NEW - Member Spotlight

Global Perspectives: Non-Invasive Fat Reduction

Global Sponsor Feature
Message from the Editor 3
Message from the President 4
Global Alliance 7
Guess Who? 13
Global Sponsor Feature 14
Education Council Update 17
Course Report 18
Symposium - Poland 21
Webinar - BIA-ALCL 22
Visiting Professor Program 23
Feature: Australian TGA 25
Books by Members 27
Patient Safety 28
Humanitarian 32
National Secretaries 34
Journal Update 35
Marketing 36
Global Perspectives 40
Case Study 47
ISAPSexpert 50
Where in the World 51
Member Spotlight 54
History 56
In Memoriam 59
Meetings Calendar 61
Dear Readers,

I hope that this issue finds you ending your year on a high note in the company of good friends and family.

The year 2019 saw many changes within plastic surgery around the world. One of the most notable events of the year was the Food and Drug Administration (FDA) hearing in the United States on the topic of silicone gel breast implants, which was subsequently followed by the complete or partial removal of textured implants from a number of markets worldwide, including France, Canada, Australia, the Netherlands, and the United States. To that end, I urge you to read Dr. Mark Jewell’s update on the recent decision in Australia. The situation regarding BIA-ALCL and the use of textured devices is a rapidly changing one, and as the leaders in plastic surgery it is our responsibility to our patients to be as well-informed about this topic as possible.

This year was also notable for greater scrutiny of gluteal fat grafting, which has continued to be associated with an unacceptably high mortality rate. As you may know, ISAPS is part of a multi-society task force which also includes representatives from the American Society for Aesthetic Plastic Surgery (ASAPS), the American Society of Plastic Surgeons (ASPS), the International Society of Plastic and Regenerative Surgeons (ISPRES), and the International Federation for Adipose Therapeutics and Science (IFATS). Please review their advisory statement which reviews safety considerations for all practitioners offering gluteal fat grafting: https://www.isaps.org/blog/gluteal-fat-safety-advisory/

This issue’s focus topic is non-invasive fat reduction. While we are surgeons and feel most comfortable in the operating room, technology has brought us new modalities for treating what were previously only surgical problems. This issue therefore includes articles by several of our colleagues who have used these new devices to augment surgical offerings in their practices. Wendy Lewis presents us with another wonderful marketing article devoted specifically to this topic, and I recommend reading her article closely for actionable items should you wish to offer non-surgical fat reduction in your practice. Our next issue will feature abdominoplasty, and I hope that many of you will submit an article for consideration.

I would like to end this short letter by thanking all of you for your enthusiasm and support as I finish my first year as Editor-in-Chief of ISAPS News. It has been an honor and a pleasure to be in this position, and I look forward to your feedback and suggestions as we continue to improve upon your newsletter.

Thank you for all you do for ISAPS.

Nina Naidu, MD, FACS - United States
Editor-in-Chief
Dear friends and ISAPS members,

It will soon be Christmas - and the first year of my presidency has flown by.

The results of our global statistics survey are now available and can be found on our website. Thank you very much for all those who took part, even though we would like to see even more commitment in the future. It is interesting to note that despite all the discussions about BIA-ALCL, breast augmentation has rather increased by more than 6% and is still the most commonly performed plastic surgery worldwide. The non-invasive treatments have once again increased considerably with over 10% growth. Interesting figures that help us to maintain our market orientation in our practice and not to miss important trends.

We have also evaluated our member survey very meticulously this year and are particularly pleased that the satisfaction with our society has again increased. In particular the electronic learning options such as MedOne, webinars and our video library have gained considerably in popularity. This confirms the direction we have taken to enable distance learning. Nevertheless, we are pleased that for many members the personal meeting at an ISAPS course is the most important. A face-to-face exchange is irreplaceable.

Furthermore, we sense an increasing demand to advance regulations in the field of aesthetic surgery due to increasing complications by non-plastic surgeons worldwide. Here regional work is required, but also global activity. We are happy to accomplish this task through intensive political work.

We also want to promote our young talents and have organized a large-scale leadership meeting for our national secretaries and committee members. The first three-days have already taken place in Vienna. A second part will follow next year in New York. The feedback was very promising, and we hope to train even more leaders.

On this occasion we were able to introduce our congress city 2020, Vienna, to our course
participants: everyone was enthusiastic, and Vienna showed itself from its best side when the sun was shining. In the meantime, we have over 350 speakers who have confirmed, and the program will be up to date and exciting. Visit us on our homepage and register now for the event of the year 2020: our 50th birthday. Join us and book in time.

