



The Sixth World Congress of the International Society of Plastic and Regenerative Surgeons in Dubai, United Arab Emirates

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fter reorganization, the International Society of Plastic and Regenerative Surgeons (ISPRES) is now a sister society under the American Society of Plastic Surgeons (ASPS) with its unique mission to promote regenerative therapies represented by clinical application of fat grafting and adipose-derived stem cells. ISPRES was originally launched as a daughter society of International Federation of Plastic, Reconstructive, and Aesthetic Surgery in 2011. The First World Congress was held in Rome, Italy, between March 9 and 11, 2012,1 and the Second World Congress was held in Berlin, Germany, between June 7 and 9, 2013.2 After the Third World Congress in Miami between September 12 and 14, 2014, the Fourth World Congress of ISPRES was held between December 4 and 6, 2015, in Beijing, China.³ The Fifth World Congress was held between October 6 and 8, 2016, in Marseilles,

The decision to organize our sixth World Congress of ISPRES in Dubai was one of the easiest choices for the Board of Directors. Dubai is a city that is blooming, the safest place to visit in the Middle East, and an international hub, with direct flights from the most important capitals of the world. It obviously helped that we have been successfully organizing our local annual congress for the Emirates Plastic Surgery Society (EPSS)—for the last 2 years, so the expertise was already there. We planned to have the meeting together, 2 days for ISPRES, and 1 day for EPSS.

The transformations in the city were starting to become famous about 12 years ago. Then came the 2009 crash, but Dubai soon recovered and is getting ready to host the EXPO 2020, its biggest event ever in the history here.

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We chose for our venue, the Jumeirah Beach Hotel, one of the best hotels in the town and in the nicest part of the city and close to all the tourist points, from indoor skiing to flying over the Palm Dubai (Fig. 1). The Conference Center is very modern, with all the necessary equipment for an excellent world-class academic congress.

The congress was held between 17 and 19 of November 2017 under the patronage of H.H Sheikh Hamdan Award Office and with the support of Dubai Health Authority, the Ministry of Health, and Dubai Healthcare City. We had 249 delegates and 58 faculty members from all across the world showing the different aspects of Aesthetic, Plastic and Regenerative Surgery, with live surgery, and video lectures (Table 1). The local organizing company was from Turkey. This was probably the ISPRES Congress with the highest attendance of its members. The ISPRES board meeting was held on November 18, 2017. Many of the important issues related to the future development of this young organization were discussed. Several board members were added, and new leaderships were appointed (Fig. 2).

LIVE SURGERIES

Four live surgeries were demonstrated simultaneously in 2 rooms at Dubai London Clinic and Specialty Hospital on the first morning of the congress. In the first room, Dr. Roger Khouri, the immediate past president of ISPRES from the United States, showed us about his unique technique to replace a breast silicone implant with fat grafting. He showed that it is usually not enough to remove an implant and fill the breast with fat. However, the technique that "recupes" tissue from around the breast and uses threads to reposition the breast filled with injected fat can be performed. Simultaneously, in the second room, Dr. Kotaro Yoshimura from Japan directed our local plastic surgeon, Dr. Saba Al Marush, to perform his technique of breast augmentation with fat grafts, injecting 400 ml of fat per breast using 3-cc syringes. The second procedure in the first room was a facial rejuvenation case with fat grafting, performed by Dr. Lee Pu from the United States on a 40-year-old Russian patient, a great alternative to postpone a facelift. He demonstrated, step-by-step, on how fat grafting to face should be performed. In the second room,

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Fig. 1. The congress venue, the Jumeirah Beach Hotel in Dubai.

Table 1. Invited International Faculty Speakers

Roger Khouri (United States) Sydney Coleman(United States) Lee L. Q. Pu (United States)

Kotaro Yoshimura (Japan) Patrick Tonnard (Belgium) Ashok Gupta (India) Paul Cederna (United States) Facheng Li (China) Macro Klinger (Italy) Ali Majallal (France) Stefania de Fazio (Italy) Ricardo Mazzola (Italy) Amin Kalaaji (Norway) Greg Evans (United States) Luiz Toledo (UAE) Alexandra Conde-Green (United States) Brian Kinney (United States) Norbert Pallua (Germany) Gino Rigotti (Italy) Peter Rubin (United States) Guy Magalon (France)

Dr. Toledo performed a technique he has been using for 32 years, a Brazilian Buttock Augmentation, aspirating fat from thighs and flanks, and injecting them into buttocks and trochanter areas. There was obviously discussion about the safety of this technique, and he showed step-by-step how this procedure has been performed safely all these years (Figs. 3, 4).

