spectrum of cosmetic dermatology, such as treatment of telangiectasias and pigmentation irregularities, fine wrinkles, and scars and large pores. The optical treatment can be enhanced by use of a topical photosensitizer (5-aminolevulic acid) and it can be combined with a chemical peel performed in the same session to produce a more pigment selective treatment. The potential side effects of treatment, such as swelling, redness, and facial flushing, are minor and usually disappear within a few hours or days of the procedure.

HIFU vs. RF vs. FRM – Outcome and Side Effects: Which Technology When
Klaus Fritz, Germany and Carmen Salavastru, Romania

Introduction: High-intensity focused ultrasound (HIFU) and radiofrequency (RF) are used for non-invasive skin tightening. HIFU shows the highest level of neocollagenesis and neoelastogenesis in the deep reticular dermis. The goal of a body and face contouring treatment including is to achieve tightening of the skin and superficial fat reduction.

Method: We treated 10 patients, using a combination of micronedrle delivered bipolar Radiofrequency for superficial and medium deep layers in combination with HIFU of 3mm penetration depth and a fluence of 1 – 3 Joules for the tightening of SMAS and deeper layers, using a device that allows FRM, RF and HIFU applicators.

Left upper cheek was treated with both technologies, the right one with HIFU only and the both lower cheeks were treated with FRM only in 10 healthy women aged 32 to 67 doing 2 passes each in 3 sessions 1 month apart. Subjects completed 60-120 day follow-up visits or both.

Results: Results data were obtained at 90 and 180 days using a physician Global Aesthetic Improvement Scale (GAIS) score. GAS scores demonstrated that 80.2% of the patients achieved improvement at 60 days post treatment and 72.4% patients at 120 days. After the combination treatment, 71.7% of the patients achieved improvement at 60 days post treatment and 72.1% of the patients at 120 days. With HIFU only 68.5% of the patients achieved improvement at 60 days post treatment and 62.7% of the patients at 120 days. With FRM only all subjects showed subjective improvement in appearance without any association to Flaptrick skin type.

Conclusion: Microneedle RF can smoothen ageing skin and scars and tighten superficial layers, HIFU is more effective in deeper layers. Monopolar RF is suitable for superficial tightening treatments like periorbital, neck, lip and cheek. All technologies can be used as a single technology or in combinations.

Laser Assisted Follicular Unit Transplantation
Laser Assisted Hair Transplantation
Philips, Braun, CyDen, etc., are already doing this.

Conclusion: The optical treatment can be enhanced by use of a topical photosensitizer (5-aminolevulic acid) and it can be combined with a chemical peel performed in the same session to produce a more pigment selective treatment.

Conclusion: In conclusion from clinical studies and experience, Nevisen supports tool, to be used in patients with suspicion of melanoma.

Laser Treatment for Scars
Keyvan Nouri, USA

The use of lasers for the treatment of various conditions in dermatology as well as medicine as a whole is centered around the theory of selective photothermolysis which utilizes the concept that the emitted wavelength of light by the laser or light system should match the absorption peak of the targeted molecule or chromophore relative to other optically absorbing molecules. In dermatology, lasers are commonly used now for the treatment of vascular and pigmented lesions, scars, and hair removal. This lecture will be focusing on laser treatment for scars.

We have done multiple studies using the pulsed dye laser for the treatment of surgical scars, starting on suture removal day. In conclusion, results showed significant improvement compared to control. The use of fractional ablative lasers used for scar revision will also be covered during this lecture.
Novel Topical Cream Delivers Safe and Effective Sunlight Therapy for Vitiligo by Filtering Damaging UV Radiation

Andy Goren, USA

NB-UVB phototherapy is the gold standard in the treatment of vitiligo and psoriasis. The efficacy of NB-UVB artificial light sources has been demonstrated in large scale studies; however, the safety, access, and patience compliance remain poor.

Recent advances in novel chemical compositions present an opportunity to transform NB-UVB phototherapy by providing increased safety and accessibility utilizing the sun as a power source. This lecture will review the limitations of current NB-UVB light therapy and the development of a safe and effective sunlight therapy for vitiligo.

The elegant approach of using matrices of insulated microneedles offers a new paradigm for successful tightening of the neck and jaw. HiFR delivers damage only at the target depth. That makes HiFR ideal for deeper scar revision for both hypertrophic and atrophic scars, tightening of lax tissue and off the face, an ideal intervention for treating the photoscared neck, and for removal of lines and wrinkles with good neocollagenesis and elastogeneration, followed by enhanced remodeling, to restore the youthful face.

Histology shows the improvement in epidermal hydration with HA and defensin based topicals. Neovascularization and increased intradermal collagen formation are noted with simple microneedling, as well as with topical based treatments.

This apparently simple and cost effective device can only treat the epidermis and superficial dermis, but it can achieve definite results for a variety of clinical indications.

RF and Combination Protocols for Better Results

Klaus Fritz, Germany and Carmen Salavastru, Romania

Due to its high efficiency and safety various technologies of heating, biological tissue are broadly practiced in the dermatological field for various aesthetic applications, including skin tightening, skin lifting, body contouring and cellulite reduction. In treatments for rejuvenation and, the tissue radiofrequency and ultrasound play an increasing role in healing the dermis and abating the epidermis with less downtime.

The objective is to compare available RF and ultrasound technologies from uni- to bi or multipolar delivered ways and the combination technologies and to provide clinical studies with the use of a bipolar RF-system and a monopolar RF system in body contouring, that utilizes a patented RF-energy technique with or without combinations.