Please also remember to extend your membership and continue to support us. A single referral through our website makes up for your annual fee . . . and don’t lose all our benefits, journals and newsletters. Furthermore, the fees for our Vienna Congress are considerably cheaper for ISAPS members. The deadline is 31 December and comes faster than you think.

For the upcoming holidays I wish you all the best and a happy new year!

Sincerely,

Dirk F. Richter, MD
President
The ASSI® Gonzalez Detacher, is shaped like a duck’s bill with curved branches. It opens and closes as it moves forward, to suit the implant’s size and shape making detachment easier.

Designed by:
Dr. Gonzalez, Associate Professor of Plastic Surgery, University of Ribeirao Preto (UNAERP) Medical School, Brazil
ISAPS GLOBAL ALLIANCE
PARTICIPATING SOCIETIES

1. ARGENTINA
   Sociedad Argentina de Cirugía Plástica Estética y Reparadora (SACPER)

2. AUSTRALIA
   Australasian Society of Aesthetic Plastic Surgeons (ASAPS)

3. AUSTRIA
   Österreichische Gesellschaft für Plastische, Ästhetische und Rekonstruktive Chirurgie (ÖGPÄRC)

4. AZERBAIJAN
   Society of Plastic Surgery Azerbaijan (SPS)

5. BANGLADESH
   Bangladesh Society of Aesthetic Plastic Surgeons (BSAPS)

6. BELGIUM
   Belgian Society for Plastic Surgery (BSAPS)

7. BOLIVIA
   Sociedad Boliviana de Cirugía Plástica Estética y Reparadora (SBCCR)

8. BRAZIL
   Sociedade Brasileira de Cirurgia Plástica (SBCP)

9. BULGARIA
   Bulgarian Association of Plastic, Reconstructive and Aesthetic Surgery (BULAPRA)

10. CANADA
    Canadian Society for Aesthetic Plastic Surgery (CSAPS)

11. CHILE
    Sociedad Chilena de Cirugía Plástica, Reconstructiva y Estética (SCCDRE)

12. CHINA
    Chinese Society of Plastic Surgery (CCSP)

13. CHINESE TAIPEI
    Taiwan Society of Plastic Surgery (TSAPS)

14. CHINESE TAIWAN
    Chinese Society of Plastic Surgery (CSAS)

15. COLOMBIA
    Sociedad Colombiana de Cirugía Plástica, Estética y Reconstructiva (SCCP)

16. CYPRUS
    Cyprus Society of Plastic, Reconstructive and Aesthetic Surgery (CySPRAS)

17. CZECH REPUBLIC
    Czech Society of Aesthetic Surgery (CSAS)

18. CZECH REPUBLIC
    Czech Society of Plastic Surgery (CSPS)

19. DENMARK
    Danish Society of Aesthetic Plastic Surgery (DASKP)

20. DOMINICAN REPUBLIC
    Sociedad Dominicana de Cirugía Plástica Reconstrutiva y Estética (SODOCIPRE)

21. ECUADOR
    European Association of Societies of Aesthetic Plastic Surgery (EASAPS)

22. ECUADOR
    Sociedad Ecuatoriana de Cirugía Plástica, Reconstrutiva y Estética (SECEPRE)

23. EGYPT
    Egyptian Society of Plastic and Reconstructive Surgeons (ESPRA)

24. ESPAÑA
    European Society of Aesthetic Plastic Surgery (ESAPS)

25. ESPAÑA
    European Society of Plastic, Reconstructive and Aesthetic Surgery (ESPRA)

26. FINLAND
    Suomen Esteetiitis Plastikkakirurgfy (SEP)

27. FRANCE
    Société Française des Chirurgiens Esthétiques Plasticiens (SFCEP)

28. GEORGIA
    Georgian Society of Plastic, Reconstructive and Aesthetic Surgery (GEOPRAS)

29. GERMANY
    Deutsche Gesellschaft für Plastische, Rekonstruktive und Aesthetische Chirurgie, e.V. (DGPRAC)

30. GERMANY
    Vereinigung der Deutschen Ästhetisch Plastischen Chirurgen (VDAPC)

31. GREECE
    Hellenic Society of Plastic, Reconstructive and Aesthetic Surgery (HESPRAS)

32. GUATEMALA
    Asociación Guatemalteca de Cirugía Plástica Estética y Reconstructiva (AGCPE)

33. HUNGARY
    Hungarian Society for Plastic, Reconstructive and Aesthetic Surgery (HSPRAS)

34. INDIA
    Indian Association of Aesthetic Plastic Surgeons (IAAPS)

35. INDONESIA
