

Faculty abstracts

William Adams

Bacteria – bad, more bacteria worse: Capsular Contraction and Beyond – Translation in Clinical Breast Surgery

Bacterial etiology for breast implant problems are well documented and dependent largely on the bacterial load acquired at the time of surgery. Surgeons can you proven steps to minimize the bacterial load to optimize patient outcomes.

June 7, 10.45-12.15

Anand Deva

Bacteria and biofilm formation in aesthetic medicine

There is increasing evidence that bacterial biofilm is responsible for the failure of medical devices, leading to device-associated infection and implant failure. As doctors working in aesthetics, we are among the leading users of prostheses and injectable biomaterials in medicine, and it is important that we are kept informed of this growing problem. This paper will summarize the pathogenesis of device-associated infection, outline the evidence for such infection in a number of medical devices, and outlines clinical strategies aimed at reducing the risk of bacterial contamination at the time of patient treatment. It will also outline strategies under investigation to combat the problem of bacterial biofilm contamination of medical devices/injectables.

June 7, 10.45-12.15

Evelina Vågesjö

Onsite production and delivery of endogenous proteins to wounds and the MOA in acceleration of healing – a potential for improving scar healing in the future?

Immune cells play important roles in wound healing by following instructions from the microenvironment. We have developed a technology to bioengineer the wound microenvironment and enhance healing abilities of the immune cells in the dermis. The compound is classified as an advanced therapy medical product and is more specifically a Lactobacillus transformed with a plasmid encoding human CXCL12 also known as SDF-1a. CXCL12-delivering bacteria administered topically to induced wounds in mice efficiently enhanced wound closure by increasing proliferation of dermal cells and macrophages, and led to increased TGF- β expression in the macrophages. Bacteria-produced lactic acid reduced the local pH, which inhibited the peptidase CD26 and consequently enhanced the availability of bioactive CXCL12. Importantly, treatment with CXCL12-delivering Lactobacilli also improved wound closure in mice with hyperglycemia or peripheral ischemia, and in a human skin wound model. Initial safety studies demonstrated that the topically applied transformed bacteria exerted effects restricted to the wound, as neither bacteria nor the chemokine produced could be detected in systemic circulation.

Dosing, safety and efficacy was repeated in a mini pig model. Development of drugs accelerating wound healing is limited by the proteolytic nature of wounds. Our technology overcomes this by on-site chemokine production and reduced degradation, which together ensure prolonged chemokine bioavailability that instructed local immune cells and enhanced wound healing. Parts of the preclinical work was published in Vågesjö et al., PNAS 2018 and the work earned a commentary by Davis and Gallagher published in Cell-Host and Microbe 2018.

June 7, 10.45-12.15

Roger Wixtrom

Bacterial resistance – a growing and huge risk in medicine. What can we do to avoid and handle it?

The menace of increasing bacterial resistance to antibiotics is widely recognized as an impending worldwide crisis. The proposed solutions are multifactorial and will require the commitment and active engagement of a wide range of stakeholders, including: physicians; health systems, hospitals, clinics & nursing homes; healthcare payers; professional medical societies; healthcare quality organizations; government agencies, as well as patients. There are prior and newly identified potential measures that surgeons in particular may wish to pursue to assist in overcoming this monumental challenge. Several of those measures, and the supporting evidence, will be the principal focus of this presentation.

June 7, 10.45-12.15

Dolores Wolfram

Immunology and biofilm formation

Our research group postulates, that capsular contraction is initiated and aggravated by immunological processes. No fibrosis without immunological reaction. Histomorphological as well as functional results show, that a mainly T-cell based immune response takes place in the capsular tissue. Activated immune cells produce pro-inflammatory and profibrotic cytokines, which lead to severe fibrosis.

Bacterial contamination represents also a chronic immunological stimulus, supporting the above mentioned concept and we will explain immunological mechanisms leading to the phenomenon of biofilm formation. Biofilm formation by human bacterial pathogens on implanted medical devices causes aside major morbidity and mortality also tremendous health care costs. Biofilms consist of microbial communities that are entrapped in a matrix of highly hydrated extracellular polymeric substances forming a densely packed diffusion barrier to antibiotics and human immunity in general.

As a result, novel therapeutic strategies other than conventional antibiotic therapies are in urgent need. We will highlight

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the context between the immune system and fibrosis. Moreover, the relationship between bacteria, the immune system and the fibrotic reaction within the capsular tissue will be discussed. Finally, current anti-biofilm strategies, which can be divided into two groups (a) targeting the biofilm forming process by disruption and (b) anti-biofilm technologies focusing on biomaterial modifications to make the medical devices resistant to biofilm formation will be discussed.

June 7, 10.45-12.15

William Adams

Doctors delivering media messaging

Doctors have never leveraged their most important marketing asset - THEMSELVES. Instead they have relied on self-proclaimed marketers and Web personnel who often do not provide patients what they want. The Plastic Surgery Channel is a media company operated by plastic surgeons that specializes in high end doctor delivered media messaging for patients.

June 7, 14.30-16.30

Bradley Calobrace

Business of Plastic Surgery – Pearls to Creating a Comprehensive Aesthetic Practice

The creation of a comprehensive aesthetic practice is becoming increasingly important to remain relevant in the marketplace in a specialty that has become highly commoditized. This presentation's main objective is to introduce the audience to the many issues facing a growing practice, from creating a vision for growth to the implementation. The creation of a value proposition for your business, branding, internal and external marketing, and the creation of an expert team are the focus of this presentation. Four types of employees will be highlighted, demonstrating the importance of creating a team that will care out your brand.

June 7, 14.30-16.30

Emmanuel Elard

Documentation of results: past, present and future

Before and after pictures are extremely important for aesthetic practitioners, but unfortunately they do not always realise this. It is in fact, impossible to describe appearance in an objective way without high quality pictures perfectly standardized regarding all the parameters. Moreover, we don't treat statues. Pictures are not a relevant material when we want to show the natural results we get with procedures like Botulinum toxin or breast augmentation.

As aesthetic practitioners, one of the most important parameter we need to masterize is the lighting. We can show major improvement without doing any procedure on our patients. The second one is the positioning: from the patient but also

the camera that can showcase completely different results if they are not standardised. The last one is the white balance & colors that can easily trick the reality.

Nextmotion solution allows to masterize all these parameters, using a rotating device solving the problems of lighting and a smartphone running a powerful app, which interaction with its screen is the only relevant solution to solve face/camera positioning and standardisation of white balance & colors.

More than pictures, we will shoot videos showing motion and emotions of our patients and also the quality of our know how.

Our smartphones evolve very quickly and we can enjoy their last material updates just by downloading the last version of the Nextmotion app: last iPhone X enable 3D acquisitions, so we can now analyse volumes injected without investing into expensive tools.

Augmented Reality is in our roadmap: doctors will soon be able to visualize each muscles and arteries while they are injecting in order to provide more security for their patients, and a better understanding of the treatments they provide.

Being at the cutting edge of the technology providing powerful tools and evolve with doctor's needs is the philosophy of our company, created by a doctor for doctors.

June 7, 14.30-16.30

Martina Kerscher

Autologous conditioned serum:

Effects of two clinical trials in 63 female patients

Reduction of skin elasticity is a well described skin aging process due to a reduced activity of dermal fibroblasts and an upregulation of inflammatory proteins like activator protein 1, which increases collagen degradation. Due to in vitro data ACS exosomes could have a positive effect on the activity of dermal fibroblast.

Two controlled clinical trials with a total of 63 female patients (age 35-65) have been conducted applying ACS exosomes via micropuncture technique or microneedling to facial skin. Study duration was 24 weeks. Each treatment cycle was comprised of 4 treatments. Skin firmness and skin tiring were measured before the treatment, after 12 and 24 weeks with a Cutometer dual MPA 580 (Courage & Khazaka, Cologne). Clinical effects were evaluated through patients with the Global Aesthetic Improvement Scale (GAIS, Scale 0-4). Safety was evaluated at each visit.

Skin firmness improved in both trials with a very large Effect Size (ES) after 12 weeks (0.34 mm to 0.24 mm, ES 2.00 and 0.40 to 0.25 mm, ES 1.44) and increased additionally until week 24 to a huge ES in the first trial (0.34 mm to 0.16 mm, ES 4.50). The increased skin elasticity was confirmed with reduction of skin tiring (0.39 mm to 0.29 mm, ES 2.00 and 0.46 mm to 0.29 mm, ES 1.44) and again showed a huge ES after 24

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weeks in the first trial (0.39 mm to 0.20 mm, ES 4.75). GAIS improved significantly at week 12 and 24; 70% of all patients reported clinical improvement. Only transient small haematoma as local injection site effect evolved in both studies.

The significant effects of facial ACS injections on skin firmness and elasticity might be due to an activation of collagen neosynthesis in dermal fibroblasts and a consecutive skin rejuvenation effect. Treatment with ACS seems to be a preventative approach for patients with slight elasticity loss and a restorative approach for patients with extreme and strong elasticity loss.