THE BASIC PRINCIPLES OF REGENERATIVE SURGERY

Topics on biology of fat grafting, SVF & ADSC; maximizing & understanding the results were presented on the first afternoon day of the congress. The congress started with the lecture of Prof. Riccardo Mazzola, from Milan, "The Fascinating History of Fat Grafting. From Ram Fat to Stem Cells," which set the tone for the meeting, giving us a good perspective of where we are now with fat research? Then, Dr. Lee L. Q. Pu, from the United States, talked about "What do we know now about Regenerative Plastic Surgery?" One of the most respected fat grafting researchers, Dr. Kotaro Yoshimura, from Tokyo, explained the "Biology of Adipose Tissue: How Can We Process it for Regenerative Surgery."

Obviously, in this importance congress, we had to talk about "Stromal Vascular Fraction: Enzymatic Digestion, Mechanical Dissociation & Storage of Harvested Fat & SVF." Therefore, Greg Evans, from the United States, explained "Nanofat Derived Stromal Vascular Fraction Reveals Improved Progenitor Subpopulations."

Dr. Evans, as a representative of ASPS at our congress, wanted to have a meeting with the EPSS Board to strengthen the relationship between the 2 societies. Such a meeting was organized during the meeting, and we will soon see more collaboration between our groups (Fig. 5).

Dr. Brian Kinney, from Los Angeles, talked about "Aesthetic Technology, Fillers and Fat Grafting – How Do Stem Cells Fit In." Dr. Guy Magalon, from Marseille, the city that hosted our brilliant 2016 congress, showed "Stromal Vascular Fraction, Preparation, Composition, Quality Controls, Indications." After the break, we had the always innovative Dr. Alexandra Condé – Green, now from the United States, explaining the "Shift Towards Mechanical Isolation of Adipose-Derived Stromal Vascular Fraction." Dr. Sydney Coleman, from New York, one of the founders and new president of ISPRES, explained the relationship between the "Extracellular Adipose Matrix and Growth Factor." Dr. Ali Mojallal, from Lyon, showed the "Mechanical Dissociation of SVF."

The last session of the first day focused on main implications of "Acute, Subacute & Chronic Conditions Treated with Fat Grafting and/or SVF - Safety and Regulations." Dr. Kotaro Yoshimura explained "Does Radiation Affect Adipose Tissue and Stem Cells? How Can We Treat Radiated Tissue? Dr. Paul Cederna, from University of Michigan, presented an interesting topic on Fat Grafting to Enhance Peripheral Nerve Regeneration. Dr. Gino Rigotti, from Italy, the past-president of ISPRES, demonstrated an important study on "The Damage from Radiation Therapy and Fat: Biology and Results." Greg Evans described "Stress-Dependent Up-



Fig. 2. A group picture of ISPRES Board Directors - From left standing: Luiz Toledo, Gino Rigotti, Lee Pu, Facheng Li, Paul Cederna, Ali Mojallal, Brian Kinney, Peter Rubin, Guy Magalon, Greg Evans and Steffania di Fazio. Sitting: Carol Lazier, Roger Khouri, Syd Coleman, Kotaro Yoshimura, and Riccardo Mazzola.



Fig. 3. Drs. Kotaro Yoshimura, Lee Pu, and Riccardo Mazzola in the operating room before the live surgery demonstration.

regulation of Stem Cell Markers and Populations for Processed Lipoaspirates." Finally, Peter Rubin, from Pittsburgh, showed the "Immuno-Modulatory Effects of Adipose Stem Cells. "The audience was captivated by what, in another context, would seem like a dry choice of subjects, but they paid close attention and asked pertinent questions until the end of the first day.



Fig. 4. Drs. Roger Khouri and Luiz Toledo during the Live Surgery demonstration

CLINICAL APPLICATIONS OF REGENERATIVE SURGERY

On the second day, topics on fat grafting and/or SVF for treating scars of upper and lower limbs - problems and complications were presented. When Dr. Amin Kalaaji presented "Gluteal Augmentation with Fat: International Review of Highest Death Rate Ever in Aesthetic



Fig. 5. Dr. Greg Evans was meeting with the EPSS Board: From left to right, Dr. Luiz Toledo, Carol Lazier (from ASPS office), Dr. Greg Evans, Dr. Sabet Salahia, and Dr. Khalid Al Awadi.



Fig. 6. Dr. Bong-Sung Kim receiving the ICOPLAST Award for Young Surgeons from Dr. Roger Khouri, Dr. Stefania de Fazio, and Dr. Riccardo Mazzola.