Both – ultrasound and RF are used as a single technology or in combinations in order to achieve sufficient healing of the dermis. Based on the simultaneous delivery of monopolar RF and ultrasound energy through a single hand piece the Exilis (BTL) reduces fat cells. The applicator tip is continuously cooled throughout the treatment to protect the skin and permits effective heating of the subdermal fat layers. Re-shaping and volume reduction are achieved through targeted energy absorption and subsequent initiation of lipolytic processes and collagen remodeling.

Among its safety features are a Dermapa Tissue Control (DTC) system and an Energy Flow Control (EFC) system. The procedure is considered painless and no consumables are required. Similar systems like from Cutera are available. Since 2 years a new system was launched by BTL using a whole abdomen Radiofrequency for circumference reduction (Vanquish) and in 2015 applicators for the treatment of whole abdomen Radiofrequency for circumference reduction (Vanquish) and in 2015 applicators for the treatment of
of thighs was proven to be effective. A reduction of circumference on abdomen of 4.5 cm in average after 3 sessions 1 months apart and 1-2 cm of thighs can be achieved. A significant body reshaping effect was observed on all corresponding cases.

An objective improvement was in correlation with the patient satisfaction rate. The results of this pilot evaluation indicate that the device is safe and efficacious for non-invasive body contouring and circumferential reduction, patients tolerate nicely the treatment sessions. Shock wave treatments using the X wave by BTL immediately after Vanquish or Exilis and weekly for 3 more weeks results in twice the rate of fat absorption. These new technologies allow better tightening than lasers and have enlarged the portfolio of available procedures in aesthetic medicine.

Combination Therapy for Lips Correction in Post-Menopausal Female Patients
Irina Kaplukchenco, Ukraine

Background: A lot of our patients that have been done cosmetic procedures during the last 20 years have enterred the menopause and post-menopause period and nobody knows exactly what to do with them. We want to propose an algorithm for estimation and correction this zone, because lips are the most sensitive to hormonal aging.

Every woman experiences 3 stages of hormonal reorganization of organism called: pre-menopause, menopause, and post-menopause period. All the tissues of female organism undergo certain changes: Bones develop osteoporosis, muscles – atony, mucous membrane – atrophy, skin can demonstrate numerous aesthetic and dermatological problems like wrinkles, loss of elasticity, dryness etc. Let us suggest taking a close look at how hypoestrogenism influences women’s lips mucous membrane during menopause and post-menopause periods. Lips are divided into two parts: mucous membrane (internally) and skin (externally). Vermilion is a transition zone between skin and mucous membrane. The submucous layer in the vermillion border is absent. A big number of tiny salivary glands are located on the border between muscular layer and mucous membrane. Vermilion border is covered with multi-layer squamous keratinized epithelium while the buccal vestibule side is covered with squamous non-keratinized epithelium. Vermilion mucous border and mouth changes are the first clinical signs of climax.

Starting from pre-menopause and then in menopause and post-menopause periods with the declining estrogen level, some degenerative changes of epithelium and connective tissue interlayer take place (high hyperkeratinization). It is accompanied by decreased function of salivary glands (hypoplication).

Materials and methods: Doctors normally recommend hyaluronic acid injections (fillers). Such treatment method works well for small wrinkles and increases the lost volume of lips. However, such complaints as dryness, flaking and even rhygades (skin fissures) increase and at this stage, patients start to realize the failure of extra high expectations. Because no treatment of mucous membrane is done, when it becomes sensitive to hormonal imbalance.

We have treated a group of 30 women at the age from 50 to 60 years old. All of them were menopausal or post-menopausal. Due to our IMPACTD Concept (Integral Menopausal Patient Anti-Aging Cosmetic Treatment Concept) we have recommended the following algorithm of treatment: the female lips mucous membrane during menopause:

1. Consulting by endocrinologist – HRT, as an example estril group drugs that can influence the condition all mucous layers.
2. Topical injections of non-stabilized hyaluronic acid (Juvederm Hydrate in our investigation) into the vermillion and perioral area. From 3 to 5 treatments with 1 month interval, depends on the skin and mucosa dryness and the result, achieved one month after the procedure.
3. PRP therapy. Papules injection into the mucous of mouth, lips and perioral skin area.
4. Skin application with Phystoestrogens
5. Filler’s correction should be used after the treatment course – Juvederm Smile in our investigation

Results: After the recommended complex treatment was done the signs of dryness on the oral mucosa and perioral area goes down, quality of the skin, vermillion border achieve much better quality level. All patients were asked their opinions and the results analyzed according to the Global Aesthetic Improvement Scale (GAIS). The results as analyzed by the patients were: 1=50%; 2=45%; 3=5%; 4=0%; 5=0%.

Conclusion: As a result of the performed therapy, all the patients have admitted that any complaints about dryness, flaking, burning disappear and also that lips appearance completely meet their expectations.

Advanced Botulinum Toxin and Fillers for Antiaging Treatment and for Facial Harmony
Claudia Magalhaes, Brazil

In the last two decades of the 20th century, the Botulinum Toxin and many types of fillers have been applied to improve facial aesthetics in order to achieve a youthful appearance of the face. Many of these products available around the world are very safe - when applied with adequate techniques - and some of them are approved by the United States Food and Drugs Administration (FDA). Since the beginning of the 21st century the Botulinum Toxin and many other types of fillers have been applied with a 3D perspective of the face.