June 7, 14.30-16.30

Nikolaos Metaxotos

The beginners guide: How to Build a Successful Practice In Aesthetic Medicine

Nowadays, an aesthetic surgery patient is a healthy person with many different experiences. He/She has a variety of treatments to choose from, a wealth of information to learn from and many different options regarding medical facilities, whether at home or abroad. Thus, establishing a successful aesthetic medicine practice is becoming so much more than simply offering a number of treatments, surgical or non-surgical. It is an experience more than anything else. Therefore, apart from scientific excellence and medical ethos, successful practices may rely a lot on promotion, marketing, PR activities, building strong partnerships and establishing long lasting customer relationships. This lecture will draw upon the example and main lessons of running Symmetria clinic to shed some light into the complicated questions of what the customer wants and how a successful business model can cater for those needs in order to establish itself competitively into the very challenging market of aesthetic medicine.

June 7, 14.30-16.30

Peter Wehling

Inflam-Ageing and Exosomes: A New Treatment Strategy to Extend Health Span?

There is general agreement based on accumulated scientific data that proinflammatory cytokines and other inflammatory factors are an important basis for aging and age-related diseases. To inhibit chronic-low grade inflammation is therefore a sound strategy to delay aging and/or extend healthspan. One way to induce low grade inhibition of inflammation is the application of anti-inflammatory exosomes, derived from autologous conditioned serum (ACS). Exosomes are nanovesicles, produced by endosomal membranes. They feature complex immunomodulatory effects to neighbouring cells and contain cytokines, RNA and other material.

We have developed a technique to promote and enhance the anti-inflammatory effects of autologous exosomes. The

talk describes the effect of inhibiting inflammation in general and the impact of ACS derived anti-inflammatory exosomes on cellular function, experimental models of aging and possibilities of clinical application of this technology.

The results can be summarized as follows: ACS derived exosomes enhance dose dependent cell division, inhibit UV induced cell death, reduce hs CRP and NO, reverse parameters of skin aging, reverse joint effusions, attract stem cells and induce collagen synthesis. Preliminary data also shows improvement of life quality measured by SF-36.

ACS derived exosomes are a new technology, which already showed positive human clinical results in randomized studies of OA and reversal of skin aging. Further studies are planned to see its effect on extension of general health span.

June 7, 14.30-16.30

Kieren Bong

How I approach a consultation

Over the past 20 years, the field of facial rejuvenation has grown and changed tremendously. Most patients who walked through a plastic surgeon's office in 1998 were offered surgery and nothing else. Today, the trend is toward customised programmes that utilise surgical and nonsurgical options, along with skin care programmes designed to suit each patient's needs and wishes. The approach to each treatment plan is individual, with many tools and techniques available to achieve successful and satisfying results.

In this session, Dr Kieren Bong shares his approach in an effective and successful consultation, taking into consideration the importance of different aspects of patient-doctor consultation and its association with patient satisfaction and retention rates.

June 7, 17.00-18.00

Robert Cohen

Managing Expectations in Aesthetic Medicine

Focusing specifically on aesthetic breast surgery, this presentation emphasizes the importance of managing patient expectations as a key to success in aesthetic surgery. Discussion will include specific techniques with regards to assessment of patient goals, predicting realistic outcomes, and integrating these two evaluations in order to achieve success and patient satisfaction.

June 7, 17.00-18.00

Nikolaos Metaxotos

How to establish strong relationships with your patients

Having established a great team of health professionals, having allocated time and resources to set up the practice, here comes the task at hand: how to market your practice when competition is growing all around the world? How can you

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differentiate yourself and your services from others and convince your potential customer to visit you once, and come back again and again? What reasons can you give to your potential patients to visit your practice again and again? How can you establish a relationship of trust, which is the key to the patient - doctor relationship?

June 7, 17.00-18.00

Eric Bernstein

Overview of Cutaneous Lasers and Energy-based Devices

There has been a recent explosive growth in the numbers of lasers and other energy-based devices on the market. Keeping up with even the different classes of devices, let-alone the individual options within each class is a daunting task. I will present an overview of the various lasers for a variety of conditions. In the short time allotted, the best that can be accomplished is a whirlwind list of what types of devices are now on the market, and what my personal choices are for managing various conditions. Further, in-depth analysis of the laser/energy-based device landscape is necessary to make informed decisions on what devices to add to one's specific aesthetic practice. Attendees should be able to understand the landscape of lasers and energy-based devices, and begin to choose what devices they wish to integrate into their practices.

June 8, 07.00-08.00

Dominik Duscher

HIF Pathway Modulation:

The New Frontier of Skin Rejuvenation

Introduction: Similar to chronic wounds, advanced age is associated with disorders in the cellular regenerative capacity of the skin. The response to injury pathway centered around HIF-1-alpha has been identified as fundamental in skin healing and is defective in aged skin.

Aim: In addition to hypoxia, also a decreased cytoplasmic iron-concentration is effective to modulate the HIF-1-alpha pathway. Here we utilize local iron-chelation in order to induce a controlled enhancement of the HIF-1-alpha pathway for cellular regeneration.

Materials and Methods: In order to determine the effects of small molecule induced iron-chelation on skin cells, young and old fibroblasts were cultured and treated with various concentrations of Deferiprone (DFP). The viability, proliferation, metabolic activity, cellular stress, and the genetic expression of key regenerative genes were quantified. After having established how DFP upregulates cellular regeneration of aged fibroblasts, a split face clinical study with 33 patients (mean age 54) was conducted. In a six-week trial the effects of a DFP containing formulation (Day Catalyst, Tomorrowlabs

GmbH, Vienna, Austria) on facial skin were examined (irritations, wrinkles, hydration, skin barrier functionality, patient satisfaction).

Results: In vitro preconditioning with DFP resulted in a significant enhancement of aged fibroblast viability, proliferation, cytokine expression, metabolic activity and decreased cell stress. In the clinical study, the treatment with a DFP containing formulation (Day Catalyst, Tomorrowlabs GmbH, Vienna, Austria) has significantly induced skin rejuvenation by reducing facial wrinkles and increasing hydration while preserving the barrier function of the skin. No adverse events or skin irritations were recorded. These results demonstrate the effectiveness of HIF-1 alpha pathway modulation for skin rejuvenation on both a cellular and a tissue level.

Conclusion: A DFP containing formulation (Day Catalyst, Tomorrowlabs GmbH, Vienna, Austria) is able to actively support the biological processes that are depleted during aging. HIF-1 alpha pathway modulation for skin rejuvenation exemplifies elegantly how insights from basic science in regenerative medicine can inform aesthetic medicine for the development of effective treatment paradigms.

References:

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June 8, 08.00-10.00

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Nabil Fakih

Products and Protocols for Treatment of Hyperpigmentation, Acne and Rosacea

With an increasing number of multicultural patients and those of different backgrounds presenting in dermatology clinics, issues facing patients with higher Fitzpatrick skin classifications, often referred to as skin of color patients, are on the rise. Knowledge of the diagnostic dilemmas, cutting edge treatment options, and latest clinical research in the diagnosis and management of cutaneous anomalies in skin of patients is of paramount importance. The most common complaints in patients are rosacea, acne and hyperpigmentation. Where sometimes rosacea is the trigger for the rest. Despite the availability of multiple treatments for these condition, all three continues to present clinical management challenges for doctors. Difficulty may be traced to physician or patient reluctance to use certain agents or interventions, failure to identify and avoid contributing factors, and insufficient attention paid to the psychosocial aspects of the disease. The author will address a variety of issues including the diagnosis and management of hyperpigmentation, rosacea and acne with ZO Skin Health.

June 8, 08.00-10.00

Alain Fogli

Eye brow and Temporal lift

The temporal region has imprecise limits in the young patient. During the aging process, it becomes individualized with the appearance of a temporal fossa, the temporal, orbital and zygomatic bone margins, the ptosis of the lateral part of the brow and the appearance of the wrinkles of the crow's foot. As this area frame the look, it should be taken into consideration during the clinical examination as well as the facial and cervical stages.

The rejuvenation techniques are numerous, nuanced and gradual. As long as the eyebrow ptosis is not evident and the distance of the eyebrows unaltered, the volumizing techniques and the botulinum toxin can respond effectively and harmoniously to the patients' demand.

Then the surgical techniques of temporal and brow liftings must be considered and coupled with the techniques of lipstructure that are more and more practiced.

It should be noted that the demand for temporal rejuvenation is increasing and precedes the demand of cervico-facial rejuvenation. This underlines the importance of this region both in terms of preventing or at least slowing down the process than in terms of curing the stigma of aging.

June 8, 08.00-10.00

Bahman Guyuron

Individualized periorbital rejuvenation

In this presentation the important points about the patient preparation, surgical technique, and individualization of the procedure will be discussed. The importance of noting eyelid ptosis and asymmetry will be emphasized and a simple surgical solution will be offered for the correction of eyelid ptosis.

June 8, 08.00-10.00

Rahul Mehta

Research strategies for cosmeceuticals

Developing skincare products with clinically proven activity and demonstrated biological mechanism of action is becoming ever more important to separate evidence based products from majority of commercial skincare products. Understanding biological pathways that cause changes in skin quality can be studied using established molecular biology techniques. Formulating ingredients to manipulate the identified biological pathways is a critical step in designing a product. Final formula must be able to maintain biological activity throughout the shelf-life of the product and adequate testing must be performed to verify activity using appropriate biological or clinical studies. All claim-substantiating clinical studies must be adequately controlled using appropriate placebo/vehicle or active comparators and enroll sufficient number of subjects to achieve statistical significance in key outcome measures. While all of these measures are routine during development of new drugs, cosmeceuticals are rarely subjected to such rigors. This lecture describes optimal path for development of cosmeceuticals that ensure product activity and safety while controlling the time and cost of development.