    Indonesian Association of Plastic Reconstructive and Aesthetic Surgeons (IPRAS)

36. IRAN
    Iranian Society of Plastic and Aesthetic Surgeons (ISPS)

37. IRISH
    Irish Association of Plastic Surgeons (IAPS)

38. ISRAEL
    Israeli Society of Aesthetic Plastic Surgery (ISAPS)

39. ITALY
    Asociación Italiana di Chirurgia Plastica Estetica (AICPE)

40. ITALY
    Società Italiana di Cirugía Plástica Reconstrutiva ed Estetica (SICRE)

41. JAPAN
    Japan Society of Aesthetic Plastic Surgery (JSAPS)

42. JORDAN
    Jordanian Society for Plastic and Reconstructive Surgeons (JSRPS)

43. KAZAKHSTAN
    Kazakhstani Society of Aesthetic and Plastic Surgery (NSPAS)

44. KUWAIT
    Kuwait Society of Plastic Surgeons (KSPS)

45. LEBANON
    Lebanese Society of Plastic, Reconstructive, and Aesthetic Surgery (LSPRAS)

46. MALAYSIA
    Malaysian Association of Plastic, Aesthetic and Craniofacial Surgeons (MAPACS)

47. MEXICO
    Asociación Mexicana de Cirugía Plástica Estética y Reconstructiva (AMICPER)

48. MOROCCO
    Société Marocaine des Chirurgiens Esthétiques Plasticiens (SOMCPE)

49. NETHERLANDS
    Nederlandse Vereniging voor Esthetische Plastische Chirurgie (NVPEC)

50. NICARAGUA
    Asociación Nicaragüense de Cirugía Plástica (ANCIP)

51. NORWAY
    Norwegian Society of Aesthetic Plastic Surgery (NSAP)

52. ORSÖ
    Oriental Society of Aesthetic Plastic Surgery (OSAP)

53. PAKISTAN
    Pakistan Association of Plastic Surgeons (PAPS)

54. PANAMA
    Asociacion Panama de Cirugia Plastica, Estetica y Reconstructiva (APCEPER)

55. PARAGUAY
    Sociedad Paraguaya de Cirugía Plástica (SPCP)

56. PHILIPPINES
    Philippine Association of Plastic, Reconstructive and Aesthetic Surgeons (PAPRAS)

57. POLAND
    Polish Society of Plastic, Reconstructive and Aesthetic Surgery (PSPRAS)

58. PORTUGAL
    Sociedade Portuguesa de Cirugía Plástica Reconstrutiva e Estética (SOPCPE)

59. ROMANIA
    Romanian Aesthetic Surgery Society (RASS)

60. RUSSIA
    Russian Society of Plastic, Reconstructive and Aesthetic Surgery (RSPRAS)

61. RUSSIA
    Russian Society of Plastic, Reconstructive and Aesthetic Surgery (RSPRAS)

62. SAUDI ARABIA
    Saudi Plastic Surgery Care Society (SPSCS)

63. SERBIA
    Serbian Society of Aesthetic Plastic Surgeons (SRSAPS)

64. SERBIA
    Serbian Society of Plastic, Reconstructive, and Aesthetic Surgery (SRSAPAS)

65. SINGAPORE
    Singapore Association of Plastic Surgeons (SAPS)

66. SOUTH AFRICA
    Association of Plastic, Reconstructive and Aesthetic Surgeons of Southern Africa (ADRASSA)

67. SOUTH KOREA
    Korean Society of Aesthetic Plastic Surgery (KSAAPS)

68. SPAIN
    Asociación Española de Cirugía Estética Plástica (AECEP)

69. SPAIN
    Sociedad Española de Cirugía Plástica Reparadora y Estética (SERCIP)

70. SWEDEN
    Svensk Förening för Estetisk Plastikkirurgi (SFEP)

71. SWITZERLAND
    Schweizerische Gesellschaft für Ästhetische Chirurgie (SGAC)

72. SWITZERLAND
    Swiss Society of Plastic, Reconstructive and Aesthetic Surgery (SSPRAS)

73. THAILAND
    Society of Aesthetic Plastic Surgeons of Thailand (THSAPS)

74. TURKEY
    Turkish Society of Aesthetic Plastic Surgery (TSAPS)

75. UKRAINE
    Ukrainian Association of Plastic, Reconstructive and Aesthetic Surgeons (UAPRAS)

76. UKRAINE
    Ukrainian Society of Aesthetic Plastic Surgery (UAPS)

77. UNITED ARAB EMIRATES
    Emirates Plastic Surgery Society (EPSS)

78. UNITED KINGDOM
    British Association of Aesthetic Plastic Surgeons (BAAPS)

79. UNITED KINGDOM
    United Kingdom Association of Aesthetic Plastic Surgeons (UKAAPS)

80. UNITED STATES