As a result of this 3D vision we realized we should no longer analyze only a specific wrinkle or dynamic lines. When taking the whole face into account, we can usually achieve better results with a facial fluidity and contour improvement. These procedures could even have a considerable effect on the neck. Furthermore, with the development of more advanced injection points it is possible to treat young and old patients. Therefore, we have been injecting the Botulinum Toxin and fillers in some strategic points of their faces.

As an outcome of this practice, it has been clearly perceived an improvement of the facial harmony, when taking into consideration the reduction of the fluidity as well as beautification of the facial structure, highlighting a more natural appearance.

The Synergy of the Combined Ablative and Non-Ablative Fractional Laser on Asians
Woraphong Manusukiti, Thailand

Fractional laser resurfacing technique, based on the principle of fractional photothermolysis (FP) has been developed to address the drawbacks of full-field ablative laser resurfacing, with its significant adverse effects, and nonablative dermal remodeling, with its limited efficacy.

Nonablative fractional resurfacing (NAFR) systems were available first. Although the NAFR system has a patient-friendly benefit and less postoperative downtime, the outcomes of most NAFR lasers may not be as efficacious as those of ablative fractional resurfacing (AFR) systems in the treatment of photodamaged skin, rhytides, and atrophic scars. However, AFR is associated with a high incidence of postinflammatory hyperpigmentation (PH) in patients with dark skin types. A combined fractional ablative and nonablative laser system has recently introduced in order to achieve a better outcome with lower risk of adverse effects, compared with existing fractional laser technologies. To sought treatment efficacy and side effect of a combined fractional 2940-nm Erbium:YAG and 1470-nm lasers in dark-skinned subjects.

We investigated the efficacy and adverse effect of a combined ablative and nonablative laser resurfacing device in a series of ten subjects with skin phototypes IV and V. All subjects received four treatments with one-month interval. Follow-up occurred performed 1 and 3 months after the last treatment session by two masked investigator and consisted of assessment of dyspigmentation, texture, rhytides, and atrophic scars on a standardized 5 point scale.
Results: The majority of the enrolled patients in this study were of grade I acne vulgaris. There was a significant reduction in acne severity index (ASI) at both sides of the face. By comparing the Rt. and Lt. sides, the Rt. side (× comedo extraction) showed better and earlier improvement than the Lt. side with statistically significant difference (p < 0.05) with significant reduction in the mean number of total lesion count (TLC).

All patients were satisfied with the results and have well tolerated the modified technique of comedonal extraction.

The most frequent side effects were discomfort and mild to moderate pain. No recorded cases with scar formation denoting the safety and tolerability of application of both glycolic acid and comedo extractor.

Conclusion: Using our modified technique of comedo extraction is safe, effective and faster results can be obtained.

Results: As a result of platelet-rich plasma therapy, there is a positive trend established as the form of hair loss reduction and enhancing their growth. Patients receiving more than 3-4 treatments achieved the significant effects such as clinical improvement in the hair counts, hair thickness, hair root strength, and overall alopecia. During and after treatment the side effects for a year have not been noted.

Conclusions: Based on the literature review and the results of the present study, intra-perifollicular injections of autologous PRP generates improvement in hair thickness and density in AA patients. The beneficial effects of PRP in AGA can thus be attributed to various platelet-derived growth factors causing improvement in the function of hair follicle and promotion of growth. PRP appears to be a simple, cheap, effective, non-allergic safe and promising therapy for AGA that improves overall patient satisfaction.

Current there is evidence to support its potential efficacy, however further investigation is required. New research will hopefully provide the data required to evaluate protocols for activation, additional beneficial components, and the minimum required frequency of treatments for effective results.

A New Approach for Gynoid Dystrophy Treatment Based on a Hyaluronic-Conjugated Gold Nanoparticles Cosmetic Product

Introduction: Gynoid dystrophy is one of the most common aesthetic issues among women. Cosmetics and non-invasive energy-based methods aim to solve the issue acting over the adipose tissue and have met mixed-to poor results. A new approach based on reinforcing the mechanical properties of the dermis with a cosmetic product with hyaluronan-conjugated gold nanoparticles has obtained rather favorable results.

Materials & Methods: Twenty-four subjects aged from 32 to 52 presenting cellulite grade 1 to 2 (Müller Scale) were selected for a randomized, double-blind, placebo-controlled 28 days long efficacy study. The placebo contained the identical particles, thus acting as negative control. Weight and thigh circumference, waist circumference, and hip circumference were measured. The body mass index (BMI) and waist-to-hip ratio were also calculated.

Twenty-six patients suffering from hair loss due to AA (including male – 8, 18 - women aged 19 to 69 years, average age – 39.73 ± 11.85 years) and not responding to 6 months treatment with minoxidil and other agents were included in this study. Duration of disease, on the average 4.5 years. The PRP was prepared using the kit certified as medical device Class IIb. Monotherapy was carried out by intradermal injection of platelet rich plasma at intervals of 3-4 weeks. A total volume of 4 to 5 mL (per session) PRP was injected in the scalp by using an insulin syringe. The number of sessions is 2±10, on the average – 3.9 ± 2.9. Evaluation of the results was made by macroscopic photos and patient's overall satisfaction.