June 8, 08.00-10.00

Warwick Nettle

Hairline lowering Forehead Reduction

Hairline lowering forehead reduction creates a more harmonious facial balance by lowering the anterior hairline and reducing the show of forehead skin. This surgery is particularly suitable for females as a high hairline can give a masculine look. Due to hairline recession with time most men are not generally good candidates for this procedure and hair transplants are more commonly recommended. However a combination of hairline lowering and hair transplant finessing can work in either sex.

In the hairline lowering procedure thousands of follicular units are moved using a subgaleal scalp advancement flap, reducing the forehead height.

The procedure will be outlined including a video demonstration of the procedure as well as methods to improve re-

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sults and hints on how to avoid problems and complications.

June 8, 08.00-10.00

Warwick Nettle

Transcutaneous brow shaping (Pelle technique) and direct brow lift

There is no one perfect method of brow lifting surgery and the commonly used browlift techniques are recognised as often having unreliable and aesthetically unsatisfactory results.

For women an aesthetically pleasing brow rises from near the top of the nose through an arch then into a lateral peak before a very slight downturn. Transcutaneous brow shaping (TBS) allows the opportunity to directly influence brow height and shape accurately. The technique will be outlined including a video demonstration. The pros and cons of this technique as well as the indications for browlift techniques using direct brown incisions will be discussed.

June 8, 08.00-10.00

Jay Burns

Transconjunctival lower lid fat modification combined with aggressive fractional laser of the skin

Rejuvenation of the lower lids is one of the most sought after procedures to correct facial aging, yet can be fraught with unexpected complications such as scleral show and ectropion. This talk will cover an approach to the lower lids that combines transconjunctival fat removal with lower lid laser resurfacing that produces quality long term results equivalent to many standard lower blepharoplasty results. Optical confocal tomography was utilized to determine depth of penetration and will be presented to help elucidate depth of penetration and layers of the lower lid effected. This approach has proven to be a useful technique to achieve quality results, high patient satisfaction, and few side effects or complications.

June 8, 08.00-10.00

Jay Burns

Aggressive full field laser resurfacing

The author will review his technique of aggressive laser resurfacing developed over the last 23 years since the inception of CO2 laser resurfacing. The transition to Erbium laser resurfacing will be discussed. Comparisons between CO2 and Erbium will be discussed. The author's technique for deep perioral rhytids, acne scarring, pores, and actinic damage, including dyschromia, will be discussed along with representative case presentations. The author will present his article just accepted for publication in Plastic and Reconstructive Surgery which analyzes his approach to advanced facial skin aging. Indications and complications will be discussed, as well as pre and post operative care. Individ-

ualized treatment plans utilizing multiple lasers for each patient will also be discussed.

June 8, 10.30-12.45

Jay Burns

Indication and limitations of IPL treatments

IPL is the single most utilized light based therapy in medical spa's today. If a physician were to open a practice and purchase only one device, Intense Pulse light devices would be the most common choice. This choice certainly holds true if the majority of the patients in a practice are skin types I, II or III. IPL devices can be utilized in Skin types IV and V, but only very carefully with more gentle and conservative settings. Indications and complications will be discussed. Different types of IPL devices will also be discussed and compared. The long term clinical results will be discussed. BBL's effect to produce a more youthful genomic expression will be reviewed. Limitations of treatment will be discussed as it relates to skin types, laser hair removal, and skin conditions that do not respond well to IPL/BBL.

June 8, 10.30-12.45

Jay Burns

Facial cryolipolysis benefits and limitations

The author will present his work on facial cryolipolysis that led to FDA approval of cryolipolysis for the removal of submental neck fat. Challenges encountered, as well as successful modifications of the applicators and technique will be discussed. Current indications and various techniques will be discussed. The applicator modifications led to the transformation of all current applicators, which will also be presented. The author's scientific presentation of "Treatment to Transformation" which led to widespread use and acceptance of cryolipolysis will also be discussed. Indications and complications will be discussed including the incidence of paradoxical hyperplasia and post operative pain management.

June 8, 10.30-12.45

Eric Bernstein

Avoiding complications and Maximizing Results of Laser Surgery

With more and more devices entering the marketplace, there is often less time to develop familiarity with what's new and how to most safely use lasers and related devices. Often, the most dangerous devices are the most widely used and put into the hands of the least-experienced operators. A very brief overview of the not-so-scary physics and biology of lasers will be presented in the context of understanding where greatest risks occur with laser usage. Eye protection will be discussed for both the treating professional and staff, as well as for the patient. Finally, a few tips will be given

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for safe use of resurfacing, vascular, pigment, hair-removal and tattoo-removal lasers. Information and resources for more in-depth safety information will be provided.

June 8, 10.30-12.45

Eric Bernstein

Tattoo-removing lasers

Laser tattoo removal was one of the first applications of laser technology. It's one of the most fun applications of laser technologies, because laser-tissue interactions are all about color, and tattoos are simply an array of colors, artificially placed in the skin, and their removal depends strongly on the properties of individual lasers for their removal. Lasers can easily be characterized by wavelength or color (which needs to be effectively absorbed by the target pigment), pulse-duration (which needs to be short to fracture small targets), and spot-size or beam diameter (which needs to be large enough to allow the laser energy to penetrate deeply enough to reach the tattoo pigment). The Q-switched, nanosecond-domain lasers have been the mainstay of laser tattoo removal and include the 1,064 nm Nd:YAG, the 532 nm KTP, the 755 nm alexandrite and the 694 nm ruby lasers. Recent advances in laser technology have enabled the development of picosecond-domain lasers for tattoo removal, often incorporating 3 wavelengths within a given laser device. These new developments have led to additional options for tattoo treatment. Current strategies for laser tattoo removal will be discussed in the context of the new equipment.

June 8, 10.30-12.45

Per Bergentz

Overview of different treatment options for vascular lesions in an aesthetic clinic

At Akademikliniken there are a lot of patients with vascular lesions coming to the clinic. Patients with everything from small cherry spots, spider veins, visible vascular lesions in scars or on the nose after rhinoplasty, blue veins under the eyes and even large glomovenous malformations. These lesions are usually unattractive, can be painful and might even impair the result of plastic surgery.

There are several different options on how to treat these lesions and malformations. Laser is one way of treatment, but this lecture is focusing on other thermal treatments and injections. Treatment of varicose veins is done with ultrasound guided radio frequency when it comes to greater and smaller Saphenous veins, and foam sclerotherapy for the contributors. Foam sclerotherapy can also be used on other parts of the body and to treat large glomovenous malformations. For the smaller spiders and lesions in the face Endovenous Radio Frequency can be successfully used.

June 8, 10.30-12.45

Alain Fogli

How I do it and why after 38 years of experience

The aim of this study is to analyze the anatomical changes leading to the appearance of jugal aging with the appearance of jowls. It is also to describe the different techniques and to highlight those that are most effective with the permanent concern of obtaining a natural result with a well defined jawline and a harmonious distribution of jugal volumes.

For this purpose, the techniques of lifting with relocation of the displaced volumes and lipostucture are often associated with the strict respect of different directionnal vectors for the underlying tissues and for the skin redraping. More precisely, the dissection of the pre-masseteric space makes it possible to address the specific problems posed by the jowls and the heavy labio-mental grooves.

In responding to the psychosociological demand of our time, two major types of indications emerge with the facelift of the young patient which makes it possible to obtain a long lasting result and a fast return to social and professional life and a later indication surgery which requires more invasive techniques resulting in heavier surgical procedures and follow-up.

June 8, 10.30- 12.45

Mario Pelle Ceravolo

The submandibular gland: an uncomfortable presence in the neck. How to treat it.

The submandibular gland constitutes an important presence in the neck in terms of volume. The gland may be protrusive for different reasons like ptosis, lack of room due a hypoplastic mandible or hypertrophy following recurrent inflammatory episodes.

In some patients the glands are obviously protrusive pre-operatively and represent an absolute indication for treatment. In other individuals its presence is masked by the subcutaneous fat or by the excess skin and platysma. After treating these excesses, the gland may become obvious and, if untreated, may spoil an otherwise good results.

The only effective treatment of a bulging gland is surgical reduction. The technique used by the large majority of surgeons entails an anterior, submental approach.

The author has used this anterior approach for many years but, since the last 7 years, has switched to a lateral approach through a technique (LSD) that has been recently published in PRS.

The gland is approached through a vertical incision on the platysma, carried out 4 cm lower than the lateral mandibular border and it is reduced intracapsularly according to the anatomical parameters of each patient.

The lateral approach has multiple advantages in comparison to the anterior as:

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- absence of the submental scar
- no skin undermining on the anterior neck
- better exposure
- easier emostasis
- time saving
- no risk of compressing haematoma

The occurrence of complications is extremely low if a correct technique is carried out. The most frequent complication is an insufficient correction in terms of volume or a sialoma which can be easily treated by the use of Botulinum toxin or fibrin glue.