    American Society for Aesthetic Plastic Surgery, Inc. (ASAPS)

81. VENEZUELA
    Sociedad Venezolana de Cirugía Plástica, Reconstructiva, Estética y Maxillofacial (SVCPREM)

82. VIETNAM
    Vietnamese Society of Aesthetic and Plastic Surgery (VSPAAPS)
With its 185 members, Italy is the largest ISAPS section in Europe and the fourth in the world after the US, Brazil and Mexico. Two Italian societies contribute to this success and have been among the first national societies to join the ISAPS Global Alliance.

Società Italiana di Chirurgia Plastica Ricostruttiva ed Estetica (SICPRE), founded in Rome in 1934, brings together board certified plastic surgeons interested in reconstructive and/or aesthetic surgery. Presidents remain in office for one year and the following year become President of the national meeting, chairing its scientific committee. The SICPRE annual meeting is organized every year in the fall and usually takes place in the city of the presiding Past President. The next event, the 69th Annual SICPRE Congress, will be held in Bologna September 24-26, 2020 under the Presidency of Daniele Fasano (Figure 1). Topics in the scientific program are: aesthetic surgery of the face, aesthetic and functional rhinoplasty, oculopalpebral surgery, aesthetic medicine, update on breast implants, post-bariatric surgery and many other aesthetic and reconstructive subjects. Faculty will be Italian and international and will be announced on the website: www.sicpre2020.it

Associazione Italiana di Chirurgia Plastica Estetica (AICPE), founded in Milan in 2011, gathers plastic surgeons only or mainly those interested in aesthetic plastic surgery. Presidents remain in office for two years. AICPE’s annual meeting is always organized in Florence in the
This city has been selected from the beginning due to its geographical position (in the center of the country, halfway between the north and south of Italy) and the attractiveness of its historical buildings and monuments.

The next event, the 8th Annual AICPE Congress, will be held on March 20-22, 2020. International invited speakers are: Jose Parreira (Portugal), Gustavo Abrile (Argentina), Fausto Viterbo and Antonio Graziosi (Brazil), Benjamin Ascher, Sebastien Garson, Francois Petit, Catherine Bergeret Galley, Gilbert Vitale and Thierry van Hemelryck (France) and Irina Khrustaleva (Russian Federation). All the main topics in aesthetic surgery and medicine will be covered during the meeting (www.aicpe.org).
The signing of the Alliance Agreement between the German Society of Plastic, Reconstructive and Aesthetic Surgeons (DGPRÄC) and the International Society of Aesthetic Plastic Surgery (ISAPS) occurred during a festive evening at the 50th Annual Congress of the DGPRÄC on September 27, 2019 at the Atlantic Hotel Kempinski in Hamburg.

The agreement was signed by the newly elected President of DGPRÄC and ISAPS Member, Lukas Prantl, MD, PhD, and ISAPS President Dirk Richter, MD.

Founded in 1968, the DGPRÄC officially represents more than 1900 German plastic surgeons internationally, and as such, is the largest association of plastic surgeons in Europe. The society officially represents German Plastic Surgery in politics and science. Surgeons holding the German title “Specialist for Plastic and Aesthetic Surgery” or “Specialist for Plastic Surgery” are qualified for membership, while doctors in training may apply for “associate membership”. The society offers many benefits to its members. In addition to hosting an annual congress, they also provide nearly 100 hands-on workshops free of charge to their associate members.