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Results: Weight and thigh circumference remained the same throughout the study. All major 3D parameters (dimples volume, circumference, area; roughness) presented a considerable and statistically significant improvement exclusively on the gold nanoparticles-treated leg (dimples volume was reduced by an average of 30%). Dermal and epidermal thickness experienced a similar evolution on both legs. Echogenic density of the dermis increased in average 21% in the placebo treated thighs and 50% in the pro.

Methods: A new HIFU device (UPower™, Jesiys Medical, Inc. Seoul, Republic of Korea) with contact cooling was used to reduce abdominal circumference adipose tissue in 3 treatment modalities. Result: 30 subjects, mean age of 35.4 years underwent one or 2 HIFU treatments. Mean total energy dose was 509.4 J/cm², 495 J/cm², and 374 J/cm² for Groups A, B, and C respectively. A significant mean waist circumference reduction of 3.05 cm from baseline was observed. Most subjects (63.3%) reported being satisfied or very satisfied with the results; 80% of the investigators reported satisfactory results.

Conclusions: HIFU with surface cooling using high fluence, assessed by standardized waist circumference measurement, is safe and effective for abdominal SAT reduction and noninvasive body sculpting.

High-Intensity Focused Ultrasound with Surface Cooling Non-Invasive Abdominal Subcutaneous Adipose Tissue Reduction
Esther Carmina Hernández and Héctor Leal Silva, Mexico

Background: High-intensity focused ultrasound (HIFU) quickly raises local temperature of subcutaneous adipose tissue, resulting in instantanous cell death within the targeted area; higher temperatures can be safely applied using contact cooling.

Objective: Evaluate safety and performance efficacy of HIFU with surface cooling for Non-Invasive reduction of the subcutaneous adipose tissue (SAT) in the abdomen.

Methods: A new HIFU device (UPower™) was used in both treated groups, with contact cooling was used to reduce abdominal circumference adipose tissue in 3 treatment modalities.

Result: 30 subjects, mean age of 35.4 years underwent one or 2 HIFU treatments. Mean total energy dose was 509.4 J/cm², 495 J/cm², and 374 J/cm² for Groups A, B, and C respectively, whole study mean total fluence was 459.47 J/cm². Mean waist circumference reduction was 2.95 cm, 2.4 cm, and 3.8 cm for Groups A, B, and C respectively. A significant mean waist circumference reduction of 3.05 cm from baseline was observed. Most subjects (63.3%) reported being satisfied or very satisfied with the results; 80% of the investigators reported satisfactory results.

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Intraoral Rejuvenation with the Fractional CO₂ Laser
Dinko Kaliterna, Croatia

For the first time the Fractional CO₂ Laser is used for the intraoral rejuvenation. The idea is with the specially designed tip treat intraoral mucosa to have closer contact with the dermis. Because of that the result is better. The treatment is safe, painless and with no down time.

The results are seen more immediately after the treatment and became better over the next 9 months. With this treatment we can shape the middle face and the lower part. It is especially suitable for cheek elevation and reduction of wrinkles. This treatment represents significant advantage for the face rejuvenation.

Conclusion: This treatment represents a significant breakthrough not only for the prevention of face sagging but also for the shaping of the face.

Won Serk Kim, Jung-in Kim, South Korea

Background: 585nm pulsed dye laser (585-PDL) is typically used for rosacea treatment, but the high running cost and toxicity of dye kit are its drawbacks. Accordingly, we need other laser that could overcome the drawbacks.

Objective: To compare the effectiveness of the dual wavelength long-pulsed 755nm alexandrite/1064nm neodymium:yttrium-aluminium-garnet laser (755-LP Alex & 1064-LP Nd:YAG) with that of 585-PDL for rosacea.

Methods: This was a randomized, single-blinded, comparative study. All patients received four consecutive monthly treatments with 755-LP Alex & 1064-LP Nd:YAG or 585-PDL, followed up for 6 months after final treatment. Erythema index was measured by spectrophotometer, and photographs were evaluated by blinded dermatologists for physician’s global assessment. Subjective satisfaction surveys and adverse effects were recorded.

Results: 37 subjects were enrolled (19=585-PDL, 18=755-LP Alex & 1064-LP Nd:YAG). There were no significant differences between 755-LP Alex & 1064-LP Nd:YAG and 585-PDL in the mean reduction of the erythema index (P>0.812; 3.6% vs 2.8%), improvement of physician’s global assessment (P=1.000, 88.9% vs 89.5%), and subject-rated treatment satisfaction (P=0.842, 77.8% vs 82.4%). 585-PDL showed more adverse effects including vesicles than 755-LP Alex & 1064-LP Nd:YAG (P=0.046, 26.3% vs 0.9%). No other serious or permanent adverse events were observed in both treatments.

Conclusions: Both 755-LP Alex & 1064-LP Nd:YAG and 585-PDL are effective for rosacea, but 755-LP Alex & 1064 LP Nd:YAG may be safer than 585-PDL. Conclusively, 755-LP Alex & 1064-LP Nd:YAG could be a good laser doing 585-PDL replacement.
reduced, level of superoxide dismutase showed significant increase trend in all patients, levels of Humanin peptide and Small Humanin-like peptides became significantly improved in all patients.

Application of organ-targeted mitochondria-derived protein may improve the major mitochondrial functions: apoptosis, metabolism, and oxidative stress. Hence, this effective method of rejuvenation-revascularization may have positive application in internal, holistic and esthetic medicine.