Surgery: Study of 45 Cases and Review of Literature?" Shall we stop doing the procedure? There was much more discussions on this hot topic. The consensus was that we should keep reviewing the fatal cases and support all the committees that are studying the problem and trying to find a solution for patient safety. Patrick Tonnard, from Belgium, lectured on two of his favorite topics: "Update in Nanofat Grafting: What We have Learned, What We Still Do and What We've Changed" and "The Role of Mechanical Trauma in the Processing of Nanofat." Dr. Ashok Gupta, from Mumbai, has won many international awards for his work on the victims of acid burn in India. He demonstrated the use of Autologous Fat Injections to Enhance Scar Maturation / Deformations In Severe Post-Burn Hypertrophic Scars and Skin Grafted Areas: A Long Term Follow Up." Dr. Ali Mojallal's presentation on "The Impact of Adipose Tissue and

ASCs on the Skin" brought to light the improvement on the skin of patients treated with fat grafting. Interestingly, the first person who mentioned this concept in the late 1980's was Dr. Pierre Fournier, from Paris, who was developing a cream for patients based on their own fat. Now we understand why the skin quality becomes better after fat grafting. These new studies have provided more science into the old concepts. Dr. Peter Rubin has been doing fantastic work on U.S. war veterans who had amputations and needed to adapt their limbs to the new prosthesis. His work on "Fat Grafting and Adipose Stem Cell Therapy for Treating Amputation Sites" was innovative and much needed.

Another interesting session was dedicated to **Fat Grafting and/or SVF to the Head, Face and Neck.** Dr. Riccardo Mazzola showed a new application for fat, "Fat Injection to the Vocal Folds: Indications, Technique,



Fig. 7. The Burj Al Arab Hotel, a 7-star hotel near the Jumeirah Beach Hotel

and Results." In collaboration with a phono audiologist, the lecture contained before and after videos of patients with paralysis of vocal cord, being able to speak

normally after the treatment. Dr. Lee Pu explained in detail what he did on the live surgery with "Fat Grafting for Facial Rejuvenation and Contouring." Dr. Brian Kinney showed his "Off the Shelf Adipo-Cellular Matrix Study Injection in the Temple" and Dr. Marco Klinger presented his favorable topic on "Fat Grafting in Face Contouring." The last panel session was on platelet-rich plasma (PRP): Mixture with fat, SVF and hyaluronic acid. There is still much discussion about the effectiveness of the mixture of fat, PRP, and hvaluronic acid. Drs. Gino Rigotti showed "Skin Rejuvenation: Comparison of the Results Obtained with Lipoaspirate, Lipoaspirate Supplemented with PRP, Expanded Stem Cells, PRP Alone." Drs. Valerio Cervelli and Pietro Gentile, from Italy, showed this combination improves fat grafting maintenance in breast reconstruction and reduces hair loss, and Dr. Guy Magalon lectured about the "Recommendations to Clinical Use of PRP."

FREE-PAPERS

We received 63 submissions for free-papers, and the Scientific Committee chose only 22 for oral presentations. Riccardo Mazzola, Stefania de Fazio, Ali Mojallal, and Luiz Toledo formed the Committee. It was a very difficult choice because most papers were of high quality. There was a combined session of free-papers for young surgeons, organized by Dr. De Fazio, between IS-PRES and ICOPLAST, the International Confederation of Plastic Surgery Societies. Drs. Carlo M. Oranges, from Switzerland, Michelangelo Vestita and Aurora Almadori, from Italy were the runner-ups and Dr. Bong-Sung Kim, from Germany won the first prize with his paper entitled "Characterization of Stem Cells and Macrophages in Inflamed Fat Tissue and the Role of MIF Family Proteins in this Context" (Fig. 6).



Fig. 8. Dr. Luiz Toledo with several delegates from China. Being an international hub, the congress in Dubai attracted doctors from many continents.

SOCIAL ACTIVITIES

The faculty dinner was held at the terrace of the hotel, overlooking the Arabian Gulf and the emblematic Burj Al Arab hotel, a monument of modern architecture (Fig. 7). The congress itself also attracted many international attendees from almost all major continents. They enjoyed learning from world experts of fat grafting and getting to know them more through many nice conversations (Fig. 8).

The next ISPRES world congress will be held in Chicago, Ill., together with the annual ASPS meeting from September 28 to October 2, 2018. We are all looking forward to our future world congresses with excitement. Under the capable administrative support from ASPS, ISPRES, this new dynamic society with their primary focus on fat grafting and regenerative surgery, will lead this subspecialty of plastic surgery to the next level of excellence.

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