The DGPRÄC joining the ISAPS Global Alliance of 76 international societies of plastic surgery leads to more opportunities for plastic surgeons and offers a wide range of opportunities to improve one’s skills as a plastic surgeon.
BSAPS fully endorses the view of ISAPS’ immediate past president, Dr. Renato Saltz, the present president, Dr. Dirk Richter, and the board of directors, that residents in plastic surgery should be allowed more exposure to aesthetic surgery during their residency period. We believe that this will help young plastic surgeons to not only navigate better in the field of aesthetic surgery, but also learn the tricks of the trade more efficiently. For this reason, we welcome the decision of ISAPS that plastic surgery residents can become Resident Members for free. We have planned to publish a BSAPS Journal twice a year, where our members will write articles in order to share their experiences in aesthetic surgery.

During the ISAPS Symposium in Bruges, Belgium in October 2019, BSAPS signed an agreement and became an ISAPS Global Alliance member. Thanks to the president, Dr. Dirk Richter, who was very positive about BSAPS joining this group. This Alliance will help plastic surgeons from Bangladesh join ISAPS more easily. At the same time, we will feel encouraged to uphold the global standards in the practice of safe aesthetic surgery in our country.

We are extremely happy that ISAPS decided to conduct an educational Course in Dhaka in 12th - 14th March 2020. Thanks to the Chairman of the Education Council, Dr. Vakis Konto, for approving the dates on his very busy education calendar. He has already started inviting faculty from around the world to conduct the ISAPS Course in Dhaka. This course will provide ample opportunity for our young plastic surgeons and residents to learn about aesthetic plastic surgery up close, from the world leaders on the subject. We are looking forward to this upcoming event in Bangladesh, which will encourage more plastic surgeons from our country to join ISAPS.

We believe that by having regular interactions with ISAPS and other aesthetic surgical bodies we will be able to enrich our plastic surgeons in the field of aesthetic surgery.
The Nicaraguan Plastic Surgery Society was founded on the 25th of July in 1992 by a group of board-certified plastic surgeons to promote education, ethics and good practice of plastic surgery.

Our National Society was granted all legal rights as a non-profit organization in the year 2011 when all its members were determined as board-certified plastic surgeons practicing aesthetic and reconstructive surgery.

Our aim is to ensure that plastic surgeons receive continuing medical education in a program where the members gather monthly in sessions where they review and discuss the latest trends and topics in the field of plastic surgery with the highest medical evidence published, and share our plastic surgery experience among the members, thus developing the latest and most important topics.

Since our creation, in our commitment to education, we have developed a national Congress and Symposia where our national professors participate together with internationally renowned faculty. This year, our nation co-organized the Central American Plastic Surgery Congress with the Panama Plastic Surgery Society, having the integration of all the national societies in the region and transcending our borders, having guests from 22 countries.

During the month of October, we celebrated a two-day symposium focusing on aesthetic and breast surgery procedures with the participation of international guests from Mexico Guatemala and Colombia. Dr. Bertha Torrez Gomez, Dr. Arturo Ramirez-Montañana, Dr. German Vargas, Dr. Tatian Garcia, Dr. Celso Bohorquez, and Dr. Humberto Uribe Morelli all gave their expert opinions in the latest trends and safety in facial rejuvenation, with discussions on safety measures to consider in breast surgery.
During the symposium, ISAPS Vice President, Dr. Arturo Ramirez-Montañana, invited our National Society to join the ISAPS Global Alliance which ensures that its members have the highest standards of training, safe practice, and maintain the highest standards of ethical conduct and quality of care through continuous medical education.

The Nicaraguan Plastic Surgery National Society is also an active member of the Iberolatinamerican Federation of Plastic Surgery (FILACP) and the International Confederation of Plastic Surgery Societies (ICOPLAST).

We are honored to be affiliated with the prestigious ISAPS Global Alliance and we look forward to providing our society and patients the best standards of care, and to have a great educational relationship.

**Figure 2** - Dr. Ramirez-Montañana announces ISAPS’ invitation to ANCP to join the Global Alliance.

**Figure 3** - Attendees at the recent Central American Plastic Surgery Congress.

**GUESS WHO?**

Answer on page 63
The human skin is the largest organ and plays an important role in protecting the body. It is the mirror of health and any burn, injury, or other trauma, such as surgery, can result in the formation of a scar. Scars can have a major consequence on a patient’s overall well-being, appearance, and satisfaction with a surgery especially when the scars are in sensitive places on the body or cannot be covered by clothes. Treatment of scars can be potentially life changing for a patient and relieve a painful burden which patients may have been carrying for years. The increase in the number of cosmetic surgeries has resulted in the visual appearance of the final result of the surgery growing in importance to both surgeons and patients.