A Split Scar Comparison Study of Hypertrophic Scar Treatment with Fractional Laser vs. Fractional Laser-Assisted Topical Corticosteroids Delivery

Vivek Mehta, India

Background: Laser Toning is a well accepted technique that involves use of Q switch Nd:Yag Laser with a large spot size in combination with very low fluence to treat pigmentary disorders.

Purpose: To see if we have any idea to improve our treatment outcomes, we have used dual laser toning technique for Skin Rejuvenation and Pigmentary Disorders in Indian Skin.

Material and Methods: 30 Patients with Pigmentary disorders of varied origin including melasma, Lichen Planus Pigmentosus, PIH, Reih’s melanosis, seborrheic melanosis etc and those coming for skin rejuvenation were subject to dual laser toning: genesis mode followed by top hat beam Q switched Nd Yag mode .

Discussion: Dual laser toning seems to be a new technique of Q Switch Nd Yag Laser that has increased effectiveness while maintaining safety in treating pigmentary disorders and skin rejuvenation.

New Kudzu Acetic Acid Peel Act as an Estrogen Supplement for Aged Skin

Joon Hong Min, Ju-Yeon Choi, Jae Yun Lim, Won-Serk Kim, South Korea

Background: Estrogens play a significant role in the maintenance of human skin. They improve collagen content and quality, increase skin thickness, maintain skin moisture and enhance vasculization. Despite the benefits of Estrogen, there is increased risk of breast cancer, endometrial cancer, stroke, and thromboembolic disease in Estrogen users.

Phytoestrogens are estrogen-like substances produced by plants. These chemicals bind directly to estrogen receptors (ERs) to exert mixed agonist and antagonist effects and, therefore, they have been considered as potential contenders to a natural form of estrogen replacement. Kudzu is a semi-woody, perennial leguminous plant native to south Asia, and is a rich source of phytoestrogen.

Material and Method: We took Kudzu acetic acid from the fermentation process and various in vivo and vitro studies were done. In vitro study using human fibroblast, animal study using hairless rat and preliminary human trial were done.

Conclusions: FAL alone is safe and effective for treatment of hypertrophic scar. Application of clobetasol ointment provides no synergistic effect to FAL.

Dual Laser Toning Technique for Skin Rejuvenation and Pigmentary Disorders in Indian Skin

Amany Nassar, Egypt

Background and objective: Laser treatment of cutaneous pigmentation is one of the most interesting areas in cutaneous surgery. Our purpose was to study the efficacy of Q-switched Nd:YAG at 1064 nm and 532 nm for the treatment of some pigmented lesions in our locality in Egypt.

Methods: A total of 60 subjects were treated with the Q-switched Nd:YAG laser with fluences ranging from 8 to 10 J/cm2 for dermal lesions and 2.5 – 5 J/cm2 for epidermal lesions. The number of sessions ranged from one to six sessions for epidermal lesions, four to six sessions for dermal lesions, while the mixed group required two to three sessions.

Results: A total of 34 patients (56.7%) showed excellent response, seven patients (11.7%) showed good response, nine patients (15%) showed fair response and 10 (16.6%) showed poor response. Transient post inflammatory hyperpigmentation occurred in five patients (8.3%) and erythema in seven patients (11.6%). Complications were common in darker skin types V and VI.

Conclusion: The Q-switched Nd:YAG laser is an effective and safe technique for the treatment of pigmented skin lesions. Adverse hyperpigmentation can occur but is transient.

Vacuum Integrated 1540-nm Non Fractional Erbium:Glass Laser for the Treatment of Acne Scars

Yael Politi, Moshe Lapidot, Israel

Introduction: Acne scars are a common result of inflammatory acne, affecting a high percentage of acne patients for some degree. Atrophic scars are the most prevalent form, presenting as dermal depressions caused by inflammatory degeneration of dermal collagen.

Results: Kudzu acetic acid showed antioxidant effect, increased collagen synthesis and regulated various signals related to skin homeostasis in cell and DNA microarray study. Increase of dermal thickness and modulation of hair cycle were detected in animal studies. Preliminary clinical trial in 12 female patients showed general skin rejuvenation after Kudzu acetic acid peel.

Conclusion: Chemical peel using Kudzu acetic acid is safe and effective treatment for skin aging. Most of all, treating the aging skin with the Estrogen-like effect may be new, innovative trial.

Use of the Q-Switched Nd:YAG Laser for the Treatment of Pigmentary Disorders in Egyptians

Amary Nadaa, Egypt

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Mid-infrared laser skin interaction is characterized by its modest absorption in water and fine penetration to the upper papillary-superficial reticular dermis. Since collagen is a desirable target laser, 1540nm wavelength is amenable for collagen remodeling within the depressed area of atrophic scars.

Patients & Methods: This prospective study included 24 volunteers (10 men, 14 women) with post acne atrophic scars. Patients were treated with a mid-infrared 1540-nm Er Glass laser (Alma Lasers Ltd. Caesarea, Israel) with integrated cooling – vacuum assisted technology. Acne scars were exposed to 3 stacked laser pulses, range between 400 – 600 mJ/Pulse using 4 mm spot size at 3Hz. Patients underwent 3 – 6 treatments every 2 – 3 weeks. Final results were assessed 1 & 3 months after final laser treatment. Before and after photography were captured by high resolution digital camera. Clinical evaluation was performed by two independent dermatologists on a scale from 1 (exacerbation) to 4 (75%-99% improvement). Satisfaction was evaluated both by physician and by patient as well as pain perception and adverse effects.