June 8, 10.30-12.45

Bahman Guyuron

Rhytidectomy the salient points

Face and Neck Lifting, 10:30 AM - 12:45 PM

In this presentation the salient points related to the patient assessment, detection of risk factors, and brief discussion of the surgical techniques and outcomes and complications will be discussed. The super high SMAS along with the tailor tack technique as well as the vest over the pants platysmorrhaphy will be reviewed.

June 8, 10.30-12.45

Warwick Nettle

Management of the anterior digastric in neck surgery

An aesthetically pleasing neck has good quality skin overlying a muscular and glandular structure which allows good definition of the jawline and a pleasing profile.

Jawline-neck delimitation can be compromised by fullness of the neck, including excess subcutaneous and subplatysmal fat, submandibular gland ptosis or bulkiness and large anterior digastric muscles.

Management of the digastric muscles, including the interdigastric submental fat will be discussed.

Pros and cons of partial or complete digastric excision or Labbe digastric corset will be discussed together with candidate selection. A video of the procedures will be presented.

June 8, 10.30-12.45

Roy de Vita

Sponsored workshop

Galatea: The Next Generation of Soft Tissue Support – The GalaFLEX Scaffold

Since skin- and nipple-sparing mastectomies (SSM/NSM) have proven to be oncologically safe, the number of direct to implant breast reconstruction procedures has substantially increased. With SSM and NSM, the gland is removed and the skin completely preserved facilitating subsequent implant based breast reconstruction. The proven safety of silicone breast implants and the development of biological matrices

and synthetic meshes have contributed to the growing popularity of this approach. I report my experience by using GalaFLEX surgical scaffold in DTI breast reconstruction and revised surgeries. GalaFLEX surgical scaffold is the only biologically derived scaffold for plastic and reconstructive surgery that is constructed from poly-4-hydroxybutyrate (P4HB), extruded into monofilament fibers and knitted into a strong, bioresorbable scaffold.

June 8, 13.15-14.00

William Adams

Will the real double bubble please stand up! - bad terminology leading to bad outcomes

Somewhere in the past 15 years someone propagated and popularized the term double bubble for inferior breast implant malposition, but the problem is the terms actually means something completely different. Surgeons in typical fashion have confused the treatment based on this faulty terminology. It time to get back to basics and end this gong show!

June 8, 14.00-15.30

Mario Pelle Ceravolo

Pathophysiology of animation deformities

Animation deformities are present in almost every patient submitted to subpectoral augmentation mammoplasty. They represent the most common complication related to this operation and yet the least known one. Not all patients complain about it but many women get dissatisfaction and frustration especially when they are told that there is little solution for this problem.

Animation deformities have been studied by the author in more than 1000 patients and classified following clinical criteria in 6 different categories.

The deformity is caused by the pulling action of the muscle on the breast mass more than to implant dislocation during the muscle contraction.

The author presents his algorithm of different techniques to avoid this deformity, based on different anatomical pre-operative situations in order.

Preservation of pectoralis muscle costal insertions, medial pectoralis nerve section for muscle denervation and horizontal muscle splitting are the main maneuvers used to avoid the breast dynamic distortion.

HMS consists in a horizontal incision in the pectoralis muscle which splits it in two flaps. The upper flap will provide good coverage for the implant whereas the lower one may be left attached to the chest and improve the projection of breast lower pole or may be rotated laterally or medially depending on the clinical demand. Horizontal Muscle Splitting (HMS) has been used by the author, during the

Faculty abstracts

last 15 years, in more than 600 cases with aesthetically good results and substantial decrease in animation problems occurrence.

June 8, 14.00-15.30

Elena Goltsova

The art of the volume styling of the face. Light and shadow play. Fill & lift concept.

The use of fillers is common practice in sophisticated anti-aging treatment. Which problems can they help us to fix, and how to make the face look younger, while preserving and highlighting its unique features? Fillers are not a new product, but in recent times they have been used in a new way. They were once used to correct individual aesthetic imperfections and lines; now they are applied to prevent loss of tissue volume and create harmony of the face. The aging of the face is typified by changes to its contours, and the flattening of its convex areas. In our opinion, it is very important to provide face lifting while using volumetric techniques. Due to the fact that we use modern fillers the face looks maximally natural. We can use different techniques both to create volume and to provide lifting. When conducting aesthetic assessment of the face it is important to pay attention to the harmony and volume of the face, taking into account light and shade. In the light we see the contours of the face and the zones that reflect light, and by doing so create volume and make the face appear young. Areas where the skin has defects or lacking in volume create shadow, and make the face appear older. Replenishing the volume removes the excess shadow on the face making it look younger and fresher. Properly positioning the face's best features and location highlights emphasises its uniqueness and also makes it appear younger. This method is used successfully by photographers - and also by make-up artists, who use decorative cosmetics to correct age-related changes. The report presents different techniques of filler injection and combination of such techniques. Using and combining techniques, working at different levels of injections, it is possible not only to style the face, but also to lift it. By harmonising light and shadow - with the right application of injections and fillers - and also with knowledge of anatomy and physiology, it is possible to balance the contours of the face, improve its appearance, and highlight individual beauty.

June 8, 14.00-14.45

Robert Cohen

Internal Implant Support with ADM

This presentation will demonstrate the potential benefits of acellular dermal matrix (ADM) in aesthetic breast surgery. The discussion will include preoperative patient assessment to determine the need for ADM, techniques for pla-

cement of ADM, postoperative management, as well as case studies to provide specific examples of how ADM can be used to correct various complex aesthetic breast problems.

June 8, 14.00-15.30

Roy de Vita

Breast asymmetry and treatment, my decision making algorithm

The aim of the study proposed is to present a new classification and algorithm of treatment for aesthetic breast asymmetry.

The inclusion criteria was developmental breast asymmetries while Poland's syndrome, acquired asymmetries and tuberous breast were excluded. All patients were previously classified into 3 groups based on the degree of patient's awareness of proper asymmetry and the need of special padding for the bra to improve their quality of life and self-esteem. A specific algorithm of treatment was associated to each group. We assessed by a long follow-up that bilateral similar procedure performed allows a good symmetry over time and may contribute to lower revision rates. Patients underwent surgery for breast augmentation with and without different implants, augmentation-autoaugmentation mastopexy/reduction mammoplasty or a combination of procedures. A visual analogue scale (VAS) satisfaction questionnaire regarding scarring, size, symmetry, shape was administered to the patients at 12 months postop follow-up visit.

The new algorithm is helpful in planning breast symmetrization procedures, especially in breast prostheses' selection when it is needed. Combination of this method with surgical experience results in good postoperative effects

June 8, 14:00-15:30

Nabil Fakh

Upgrading your clinic with new technologies for injections to reduce pain, risks & augment patient satisfaction

Plastic surgery has always been a technique- and technology-driven treatment discipline. There has been a remarkable evolution in technique over the last 25 years with advances in technology which accomplished another transformation of the specialty, notably the recent advances in ultra small needles, materials, and pain-free injections. This lecture will address all of the recent advances in this rapidly expanding field of cosmetic medicine related to reduction in pain and risk. Major advances often come from cross-fertilization between specialties, and having involved the doctor in the process.

June 8, 14.00-14.45

Faculty abstracts

Robert Cohen

Minimizing and Managing Complications in Aesthetic Breast Surgery

This presentation will discuss how to pre-operatively predict which complications a given aesthetic breast surgery patient will be at highest risk for, and how to adjust the surgical plan in order to address and minimize these risks. The discussion will also address how to appropriately manage complications should they occur.

June 8, 14.00-15.30

Nabil Fakh

Mixing of different facial fillers to improve results and duration

Background: The collagen-stimulating properties of Radiesse® (calcium hydroxylapatite, CaHA) and the volumization properties with high cohesivity and low G prime of Belotero® (Hyaluronic Acid) can be mixed and used for a prolifiting facial makeover and skin-tightening procedure.

Objective: To evaluate the effectiveness and safety of diluted CaHA with Belotero Volume for skin tightening and pro-lifiting in 20 cases of women with skin laxity who rejected a face-lift surgery.

Methods: 18 females and 2 males subjects were enrolled. CaHA diluted 1:1 with Hyaluronic and 0.3cc of 2% lidocaine was injected subdermally using a linear-threading technique with 25 G, 50 mm cannula. Pictures were taken before the treatment and at 6 months. Subjects and physicians assessed treatment outcomes using the 5-point Global Aesthetic Improvement Scale (GAIS). Adverse events and tolerability were recorded.

Results: 90% of subjects and physicians rated treatment outcomes on GAIS as much or very much improved. 50% felt an effect of a pro-lifiting procedure feeling a more tighten skin after 1 year. Treatment was well tolerated with a 1 case complication of a nodule that was solved alone after 8 months.

Conclusions: Diluted Radiesse with Belotero Volume gives an immediate correction, with low and high extended correction, and skin collagen stimulation with hydration improvement. The procedures were well tolerated, and subject and investigator satisfaction with treatment results was very high. Injection of diluted CaHA with hyaluronic acid is safe and effective for treating patients who do not desire a facelift and wants a pro-lifiting effect.

June 8, 16.00-17.00

Günter Germann

An update on regulatory issues to permit the use of SVF and stem cells in soft tissue procedures

Stem Cell therapy is gaining widespread popularity for a wide variety of indication. However, since even the definition of

“Stem Cells” is a grey zone, the hype lead to many undesirable developments.