GC Aesthetics conducted a single-center prospective clinical study to assess the efficacy of Silgel™ STC-SE, a topical polysiloxane silicone gel, used to reduce the appearance of hypertrophic and keloid scars resulting from surgery, trauma, burn, and other injuries. The results of this study have been published in: Plastic and Reconstructive Surgery journal 2016.1

Silgel® is a clear, non-sticky, silicone gel that is applied to a closed wound, it dries quickly and helps retain the softness of the skin.2 The active ingredient in Silgel, polysiloxane, has been proven effective by de Giorgi et al in 2009, Kwon et al in 2014, and many other reputable studies.1,5

The results of the study conducted by GC Aesthetics can be found below:

STUDY METHOD
Patients were divided into 2 groups: Those with recent scars, less than 6 months old, and those with older scars, 6 months to 2 years old. All patients were examined by the same physician to assess the suitability of the scar to be treated. Classification (hypertrophic or keloid) was completed by visual inspection to assess the level of scar growth beyond the original wound site. Patients were prescribed Silgel and instructed to apply a very small amount of the silicone gel to their scar twice daily for 16 weeks.1

To assess the efficacy of Silgel, various quantifiable parameters were utilized including scar size/visual assessment, skin elasticity, skin hydration, skin moisture evaporation, image analysis/scar color, and subject perception data. All patients visited the research center (Edinburgh, United Kingdom) for their baseline visit and subsequent visits at weeks 1, 4, 8, 12, and 16.

At baseline, week 8, and week 16 visits, macro photographs were taken by a trained expert. At each follow-up visit, the same trained nurse collected 3 sets of Corneometer readings, Dermalab TEWL measurements, Dermalab elasticity meter measurements, basic scar measurements (length, width, and height), and subjective patient questionnaire data.

THE OUTCOME IN A NUTSHELL
Scars were analyzed to assess changes in size, color and skin condition following Silgel use and, patient satisfaction was gathered during each follow-up visit.

Following Silgel treatment, the overall scar dimensions were reduced with the length of the scars showing a statistically significant decrease. The observed time until a statistically significant decrease varied between younger and older scars; younger scars showed reduction in length after 4 weeks, whereas older scars showed a reduction after 8 weeks. This corresponds with other studies (Chan et al 2005) that demonstrate the effect of silicone gel on reducing the size of scars.
High-resolution photographs were taken at baseline, week 8, and week 16 and showed great visual improvement as shown in Figure 1.

**PATIENT EXPERIENCE**

Patients also reported that Silgel increased the softness of their skin, was easy to apply, dried easily on the skin, reduced the intensity of color of the scar, and reduced the height of the scar.

Feedback showed improvement over all categories, many of which were significant. The surveys demonstrated that by week 16, 93% of patients reported to like Silgel and 86% of patients reported that the product reduced the redness of their scar. 93% of patients would recommend Silgel, and 86% of patients agreed that Silgel helped fade the appearance of their scar.

**SUPPORTING DATA**

The aforementioned data can be supported by Pantlen *et al.*, who conducted a prospective clinical study at the Department of Plastic and Maxillofacial Surgery, Fachklinik Hornheide, University of Muenster, to determine the effects of Silgel treatment on scars, mainly hypertrophic in nature. The results were aligned with the results of GC Aesthetics study in that Silgel improved the configuration, color and consistency of the scars, as shown in Figure 2.

**Silgel scar improvement results (Pantlen *et al.*, 2000)**

**CLINICALLY PROVEN TO REDUCE THE APPEARANCE OF SCARS**

Surgeons have been using Silgel as part of their patients’ after care for over 15 years now and as clinical data and patient feedback underlines, Silgel has been proven to reduce the visibility of scars resulting from surgery, trauma, burns and other injuries.

**REFERENCES**

1. Stewart SA, Dougall GM, Tafuro EM.; The Use of Silgel STC-SE, a Topical Silicone Gel for the Treatment and Reduction of Hypertrophic and Keloid Scars; *Plast Reconstr Surg Glob Open* 2016; 4:e1183; doi: 10.1097/GOX.0000000000001183; Published online 23 December 2016.


For over 40 years, GC Aesthetics has been dedicated to advance both the science and safety of medical aesthetics products around the world, and to deliver the highest quality products that meet the needs of surgeons and their patients. The company is committed to support surgeons and patients with holistic solutions – from pre-surgery through surgery and post-treatment.