Results: All the patients demonstrated a moderate to significant improvement. Average improvement rate, was approximately 60% according to pre – post photographs comparison. Patient satisfaction rate was 4.2 (in a scale of 1 – 5). Side effects were minimal and transient: erythema, very mild transient vesicles, and mild pain or inconvenience.

Conclusion: Mid-infrared Er:Glass 1540-nm laser is safe and effective modality for the treatment of atrophic acne scars.

Radiofrequency Device for Facial Skin Laxity

Hayriye Sancaqoğlu, D. Zorlu, Turkey

Skin laxity is associated with chronological aging and exposure to solar radiation. Different nonsurgical methods have centered around those that destroy the epidermis and cause a dermal wound.

The aim of this study is to evaluate the safety and efficacy of radiofrequency device for the non-ablative treatment of facial wrinkles and skin laxity. Thirty four volunteers were subjected for this purpose. A total of four treatment sessions were performed at 5-10 days interval with Exilis radiofrequency device and clinical photographs of the faces were taken at baseline, 1 week, 3, and 6 months. Twenty five patients have moderate to significant improvement of facial wrinkles and skin laxity. Radiofrequency device appears to be an effective and safe treatment method for skin laxity.
A New Approach in Therapy of Traumatic Scars: Acoustic-Interference Technology Er:YAG Laser (2940 nm) Equipped with the Special SMA Module

Natalia Volkova, Russia

Introduction: The aim of the study is to evaluate the efficacy of the treatment of traumatic scars with a new Er:YAG laser (2940 nm) associated with the special module SMA (Spatially Modulated Ablation). The SMA module provides the spatial distribution of energy flow in the 5 mm light spot with the creation of 50 micron alternating zones with minimum and maximum energy degree. The main idea of this method is the reconstruction of scar tissue with triggering synthesis of collagen without fibrosis. The mechanism is the microinjury of scar tissues caused by acoustic waves which penetrate up to 6 mm in depth and interfere with each other. Key features of the technology are only mechanical destruction without high temperature in the depth of the skin and absence of contact of damaged cells with oxygen.

Methods: We observed 75 outpatients with traumatic scars. Excluding criteria: internal chronic diseases, infections, skin diseases, pregnancy and lactation period, keloid scarring. The observation period was 6 months. An independent physician evaluator assessed the treatment outcomes using POSAS scale and 5-point grading scale (VAS).

Results: Of 75 patients, all patients successfully completed the study. All of the patients received laser treatment 3-5 times. We used an Er:YAG laser equipped with the SMA module: 3 Hz; 2,21-3,54 J/cm2. The recovery period was from 3 to 7 days. Complications of laser therapy did not occur. The changes of scar tissue were present with height, pliability, pigmentation and vascularity. After the final treatment, average percentage changes of POSAS were 64%. Based on physician's assessment, mean grade of VAS scale achieved 3,6.

Discussion & Conclusion: Significant improvement for all cases with signs of revitalization (e.g. Elasticity, Colour, Texture).

Conclusion: PRP gel prepared in the form of PRFM provides a good scaffold for scar remodeling after FxCR. It acts as a reservoir for delivering growth factors (which have short half-life) from platelets and maintaining platelets concentration for enhancement of post FxCR ablative wound care.

Platelets Rich Plasma (PRP) Gel Post Fractional Carbon Dioxide Laser Resurfacing for Atrophic Scars

Ahmed A. Youssef, Egypt

Introduction: Atrophic scars are known for being difficult to treat especially areas with poor blood supply e.g. tip of nose. Fractional carbon dioxide laser resurfacing (FxCR) has a remarkable effect on scar remodeling, and autologous platelet rich plasma (PRP) is known to enhance wound healing. We hypothesized that combined treatments by FxCR and PRP gel would manage atrophic scars more effectively.

Aim of the work: Determine the value of adding PRP gel in healing after FxCR as regards down time for healing and final outcome.

Materials & Methods: Nineteen patients with atrophic scars were treated by FxCR with variable settings for 5 sessions at 6-weeks interval. PRP was prepared from 9 ml blood collected in a tube prefilled with 1 ml anticoagulant solution followed by centrifugation 500 x g for 10 minutes, where PPP was separated, then 1000 x g for 7 minutes to separate PRP. PRP gel is allowed to form as platelet rich fibrin matrix membrane (PRFMM) by adding platelet poor plasma (PPP) to calcium gluconate 10% for induction of fibrin mesh network polymerization a sterilized dish and leaving it for 20 minutes in fridge rate 40 C. PRP gel membrane (PRFMM) was applied immediately after each session for treated areas and kept for 5 days.

Discussion & Conclusion: Growing patient demand for youthful skin appearance and favourable body shape has led to the development of new non-invasive body contouring techniques. We have previously demonstrated that the combination of bipolar radiofrequency and optical energies with tissue manipulation is an efficient reshaping modality. This study investigated efficacy and safety of a new high-power version of this combined technology for adipose tissue reduction and skin tightening.

Study Design & Methods: This newest system designed for body contouring and cellulite improvement has new technical features, which include higher output of radiofrequency. This allows a better and faster increase in skin temperature, producing better collagen remodeling and fat reduction. 6 patients have been treated in three sessions at 2 week intervals.

Results: After management of full abdomens, lower back & flanks a very nice improvement can be seen in volume & circumference reduction of every patient.