Various cell preparations of unknown composition are offered as stem cell therapy. The indications range from arthritis to Alzheimer’s disease, from Tendinitis to muscle injuries.

Regulatory restrictions vary between countries. Processes and devices to create stem cell preparations have different benchmarks and bars to overcome.

The FDA has decide to stamp out some of the wildfires, especially increasing in California, where severe complications were reported after stem cell application.

The presentation gives an overview of new developments on the “regulatory front” to update the participants how to walk on a safe way to the clinical application of pure stem cells.

June 8, 16.00-17.00

Stephane Meunier

Evolution of facial injectables

Since the commercialization of Restylane (by Q-Med), in 1996 in Europe and then in 2003 in the USA, the first HA soft-tissue filler crosslinked with BDDE, was soon followed by many other HA fillers.

As a class, HA fillers have become increasingly popular because of very low potential for adverse reactions, non-immunogenicity, predictability, durability, reversibility and ease of use.

Currently, there are many commercially available HA fillers, which differ in their source material, formulations, and manufacturing processes. However virtually all of them share the same concept for HA crosslinking with BDDE as pioneered by Restylane in 1996.

However, the recent advances in polysaccharides and HA-based materials have driven trends toward more complex systems which are expected to take a big step forward in achieving theranostics and regenerative medicine with improved therapeutic efficacy, mechanical properties, and safety profiles.

The aim of this presentation is to explore how novel concepts in HA modification could find interest in the field of dermal fillers.

June 8, 16.00-17.00

William Adams

Why I use textured and smooth implants and don't worry: Keys to success

Surgeons and patient shave misunderstood textured devices for many years. Prior to the BIA-ALCL era there was a rising faction who found clinical issues with textured devices. Now in the BIA-ALCL era much misunderstanding of

Faculty abstracts

the facts on BIA-ALCL have resulted in much mis-information on texture.

June 8, 16.00-18.00

Anand Deva

ALCL what we know, what we think we know and what we still don't know

(BIA-ALCL) is emerging as a herald diagnosis of increasing frequency. Research and evidence around its risk and pathogenesis is now giving us a clearer picture of this entity. The importance of ongoing cooperation and collaboration across academic units, industry, clinicians, device registries and regulators is emphasised. We present an up to date summary of what we currently know today and also outline emerging knowledge on BIA-ALCL and what we are likely to know in the coming months/years.

June 8, 16.00-18.00

Daniel Fleming

Spontaneous regression/resolution in BIA-ALCL – should we rethink early stage disease?

Are all cases of BIA-ALCL really malignant as the provisional 2016 WHO classification currently states? Australia has the highest per capita reported incidence of BIA-ALCL. The median time from implantation to diagnosis has been established as approximately 7.5 years yet no cases were recognised in Australia for the first 16 years of widespread textured implant use from 1991. When testing of late seromas for cytology gradually commenced from 2008, a slow and then rapidly accelerating increase in mainly seroma-only cases became evident. There is no reason to suppose that BIA-ALCL was not present with the same incidence in textured-implant-related late seromas prior to the commencement of cytological testing as afterwards. The obvious question therefore is where are the cases which would have been expected to be diagnosed between 1991-2008?

Cancer registry data shows they did not present as invasive cases of lymphoma. In other words, those seroma patients with undiagnosed BIA-ALCL prior to the onset of cytological testing to look for it got better, often without surgical intervention. Currently the only logical explanation is the existence of a lymphoproliferative presentation capable of indolence/spontaneous regression/resolution. This is known to occur in lymphomatopapulosis/primary cutaneous ALCL, the only other disorder with the same histologically malignant cells. Clinical evidence of regression and consistent with resolution will be presented as well as evidence that BIA-ALCL occurs in asymptomatic patients with neither a mass or seroma. Together with the epidemiology, these findings suggest that we need to reconsider

how we think about seroma only disease and what we tell patients.

June 8, 16.00-18.00

Per Hedén

Is the increased silicone texturization the solution for problems in breast implant surgery

There are obvious clear benefits of smooth/nano textured implants when it comes to reducing the risk for seroma formation and also likely the frequency of ALCL. However, there are also clear advantages of using textured anatomically shaped implants and smooth devices with anatomical shape are likely to rotate. This will create deformation of the breast and necessitate secondary surgery with risks associated to anesthesia etc. We still lack the ideal textured surface. A less aggressive texturing (microtexture) do not permit tissue ingrowth. Macrot textured (pore size >150 μm) implants can on the other hand have tissue ingrow into the surface thereby controlling position. However, macrot textured implants do not always have this good tissue adhesion and this could result in rotation, double capsule formation and also likely later increased risk for seroma and possibly also ALCL. Thus, there is a great need for implant surface development. In 2003 an idea related to increased implant surface texturization was shared with Inamed, later an Allergan company. This resulted in research investigations on increased implant texturization and the so called open pore surface was developed. This resulted in a series of 37 patients operated in a multicenter study in Europe 5 years ago. Follow up have resulted in a high degree of patient an investigator satisfaction. No Baker III and IV capsular contraction was noted in the series and implant position was extremely well controlled.

This new implant surface is promising but not yet commercialized. One reason for this has been concerns that they would be difficult in removing implants, the author however has demonstrated that this can be performed in a relatively simple way. The other concern relates to the present increased concern for ALCL. There is increasing evidence that biofilm formation is an etiological factor for ALCL and more aggressively textured are more prone to have a biofilm. Most scientists also believe that this disease in its first stage is limited to a seroma formation around the implant. As long as the lymphoma cells are limited to the seroma formation before invasion into the capsule and possible spread of the disease the prognosis for treatment is good. However, if the tissue adhesion is extremely strong and complete around the implant, it is not likely that seroma can be formed between the implant and the surrounding capsule and therefore it is also possible that this new surface will not permit the development of ALCL. It may be that the etiology of AL-

Faculty abstracts

CL is multifactorial and that both a genetic predisposition, a biofilm formation and mechanical inflammatory stimulation by rubbing of the textured implant surface against the tissues all are needed to develop ALCL. This would also explain why ALCL is seen after polyurethane implants as the polyurethane breaks down and surface adhesion is lost.

June 8, 16.00-18.00

Dolores Wolfram

Immune bio-compatibility of silicone breast implants

The most common complication of silicone breast implants is capsular contracture (massive scar formation around the implant). We postulate that capsular contracture is always a sequel to inflammatory processes, with both innate and adaptive immune mechanisms participating.

In general, fibroblasts and macrophages have been used as cell types to evaluate in vitro the biocompatibility of breast implant surfaces. Moreover, also T cells have been found at the implant site at the initial stage of fibrous capsule formation. However, only few studies have addressed the influence of surfaces with different textures on T-cell responses.

The aim of the present study was to investigate the immune response of human peripheral blood mononuclear cells (PBMC) to commercially available silicone breast implants in vitro. PBMC from healthy female blood donors were cultured on each silicone surface for 4 days.

Seven different surfaces, which are all commercially available, were tested within our study.

Proliferation and phenotype of cultured cells were assessed by flow cytometry. Cytokine levels were determined by multiplex and real-time assay.

We found that silicone surfaces do not induce T-cell proliferation, nor do they extensively alter the proportion of T cell subsets (CD4, CD8, naïve, effector memory). Interestingly, cytokine profiling identified matrix specific differences, especially for IL-6 and TNF- α on certain surface topographies that could lead to increased fibrosis.

June 8, 16.00-18.00

Anand Deva

A new classification system for breast implants

Background: The introduction of texture to the outer shell of breast implants was aimed at increasing tissue incorporation and reducing capsular contracture. It has also been shown that textured surfaces promote a higher growth of bacteria and are linked to the development of breast implant associated anaplastic large cell lymphoma (BIA-ALCL).

Aims: We aimed to measure the surface area and surface roughness of 11 available implants. Additionally, we aimed to subject these implant shells to an in vitro bacterial attach-

ment assay with four bacterial pathogens (*Staphylococcus epidermidis*, *S. aureus*, *Pseudomonas aeruginosa*, *Ralstonia pickettii*) and study the relationship between surface area, surface roughness and bacterial growth.

Results: Surface area measurement showed grouping of implants into high, intermediate, low and minimal. Surface roughness showed a correlation with surface area. The in vitro assay showed a significant linear relationship between surface area and bacterial attachment/growth. The high surface area/roughness implant texture grew significantly higher bacteria at 24 hours whilst the minimal surface area/roughness implant textures grew significantly less bacteria of all types at 24 hours. For intermediate and low surface area implants, some species differences were observed indicating possible affinity of specific bacterial species to surface morphology.

Conclusions: Implant shells should be reclassified using surface area/roughness into four categories (High/Intermediate/Low/Minimal). This classification is superior to the use of descriptive terms such as macrotexture, microtexture and nanotexture, which are not well correlated with objective measurement and/or functional outcomes.

June 9, 09.00-10.30

Nabil Fakih

My Protocols for Complications after Injectables

The purpose of this article is to update the changes to the author's protocols used to manage acute filler related to overdose, tyndall effect, vascular events and blindness and preparation of Complication Kit in your office. Even in the hands of very experienced injectors, there is always a small possibility of vascular complications like intra-arterial injection of filler substance.