*Silgel will be available again for purchase in May 2020.*
Welcome to Silgel™

The healing power of silicone for scar management.

From the global experts in silicone, GC Aesthetics.

www.gcaesthetics.com
In the month of September and beginning of October, I attended two ISAPS Symposia and one ISAPS endorsed meeting.

The first Symposium was in Santa Marta, Colombia and took place on October 18th, one day before the 37th Annual Meeting of the Colombian Plastic Surgery Society. Santa Marta is a beautiful town conveniently located next to the Caribbean Sea. The ISAPS Symposium was attended by more than 500 plastic surgeons. We had an excellent faculty from different countries: Lazaro Cardenas (Mexico), Richard Bendor-Samuel (Canada), Horia Siclovan (Romania), Francisco Gomez Bravo (Spain), Linda Rincon (Venezuela), Carlos Uebel (Brazil) and outstanding local faculty. We covered aesthetic surgery of body, breast and face. The faculty were hosted in the brand-new Marriott Playa Dormida Resort where we had a wonderful faculty dinner. My Co-Director, Dra. Maria Isabel Cadena Rios, President of the Colombian Society Meeting, Dra. Damaris Romero Chamarro, and the President of the Colombian Society of Plastic Surgery, Dr. Ernesto Barbosa Landinez, made sure we had a flawless meeting.

The second meeting was an ISAPS endorsed Facial Rejuvenation Workshop in collaboration with St. Louis University, in St Louis, Missouri, organized by Dr. Mike Nayak, a prominent local facial plastic surgeon. Usually, in this section I only mention ISAPS events, but the educational quality of this meeting was so high, I think our members who are interested in facial surgery should be aware of this high quality, boutique event. We had great ISAPS faculty present including Timothy Marten and T. Gerald O’Daniel from the US and Andre Auersvald from Brazil. On the first day, lectures about aesthetic surgery of the face were followed by faculty demonstrating the procedures on cadaver heads that were brought to the auditorium and broadcast on two large screens. Then the faculty and the attendees were taken to the cadaver lab where three surgeons were assigned to each head and did the dissections with the faculty for six hours. The next day was the same set-up, but involved aesthetic surgery of the neck and the third day involved live surgery in Dr. Nayak’s office. This meeting allows only 48 surgeons to participate.

The final event took place in Vancouver, British Colombia, Canada. We organized an ISAPS Symposium one day before the Annual Meeting of the Canadian Society for Aesthetic Plastic Surgery (CSAPS). The Symposium was called Body and Breast Redefined. We had great ISAPS faculty at this event as well: Chiarra Botti (Italy), Maria Isabel Cadena Rios (Colombia), Patrick Mallucci (England), Cemal Senyuva (Turkey), Larry Nichter (USA), and great local faculty. Eighty plastic surgeons attending the symposium. The faculty dinner was at the home of a local plastic surgeon in the presence of a famous chef and sommelier who introducing local wines. Dr. Richard Bendor-Samuel, President of CSAPS, was instrumental in making this symposium a success.
THE 7TH CONGRESS

WORLD ASSOCIATION FOR PLASTIC SURGEONS OF CHINESE DESCENT IN HANGZHOU, CHINA

LEE L.Q. PU, MD, PHD, FACS, FICS - UNITED STATES
Member, ISAPS Educational Council
Associate Editor, Aesthetic Plastic Surgery

The 7th Congress of the World Association for Plastic Surgeons of Chinese Descent (WAPSCD) was held in Hangzhou, China from October 18 to 20, 2019. It follows the previous six successful world congresses in Beijing (2008), Taipei (2010), Xian (2012), Hong Kong (2014), Wuhan, China (2016), and Taipei (2018). The congress was combined with the 4th West Lake Symposium on Asian Aesthetic Surgery. It attracted more than 1800 attendees from Mainland China, Taiwan, Hong Kong, Singapore, Australia, France, and USA. Dr. Xiaoyan Tan from Mainland China served as the Congress Chair and I served as Co-Chair. Dr. Xiaoxi Lin (Mainland China) served as the Chair of the Scientific Program Committee. The congress was organized by the Hangzhou Plastic Surgery Hospital, Hangzhou, China. Dr. Yilin Cao (Mainland China), Dr. David T. W. Chiu (USA), Dr. Fu-Chan Wei (Taiwan), and Dr. Yu-Ray Chen (Taiwan) served as the Honorary Chairmen.