Conclusions: These first clinical cases treated with this new device are very promising, showing very nice improvement in volume reduction.

Treatment of Hematomas with High-Power 532 NM KTP Laser

Christine Dierricks, Belgium (for Cutera, Inc.)

Background: Hematomas are damaged or broken blood vessels bleeding underneath the skin. They typically appear as red or purple discolorations and are often categorized by size – petechial less than 3 mm in diameter, purpura: 3 mm to 1 cm in diameter, and ecchymosis: 1-3 cm in diameter. During the healing process, hematomas typically change color from red-purple (Hemoglobin) to blue-green (Bilederin), yellow (Bilirubin) and then finally return to normal appearance. The treatment of hematomas has become increasingly popular post aesthetic procedures to reduce undesirable side effects and downtime for patients. Current therapies for treating hematomas include oral and topical modalities as well as laser and light based devices. The objective of this study was to evaluate the efficacy of a high power 532 nm KTP laser for the treatment of hematomas.

Study: A series of patients presenting with procedural and injury induced hematomas were treated with a high power 532 nm KTP laser. Initial treatments were delivered 24-48 hours post injury. Darker, denser hematomas were treated with 1 pass of the KTP laser while lighter hematomas were treated with 2-3 passes. Treatment parameters varied based on the age and color of the hematoma.

Results: Significant improvement in the hematomas was observed within 24 hours post laser treatment, with complete resolution 2 days post laser treatment.

Conclusion: Vascular lasers such as the high-power 532 nm KTP laser are effective in providing faster resolution in the treatment of hematomas with no downtime or adverse events.

Fat Cooling And Shock Wave for Body Contouring

Klaus Fritz, Germany (for ZIMMER MedizinSysteme GmbH)

Techniques using radiofrequencies, cavitation and noninvasive ultrasound, and carbon dioxide have been studied as treatments for noninvasive body contouring. Shockwave therapies for treating hematomas include oral and topical modalities as well as laser and light based devices. The objective of this study was to evaluate the efficacy of a high power 532 nm KTP laser for the treatment of hematomas.

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Free Communication: Abstract Award

Free Communication: Industry

Chair: Maurice Adatto

Reduction in Adipose Tissue Volume Using a New High Power Radiofrequency Technology Combined with Infrared Light and Mechanical Manipulation for Body Contouring (VelaShape III™)

Maurice A. Adatto, Switzerland (for Syneron Candela)

Background & Objectives: Growing patient demand for youthful skin appearance and favourable body shape has led to the development of new non-invasive body contouring techniques. We have previously demonstrated that the combination of bipolar radiofrequency and optical energies with tissue manipulation is an efficient reshaping modality. This study investigated efficacy and safety of a new high-power version of this combined technology for adipose tissue reduction and skin tightening.

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Free Communication: Industry
The findings show that the action of Lipolysis is a safe, effective, and well-tolerated noninvasive procedure for body contouring, it even could be an alternative to liposuction for patients who require only small or moderate amounts of adipose tissue and cellulite removal or are not suitable candidates for surgical approaches to body contouring.

**A Cross-Cultural Study of Consumer Attitudes Toward Cellulite**
**Lisa Misset, USA (Merz, Inc.)**

**Background:** Cellulite is an area of high unmet need in the aesthetic medicine arena, yet little data is available on its prevalence and bothersomeness outside the United States. A statistic of 85% of American women having cellulite is widely reported from a 1998 Harvard Women’s Health Watch Study, but data in other countries has not been readily available.

**Objectives:** To obtain self-reported incidence levels of cellulite and its location on the thighs vs. buttocks among women outside the United States. Secondary objectives included evaluating and comparing women’s attitudes toward cellulite by country, such as how long they have been bothered by cellulite and their motivation to seek treatment.

**Methods:** A total of 9322 women were screened in an online quantitative survey executed by a third party research firm. Individual country screening samples ranged from a high of 2149 in Russia to a low of 244 in Mexico in an effort to qualify at least 100 women per country who were recruited for additional survey questions. The specific countries from which women were recruited included the United Kingdom, Germany, France, Spain, Russia, Italy, Mexico, Brazil, Argentina, South Korea, Thailand, Australia, and Taiwan. Questionnaires were translated into each local language and reviewed for consumer friendliness. Screening criteria for follow-up attitudinal questions across countries included age (25 to 60 years), the requirement to self-report cellulite and be at least “somewhat” to “extremely” concerned about the condition on the buttocks. Women characterizing the cellulite as “primarily dimples or depressions,” "primarily cottage cheese" or "orange peel" (37%), “both types,” “primarily cottage cheese or orange peel” and “both types, in approximately equal measure.

**Results:** In total, across all 13 countries combined, 58% of women indicated that they were at least “somewhat” to "extremely” concerned about cellulite. This was the primary measure of self-reported prevalence. Of the 13 countries surveyed, concern was greatest in Thailand (73%), Argentina (72%) and Brazil (72%). Women in the United Kingdom were least concerned (39%). Of those women globally who were bothered by cellulite, 82% said they have been bothered for longer than one year.

Across all countries, when women are concerned about cellulite, they are highly motivated to do something about it. In total, 84% of concerned women surveyed indicated they would act. Rates were highest in Mexico at 97%, and a majority were still motivated even in the countries with the lowest motivation rates: the UK, Korea and Australia (each at 73%).

Among the 1318 women who were eligible to continue the interview, 92% indicated they had cellulite on their thighs, 74% indicated they had cellulite on their buttocks, and 23% indicated they had cellulite somewhere else (multiple responses allowed).