Where some of the events could be solved simply by hyaluronidase, others, like vascular occlusion requires more knowledge of diagnosis and quickly with the help of clinical features like blanching, livedo reticularis, and poor capillary refill, act abided by the protocols of vascular occlusion. Blindness is a more serious adverse reaction and requires knowledge and training with intra-bulbar injection with 25G 38 mm cannula of hyaluronidase.

Although vascular embolic events are rare, it is important to note that the face has higher risk and lower risk areas for filler treatment. However, with careful low pressure, low volume injection technique, and adequate preparation for treatment of acute vascular events, the risk is quite manageable and the vast majority of adverse events are very treatable with an excellent prognosis, with a few exceptions.

June 9, 09.00-10.30

Faculty abstracts

Nikolaus Raab

Implant weight effect on post-surgical pain and recovery

Background: The postoperative pain associated with breast augmentation is a top concern of most patients and can affect the decision on surgery.

Objectives: A multi-center study to evaluate the recovery process following breast augmentation with B-Lite lightweight breast implants when compared to that of full-mass breast implants.

Material and methods: Patients undergoing elective breast augmentation (B-Lite or full mass) in participating clinics are requested to fill in a daily diary after surgery as well as answer a questionnaire during a routine follow up visit, 7-14 days after surgery. Information is uniformly collected about postoperative pain and recovery indicators for both cohorts.

Results: Consistent with previous research, patients with B-Lite show significantly less pain and faster recovery than patients with full-mass implants. Results from the current study will be presented along with a discussion on the possible mechanisms and causes for the observable difference.

Conclusion: In this interim report, implantation with B-Lite was associated with shorter recovery and return to work times, alongside reduced pain levels when compared to implantation of traditional full-mass silicone breast implants.

June 9, 09.00-10.30

Radu Ionescu

Breast surgery: "Nano surfaces": advantages and disadvantages. Surgical tips & tricks for safer outcomes

Nano surface was a breakthrough in technology of breast implants. This new type of surface has a median height of 16.63 microns and a roughness (Ra) of 3.97 microns that according to ISO 14607-2018 is considered smooth surface (roughness less than 10 microns).

The Nano-surface encourage the cell proliferation and reduce the fibroblast reaction, therefore undoubtedly has a downstream effect on capsular contracture and biocompatibility of the implant.

The common long term complication such: seroma, capsular contracture, double capsule, late seroma and probably BIA-ALCL are significantly reduced.

A normal periprosthetic capsule has an important role to fixate the implant on the chest wall. The capsule of a nano surface implant is almost inexistent, very thin and elastic. The augmented breast reacts like a big natural breast prone to ptosis and tissue expansion lower pole of the breast.

This presentation will show you surgical tips & tricks for this kind of surface, that will allow you to have stable and safe results.

June 9, 9.00-10.30

Bradley Calobrace

Understanding and Achieving Long-term Fullness in Augmentation and Mastopexy.

The holy grail of aesthetic breast surgery may be the ability to achieve and maintain upper pole fullness long-term in the patients. Variables impacting upper fullness will be reviewed, including chest wall, quantity of breast tissue and fat, the quality of the breast tissue, and the influence of the lower pole. The choices of implants, both in augmentation and augmentation mastopexy, can greatly impact upper pole fullness and will be reviewed. Options is Mastopexies without implants to optimize upper pole results, including auto-augmentation and fat grafting will be discussed. Additionally, an algorithm for pocket control in secondary breast cases will be discussed, with a focus on capsulorrhaphy techniques, use of soft tissue support and fat grafting.

June 9, 9.00-10.30

Athina Giannopoulou

Hyaluronidase Treatment and the Allergic Complications

We live in the era of social media explosion and every day selfies. It is unavoidable for the non-surgical treatments and especially for dermal fillers, to grow rapidly. Dermal fillers have become the preferred treatment for injectors worldwide performing soft tissue augmentations, facial contouring, and deep skin hydration. One major advantage of HA-based fillers is the availability of a specific antidote, hyaluronidase, which is considered the rescue medication for the management of complications resulting from filler injections.

Potential complications of filler injections are known to all of us. They are fortunately rare but could be disastrous. The proper use of Hyaluronidase, knowing in depth the treatment protocols and the adverse reactions of the Hyaluronidase is a necessity for every surgeon that injects HA. Adverse effects of Hyaluronidase are uncommon, however, allergic reaction to Hyaluronidase should be included in our differential diagnosis when erythema and swelling occur after Hyaluronidase injection. The origin and formulation of Hyaluronidases for medical use seem to play a role in immunogenicity and therefore to its potential allergic reaction. Although the incidents of local allergic reactions have been reported in a low range, in fact could be higher because they may be unrecognised. In cases where high dosages were administered allergic complications could rise to about 30%. The allergic reaction to Hyaluronidase can be immediate or delayed and the allergic history of the patient is of the outmost importance.

June 9, 09.00-10.30

Faculty abstracts

Athina Giannopoulou

How to Approach the Full Face Patient in the Most Cost Effective Way

In the full face rejuvenation practice choosing the Needle or the Knife was the question of the last decade. We now have enough experience with injectables to serve patients that seek full face improvement. However, the cost of injectable treatments can be high when comparable results to surgical treatments need to be obtained.

This is due to the fact that large amounts of injectables needed to cover all areas of the face, improving the facial contouring and managing the volume deflation that naturally occurs with aging. The necessity of repeating treatments, the influence of social media on patient requirements, and the variety of injectable products in the market have major influence on the cost to the patient. It is our duty as aesthetic surgeons to offer the patient the appropriate choices that lead to patient satisfaction, establishment of good relationship and trust with the physician based on patient's safety and natural aesthetic outcome. The full facial aesthetic analysis of the patient is the single most important factor in making the right choice.

Although most patients are seeking improvement of facial rhytides, it is our responsibility to educate them about facial deflation, fat redistribution, and skeleton changes. Knowing the anatomy of the facial compartments and the animation effect on wrinkles is key to facial rejuvenation with injectables at optimum cost. Malar and chin rejuvenation is the future of injectable based facial treatments in a cost effective manner.

June 9, 09.00-10.30

Günter Germann

B-Lite implants – specific considerations for selection of implants and surgical techniques

No significant technological breakthrough has occurred in implant technology for more than twenty years. B-Lite implants, based on a revolutionary technique, have entered the arena of breast augmentation in 2014. Due to the homogenous incorporation of boron-silicate nanospheres in to a high cohesive silicone filling, the weight of B-Lite implants is reduced up to 28% compared with conventional implants. In consequence the strain on the breast tissue and the impact of gravitation are reduced.

We present the intermediate results of a consecutive cohort study of 30 patients compared with a group of thirty non-study patients. Implant type and volume, complications, and the influence of the implant specific factors on the selection of implants are analyzed.

The surgical technique does not differ significantly from the technique used in conventional implants, although there

are some technical details to be considered in the preoperative marking of the patient.

June 9, 09.00-10.30

Christoph Martschin

An overview of frequency and severity of complications after HA filler injections

Even though rare, given the large number of treatments performed, the injection of HA fillers can potentially lead to serious adverse events.

Some are related to the procedure itself whereas others are due to the product injected. No matter how careful, if one treats a sufficient number of patients, one will eventually encounter adverse events. A timeline of occurrence and clinical characteristics are presented to give a tool for more accurate characterisation of the possible underlying cause and treatment modalities based on published literature and clinical experience are suggested.

June 9, 09.00-10.30

William Adams

Breast, soft tissue and fat – past, present and future: a pundit's perspective

A short look at fat injection to the breast and where the clinical benefits are today for patients.

June 9, 11.00-12.45

Eric Auclair

Composite breast augmentation for primary & secondary procedure

The author report is experience of Breast Augmentation with a combination of Implant placed in a retro-facial position, in front of the Pectoralis Major muscle, and a complementary sub-cutaneous lipofilling. The pocket dissection is conducted through an axillary approach in order to keep the breast free of scars.

This technique had been applied to more than 1000 patients of primary and secondary Breast augmentation, since 2007, with very positive results in terms of natural aspect of the reconstructed breast with no animation and bottoming down. The rate of contracture is less than 1% and the rate of retouch is around 3% with more than 90% of satisfied or very satisfied patients.

June 9, 11.00-12.45

Robert Cohen

One Stage Augmentation with Mastopexy- Techniques and Patient Selection

This presentation will discuss various types of ptosis and the appropriate augmentation mastopexy technique to use for each anatomical problem. An argument will be made for

Faculty abstracts

using a one-stage approach in the vast majority of augmentation mastopexy cases, and how to maximize safety and aesthetic results with this surgery.

June 9, 11.00-12.45

Kieren Bong

How I approach the full face treatment.

Evaluation, planning and treatment steps

Non-surgical cosmetic treatments have become a lot more sophisticated in recent years. It is essential to look at the face as a whole and not focus our attention on one or two defined areas. In this session, Dr Kieren Bong shares his approach to full face treatments, with systematic planning strategies ensuring optimal results are attained, and rapport as well as patient loyalty are ensured.

June 9, 11.00-12.45

Timo Bartels

Aesthetics in patients for reconstructive breast surgery

A beautiful breast is the wish of every woman and modern aesthetic surgery is able to improve almost every deformity and tries to find solutions for every task. This lecture takes a closer look on different patient categories and tries to find an answer if there are differences between patients with an pure aesthetic aim and those how have to under go aesthetic plastic surgery for reconstructive purposes.

Drain in body contouring surgery: when and how can we avoid them?

As most of us have been trained to drain almost every wound nowadays more and more surgeons reduce the use of drains or stopped using them completely. Tension sutures, glue, compressing garments and other techniques are used to get away from drains. This lecture wants to give a guideline when and how we can avoid them and when we should use them.

June 9, 11.00-12.45

Daniel Del Vecchio

Large Volume Fat Transplantation to the Buttocks,

What are We Doing Wrong?

Large volume gluteal augmentation with fat is the fastest growing operation in cosmetic surgery in the USA. Despite this, fatal pulmonary fat embolism ("PFE") has been estimated to occur in 1:3000 procedures. Although surgical societies and researchers attempt to delineate the problem, involving angles of cannula insertion and suggesting "safety zones" where it appears safe to inject fat into the gluteus muscle, deaths continue to be reported from pulmonary fat embolism. In all autopsies of death from PFE, syringe injection was used and fat was found in the gluteus muscle, deep to the gluteus fascia. In no cases of PFE studied at autopsy, was

fat confined to the subcutaneous layer only.

Dynamic cadaver studies have focused on the level of injection rather than on the angle of the cannula or topographic zone. These studies strongly suggest that the location of intramuscular injection is irrelevant. The so-called "safety zones" do not appear to be safe at all.

We will introduce the concept of "deep intramuscular migration" of fat. Fat placed below the gluteal fascia does not remain in the muscle, tracks through muscle fibers and deposits deep to the gluteus muscle, in the free sub-muscular space occupied by the gluteal veins. This occurs because there is no fascia on the deep side of the gluteus muscle. Deep intramuscular migration is proposed to be a plausible cause for pulmonary fat embolism. We therefore recommend that insertion of fat at a level below the gluteus fascia should not be undertaken.

June 9, 11.00-12.45

Daniel Del Vecchio

Fat Processing – Trends in

Large Volume Fat Transplantation

Small volume fat grafting to the face is very different from large volume fat grafting to the breast and body, not only in terms of instrumentation but also in terms of fat processing. Dehydrating fat to its maximum for use in the face is not practical nor is it the most efficient way to perform large volume fat grafting. Industry has focused on fat processing devices due to the disposable nature of their devices and the unit economics that can be generated.

Despite industry claims, alluding to the quality of fat there is no clinical quantitative evidence that one processing technique is clearly superior over another in terms of volume maintenance. We examined dehydration methods such as decantation, low-speed centrifugation, high speed centrifugation, and commercial disposables including filtration, and vacuum filtration systems. We studied objective, quantitative metrics such as cost per cc and time per cc in terms of processing. The data suggest decantation is the most cost-effective and time efficient way to dehydrate large volumes of fat when used in large volume fat transplantation. In addition, the use of cell protectants such as Poloxamer 188 shows promise in both volume maintenance and in separation of water from fat.

June 9, 11.00-12.45

Daniel Del Vecchio

Fat and Implants in Aesthetic Breast Surgery

– Indications and Technique for SIEF

Implant removal and simultaneous fat transplantation is a procedure that is useful for selected breast implant patients. Patients who have undergone multiple unsuccessful

Faculty abstracts

revision breast augmentation procedures with capsulectomy due to capsular contracture eventually exhibit increasing soft tissue deficiency. Paraphrasing the late D Ralph Millard, "When the problem is soft tissue deficiency, treat with soft tissue" The surgical technique for these patients will be reviewed.

The concept of composite breast augmentation started as a small amount of fat over an average sized implant, and has evolved into a spectrum of implant fat combinations. This spectrum ranges from no implant at all - a "fat only" breast augmentation, to an "implant only" augmentation - the classic scenario. Focusing on smaller and smaller implants and larger and larger amounts of fat leads to a 2:1 fat:implant composite scenario. In this scenario, incisions are smaller, pocket dissection is less invasive, and fat is relied upon to create transitional aesthetics such as cleavage gap and lateral fullness while the implant's role is to project the NAC anteriorly. This is a completely different procedure from the classic composite operation. Indications and technique will be reviewed.

June 9, 11.00-12.45

Roy de Vita

The balcony technique of breast augmentation and inverted-T mastopexy with an inferior dermoglandular flap

Optimal breast augmentation-mastopexy involves a reliable technique, fast recovery, minimal complications, and aesthetic results that are excellent and enduring. The author sought to determine whether the balcony technique of augmentation-mastopexy was safe and yielded satisfactory long-term outcomes in patients with breast ptosis and hypoplasia. The author conducted a retrospective review who underwent subglandular augmentation and inverted-T mastopexy with a customized Wise keyhole resection pattern and an inferior flap. Patient satisfaction was assessed anonymously on a visual analog scale via a questionnaire administered 4 years postoperatively. High levels of satisfaction were determined for breast shape, size, and symmetry. The most common complications were Baker II capsular contracture and wound dehiscence. No patient experienced nipple loss or skin flap necrosis. The results of this long-term analysis demonstrate that the balcony technique of augmentation-mastopexy is suitable for patients with breast ptosis and hypoplasia.

June 9, 11.00-12.45

Roy de Vita

Fat graft: a major complication for a minor defect correction

Over the last 30 years there has been interest in the use of autologous fat transplantation for breast reconstructive

and cosmetic purposes. Up until now injection of adipose tissue into the breast has been subject to two limiting factors. First, fat injection into the breast could result in fat necrosis, cyst formation, and nodules that could be mistaken as cancerous calcifications. Second, the degree of reabsorption of the injected adipose tissue is unpredictable. Took note of the state, autologous fat transplantation on the breast can correct deformities after any kind of breast surgery including breast augmentation and reduction mammoplasty. I will present a complicated case history of infection after a revisional lipofilling in a patient submitted to aesthetic breast implant substitution. I like to conclude: Do your best and God do the rest.

June 9, 11.00-12.45

Robert Cohen

One Stage Augmentation with Mastopexy – Techniques and Patient Selection

This presentation will discuss various types of ptosis and the appropriate augmentation mastopexy technique to use for each anatomical problem. An argument will be made for using a one-stage approach in the vast majority of augmentation mastopexy cases, and how to maximize safety and aesthetic results with this surgery.

June 9, 11.00-12.45

Bertrand Lacotte

Breast reduction and mastopexy: the conical concept

A nice and natural breast is projected. Looking at statues, models, painting all around the world, beautiful breasts are conical with a small cone on top of a large one. A vertical pinching with or without a central wedge resection is the only way to get this shape and limiting pillars at 5 or 6 cm is a mistake.

June 9, 11.00-12.45

Nabil Fakh

Neurotoxins: 10 Tips For to Inject and Avoid Complications

Botulinum neurotoxin type A injection to correct and/or reverse the physical effects of aging process has become one of the most frequently requested cosmetic procedures at an outpatient setting. This lecture covers the top ten main tips for the use of botulinum neurotoxin type A and avoid complications or unwanted results for aging face and other aesthetic uses. These tips are based on careful clinical evaluation together with proper use of the techniques, reconstitution of the products, efficiency, types of needle and syringe used, disinfection and preparation, sprouting, resistance and antibodies, avoiding hematomas and bumps, pre- and post-procedures recommendations tips, and avoiding un-desired

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events of diffusion (forgotten frontal lines, brow ptosis, fake and real mephisto sign, eyelid ptosis, diplopia, fat pad bulging, loosing charming roll, lateral epicanthus fold, upper lip paralysis, droopy corners of mouth, upper lip ptosis, duck buckle lip, lower lip paralysis, lip dip and limited eversion, floppy neck, risorius paralysis).

June 9, 11.00-12.45

Sabrina Shah-Desai

My approach to total facial non-surgical rejuvenation and beautification

Facial ageing is dynamic and evolving. The ageing face presents a challenge for natural restoration of youthful contours, as all the layers of the face age heterogeneously. Skeletal retrusion gives the visual impression of descent while the reduced ligamentous support and skin ageing leads to laxity of the overlying soft tissues.

Anatomical placement of fillers in a multi-planar manner is my preferred method of correcting lamellar dissociation of the facial layers.

High G Prime Fillers, which promote targeted tissue integration, are placed deep on the bone, to support the osseotaneous ligaments treating the temple, zygomatic arch, pyriform fossa and along the mandible. Adequate volumes are used as required to address the bony & deep tissue volume loss. No attempt is made to correct laxity of the superficial layers of the face from deep volumisation.

A subcutaneous plane of injection using a filler with a low G prime is used to support the skin and subcutaneous volume loss in certain mobile areas of the face, like the tear trough, naso-labial folds, marionette lines and lateral posterior cheek.

June 9, 11.00-12.45

Elena Goltsova

How to combine fillers, EBD, fractional CO2 laser, and BNT-A to get the best results in the periorbit

At present an individual approach and vision of the face beauty as a whole are the main issues which allow to combine different stimulation methods to achieve the best result.

The peri-orbital zone is one of the main facial zones where the signs of ageing are most visible. The choice of a certain improvement method to correct age-related changes of this area as well as combinations of them are based on the results of the aesthetic analysis and personal physiological and anatomical peculiarities.