When asked to characterize the appearance of cellulite, women across all countries who reported cellulite on their thighs and/or buttocks were almost evenly divided between: “primarily dimples or depressions” (30%), primarily “cottage cheese” or “orange peel” (37%), “both types about equally” (32%).

**Conclusion:** A high percentage of women globally, in addition to the United States, report having cellulite, as measured by “somehow to extremely concern” about the condition. They are also highly motivated to do something about it. Thighs is the most frequently reported as the area of the body with cellulite, with a vast majority of women also reporting the condition on the buttocks. Women characterize the cellulite as “primarily dimples or depressions,” “primarily cottage cheese or orange peel” and “both types,” in approximately equal measure.

**Acne Treatment with Selective Delivery of Light Absorbing Gold Particles and near-IR Optical Pulses**
**Dilip Pathanakar, Cory Anderson, USA (Sebacia, Inc.)**

**Background:** Like unwanted hair and vasculature, acne can be potentially targeted via selective photothermolysis of the sebaceous units. Since the endogenous absorption of near-IR laser light by sebaceous follicles is small, follicular thermal injury with optical pulses. Porcine studies indicated skin gold levels returning to baseline in 1-month. In both studies, moderate to severe acne subjects were treated three times, either two (Study-1) or one (Study-2) weeks apart. After massage of particulate suspension, two passes of optical pulses at 800-810 nm,
30 ms duration, and 33.5 J/cm² mean input energy density were applied. Transient erythema, edema were noted; treatment was well tolerated. The reduction in mean lesion count in the treated arm was 61% at 28 weeks post-baseline in Study-1 and 53% at 16 weeks post baseline in Study-2 and statistically significant over control. Another study with 1064 nm Nd:YAG laser yielded similar results (Ref. 2).

Conclusions: A treatment of topicaly delivered chromophore consisting of near-IR absorbing gold microparticles, followed by 810 nm or 1064-nm optical pulses appears to be successful, well tolerated, and safe for treating acne vulgaris.

References:

Combination of Acoustic Wave Therapy (AWT®) and Vacuum Therapy for the Treatment of Cellulite With a Lymphatic Problem
Corry Ulrich, Switzerland (Storz Medical AG)

Introduction: Cellulite affects 95% of women and can lead to negative skin appearance. In many of these cases the reduced lymphatic flow plays a major role and has to get activated. Recent studies show that vacuum therapy activates the lymphatic flow and that acoustic wave therapy is efficient in regard to cellulite and the skin texture. Therefore, there is a legitimate idea to combine these therapies.

Materials & Methods: The D-ACTOR® 200 »ultra« supports an improvement of the elasticity and the skin texture. A combined session takes about 45 minutes to achieve in four sizes to make sure that it’s possible to work pending on the setting, the tissue is sucked and released to negative skin appearance. In many of these cases the reduced lymphatic flow plays a major role and has to get activated. Results of the study show that vacuum therapy activates the lymphatic flow and that acoustic wave therapy is efficient in regard to cellulite and the skin texture. Therefore, there is a legitimate idea to combine these therapies.

Conclusions: The D-ACTOR® 200 »ultra« supports the treatment of cellulite in a safe and evidence-based way. To combine both technologies in one device makes the treatment efficient from an economical and therapeutic point of view.

Nova Cutis – Liquidimplant: Implant Beauty!
Arash Younessi, USA (NovaCutis, Inc.)

Introduction: Filler injections by hyaluronic acid are one of the top-rated and most wanted treatments in aesthetics.

Objective: To discuss the concept of hyaluronic acid (HA) injections using the Liquidimplant range.

Material & Methods: The specifics and the features of the Liquidimplant filler range will be discussed in order to understand and enable the physician to use this specific filler range in an intelligent, suited and area- and indication-specific way: from filing lines and wrinkles to the 3-dimensional restoration of lost volume, shape and lift.

Conclusion: The Liquidimplant hyaluronic acid filler range will be showcased as a complete range of HA fillers to be used from line filling up to 3-dimensional facial shaping and volume restoration.

References:

INNOVATIONS BY CUTERA® presented at 5CC in Barcelona

For solutions in the treatment of vascular lesions to groundbreaking results with picosecond technology, CUTERA’s portfolio of technology is the trusted source that practitioners around the world turn to for innovation, sophistication and performance.

General Session Spotlight
Thurs Sept 1

9:00 - 11:00
Free Communication Session
Room D5

Dr. med Christina Dienicke Skinperium
Boom, Belgium

Treatment of Hematomas with High-Power 532 nm KTP Laser—excel V™

11:00 - 11:30
Picossecond Technology Session
Room D3

Dr. med Heike Heise
Dr. Hilton & Partner Düsseldorf, Germany

Lunch Symposium sponsored by CUTERA
Fri Sept 2 from 11:30 – 12:30
ROOM D1

Dr. med Antonio Campo Voegeli
Clinical Dermatologica Campo-Optimage
Barcelona, Spain

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Dr. med Klaus Hoffmann
Katholisches Klinikum Bochum
St. Josef - Hospital Bochum, Germany

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- **Michael H. Gold**
  - Aesthetic Dermatology Vol. 3
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- **Moshe Lapidoth**
  - Aesthetic Dermatology Vol. 2
  - Radiofrequency in Cosmetic Dermatology

- **David J. Goldberg**
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