The report is devoted to consideration of possibilities of successful combinations to apply fractional CO2 laser, botulinum toxin treatment, fillers and MFU-V as well as the author's personal clinical experience which was gained during the manipulations aimed to rejuvenate the peri-orbi-

tal zone. The genesis of the peri-orbital ageing changes determine the treatment plan, preferable techniques of botulinum toxin injections. Relaxation of mimic muscles prevents from the formation of new wrinkles, fractional CO2 surfacing laser allows to improve the skin quality and stimulates neocollagen genesis and MFU-V helps to lift.

The correction phase while injecting fillers in this zone favors the achievement of the best aesthetic and long-lasting effect. From our point of view, setting the correct phases of treatment manipulations are of great importance as well as the step by step strategy. Thus, possessing modern technologies: BoNT, laser methods, MFU-V and their correct combination make it possible to improve the appearance with the help of minimally invasive methods to emphasize the individuality, satisfying the demands and wishes of our patients.

June 9, 11.00-12.45

Thanasis Athanasiou

The learning curve of high definition liposuction

The high definition liposuction represents an advanced and more artistic approach to the conventional liposuction.

Performed with the aid of an energy delivering device that through special probes emits ultrasound vibrations, it eases and expedites the fat-removal process and at the same time provides a better tissue tightening effect. The technique also reveals the underlying musculature and enhances the definition of the muscles and tendons (rectus abdominis, pec major, deltoid etc.)

We started practicing this technique 4 years ago and from a total of 326 patients, 124 were men and 202 were women.

The first 50 patients were our "learning curve" and by keeping meticulous records and detailed descriptions of all stages of their recovery, we were able to minimize complications and provide more consistent and reproducible results.

We built solid protocols covering all preoperative, intraoperative and postoperative stages.

Preoperatively those include careful patient selection based on age, BMI, and skin quality factors as well as the stability of their dietary habits.

Intraoperatively we developed a detailed step-by-step guide that secures the consistency of the results and minimizes undesirable outcomes.

Postoperatively we maintain close patient monitoring for at least one month which includes lymphatic drainage, therapeutic ultrasounds and specially designed compression garments.

This technique is however associated with several potential complications like skin burns, irregularities/asymmetry, seromas, hematomas, skin laxity etc.

The aim of this study was to develop a step-by-step techni-

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que that will guide surgeons in order to perform this artistic liposculpting (4D hi-definition) safely and with great results.

June 9, 14.00-16.00

Kieren Bong

Contour and sculpt the mid and lower face with HA fillers

3D Ultimate Lift is a procedure pioneered by Dr Kieren Bong eight years ago. This technique encompasses contouring and sculpting of the entire face with a blunt-tipped microcannula. During this video presentation, special emphasis is put on the acute appreciation of the deep and superficial facial fat compartments. This advanced technique is used for restoration of natural facial contour to achieve a gentle lift of overall facial features that is very natural and age appropriate.

June 9, 14.00-16.00

Kieren Bong

Lip contouring with HA filler

In this session, Dr Kieren Bong showcases two techniques in sculpting and contouring the lips. Great emphasis is placed on creating a sensuous and natural result. Dr Bong will also share his methodology in his analysis of perioral anatomy before carrying out the procedure.

June 9, 14.00-16.00

Kieren Bong

Two-point eye lift (TM)

Two-Point Eye Lift™ is a revolutionary technique pioneered and trademarked by Dr Kieren Bong. This technique simplifies tear trough treatment. With the use of a blunt-tip microcannula and two entry points, this technique makes softening infra-orbital hollows with dermal filler quick, safe and very effective.

June 9, 14.00-16.00

Elena Goltsova

The chin and jawline correction: 5 steps to success.

It is impossible to make a completed image without paying attention to the chin and jawline zone. This lecture will highlight recommendations for injectable correction the chin and jawline zone with botulinum toxin and fillers, and personal tips of 5 steps for achievement safety, harmonious and natural result. Working in different levels of injections, using and combining techniques and tools, it is possible to create very safety results.

June 9, 14.00-16.00

Elena Goltsova

Lips in the harmony of the whole face. My techniques for creating natural & sensual lips.

The peri-oral zone&lips is one of the main facial zones where the signs of ageing are most visible. Also the shape and size of the lips play an important role in the beauty and harmony of the whole face. Aesthetic ideals of beautiful and sensual lips depend on individual preferences of the patients, cultures aspects and cosmetic modern trends. In my opinion, it is very useful to take into account the shape of the face, eyes, brows and the balance of the whole face for choosing the techniques of the filler injections for the creating natural, very harmonious and beautiful lips.

Creating aesthetically beautiful lips, it is important to understand the anatomy of the region, aesthetic analysis of the whole face in different layers, choice the method, filler, technique and plan of a treatment strategy. The lecture is devoted to discuss some tips and pearls in the rejuvenation the peri-oral region&lips as well as the author's personal clinical experience and techniques of injections.

The beauty of the face, lips, the individual balance and natural beautification are fundamental for the success of our work.

June 9, 14.00-16.00

Bertrand Lacotte

Important considerations in body contouring procedures

As in all case, we need to be simple and safe when performing a body contouring procedure. With a better knowledge of the anatomy, techniques have been improved and reducing length of scars should be one of the challenge. Liposuction and "non scar" technique will help us to achieve this goal.

June 9, 14.00-16.00

Francois Petit

Why buttock augmentation with implants?

Buttock surgery has the highest year-to-year rate of growth among all cosmetic surgical procedures, and gluteal implants are the safer, faster and most efficient solution for buttock volume augmentation. When done properly, gluteal implants provide a very high rate of satisfaction among patients with almost no complications and a fast recovery. This procedure is definitely a new trend in cosmetic surgery no one can afford to miss.

Learn how to perform a safe and reliable buttock volume augmentation with gluteal implants during our live-surgery session.

June 9, 14.00-16.00

Faculty abstracts

Jackie Partridge

Aesthetic Nurses: their role and requirements as aesthetic medicine adapts to worldwide changes and needs

Aesthetic nursing is a rapidly evolving specialty, with nurses in some countries providing a wide range of non-invasive and minimally invasive treatments and services. A survey of 197 experienced aesthetic nurses practising in 8 countries revealed shortcomings in the current approach to the education, training and registration of aesthetic nurses. Highly trained, expert nurses represent the future for the aesthetics industry. In order to achieve this, rigorous, academic training and education programmes are needed, as are mandatory accreditation and registration of all practitioners. There is also a need for greater recognition of the role of the aesthetic nurse and increased involvement of nurses in the development, trial and demonstration of aesthetic products on all platforms. Greater collaboration between aesthetic nurse groups and physician aesthetic organizations will help to build networks and encourage sharing of best practice, for the benefit of all.

June 9, 14.00-16.00

Christoph Martschin

Tear trough treatment

The tear trough and its treatment is one of the more challenging areas to treat with HA fillers. Due to the complex anatomy of the region and different tissue factors contributing a careful patient selection and treatment planning is necessary to optimise the outcome. Anatomy of the region and classification of TT severity is presented, resulting in a differentiated treatment approach, both direct and indirect, based on current grading scales. Clinical pearls to avoid adverse events and how to manage them.

June 9, 14.00-16.00

Jean-Francois Pascal

Inner thigh lift : orientation in 2018

Nowadays, we have meaningfully changed our indications about inner thigh lifting. We do beware of the common horizontal technique that can lead to disasters difficult to fix as labia migration and vulvar deformation.

The other fact is that most often the problem at the inner thigh is the width skin excess and it serves no purpose to reduce the length if the problem is the width.

That is why our evolution is to use the vertical technique as much as possible mixed with the horizontal one. At the end, we have a L-shaped scar line that allows to perfectly treat the double skin excess.

Of course, we carry on to use the principles of the body contouring surgery we described 10 years ago: separation of the resection of fat and skin, no undermining whatsoever,

quilting sutures and no drain.

June 9, 14.00-16.00

Jean-Francois Pascal

Buttock lifting : The golden rules to succeed

Buttock damaging is a very frequent problem due to many reasons : massive or small weight losses, aging process or even congenital. It leads to excess skin and volume distortion.

The author will focus on the surgical tricks and technical details that are used every day.

We will begin with describing how to avoid complications at this very fragile area which is the inter buttock fold.

We will insist on the drawings that are essential to get an efficient tightening.

Finally, we will talk about the cutting sequence essential to save the resection. Indeed, the drawings are just an estimation of the resection width and the questions that have to be asked are :

- If the surgeon cut the drawing all at once, is he sure he can close it?
- Is he sure to close with the right tension?
- When the surgeon will cut, will he begin with the upper line or the lower line?
- If the surgeon must modify the drawing, will he move the upper or the lower line?
- Is the surgeon sure to get a straight scar at the right location?

All these essential questions will be precisely answered to make your operations easier and less stressful overall.

June 9, 14.00-16.00

Jean-Francois Pascal

The lateral body lift : an essential procedure to know

The Conventional lower body lift only treats the length excess skin at the lateral thigh. But in gynoid body shapes, there is also an excess skin in width associated. Therefore, around 30% of your conventional body lift will be insufficient or even failed.

Then, in that cases it's necessary to also mix an ellipse resection at the lateral thigh at the same time of the horizontal resection.

In this presentation the author will explain how to make a decision to perform that lateral resection, the drawings that mix the horizontal and the vertical resection and the technical points to get a perfect result.

At the end, this technique is mandatory to know to properly treat 30% of the body lifts.

June 9, 14.00-16.00

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