Many overseas invited speakers visited Liangzhu Museum and enjoyed seeing the civilization of the country over the last several thousand years. The faculty dinner was held in a historical restaurant of Hangzhou on the night of October 17 – a wonderful event for all invited faculty members who enjoyed their time together and shared their friendship and companionship. During the faculty dinner, two Congress Chairs and several invited speakers each gave brief remarks. (Figure 1) The official board meeting of WAPSCD was conducted after our faculty dinner and many issues were discussed. (Figure 2)

On the first day, the general session started in the morning after an opening ceremony. My presentation about previous congresses was followed by the WAPSCD Founding Members’ Panel. (Figure 3) In this panel, Dr. Yilin Cao, Dr. David Chiu, and Dr. Yu-Ray Chen, each gave their perspective on this young
organization’s present and future. Their presentations were inspirational and well received. During the leadership panel, Dr. Jie Luan, the current President of the Chinese Society of Plastic Surgeons, Dr. Lynn Jeffers, the current President of the American Society of Plastic Surgeons, Dr. Hua Jiang, the current President of Chinese Medical Doctor Association, Plastic, Reconstructive, and Aesthetic Surgery Society, and Dr. His-Ken Chen, the current President of the Taiwan Society of Plastic Surgery each gave an interesting lecture on the opportunities and challenges facing plastic surgeons in their country or region. The general session in the morning was concluded with the keynote lecture panel including Dr. Xiaoxi Lin from Mainland China, Dr. Kant Lin from the United States, Dr. Xiaojun Wang from Mainland China, Dr. Hung-Chi Chen from Taiwan, Dr. George Li from Hong Kong, and Dr. Shuzhong Guo from Mainland China. Each gave a remarkable lecture on reconstructive plastic surgery and plastic surgery board certification. (Figure 4)

The congress had an additional two-days of scientific program after the general session covering the entire spectrum of plastic surgery including Asian blepharoplasty and rhinoplasty, fat grafting, craniofacial and cleft reconstruction, scar and complex wound management, non-invasive facial aesthetic procedure, facial aesthetic surgery, aesthetic and reconstructive breast surgery, trunk and extremity reconstructions, and an elite panel.

There were two live surgery forums for blepharoplasty and rhinoplasty, two of the most common procedures performed in Mainland China. There were 13 panels in both cosmetic and reconstructive plastic surgery delivered by about 70 international invited speakers and 120 domestic invited speakers. (Figure 5)

One of the very impressive scientific forums was the live surgery performed by Chinese plastic surgeons on blepharoplasty and rhinoplasty. The scientific content and quality of the live surgery was world-class, and all attendees were so engaged in learning. The live surgery forum was also enhanced by expert discussions. (Figure 6)

The banquet was held on the first night. There was live performance led by the medical professionals from the Hangzhou Plastic Surgery Hospital and many invited speakers. All invited speakers and congress attendees enjoyed such an event in this kind of the environment.

Many overseas invited speakers attended a live show on the evening of the second day in the West Lake of Hangzhou called

Continued on page 20
the West Lake Impression. The show was originally performed during the G-20 meeting in Hangzhou, September 4, 2016. It is a spectacular show performed by the local performers and has been kept as a classic show representing the beautiful city of Hangzhou and its famous lake. It combines the light, folk and classic music, folk dance and ballet, and the performance is on the surface of the lake. It is a must-see show if you ever have a chance to visit Hangzhou. (Figure 7)

Another impressive scientific forum was the video session of aesthetic medicine and surgery on the third day of the congress. During this session, plastic surgeon experts of Chinese descent demonstrated their unique technique of facial, breast, and body contouring procedures with well-edited and well-illustrated videos. It has indeed highlighted their expertise in many areas of aesthetic medicine and surgery.

The 7th Congress of the WAPSCD was indeed another great success as explained to the media in attendance during the press conference. (Figure 8) It was the largest gathering of Plastic Surgeons of Chinese Descent worldwide in the history of WAPSCD. The scientific program was world class with the participation of many internationally renowned plastic surgeons from all over the world. As a group, we enjoyed our friendship and companionship in addition to the scientific exchange. The 8th Congress of WAPSCD will be held in conjunction with the French Society of Plastic, Reconstructive, Aesthetic Surgery in Paris, France, November 19-21, 2020 under the leadership of the new president of the French Society, Professor Weiguo Hu and the Executive Committee of WAPSCD. It will be a great adventure since the meeting will be held outside Asia for the first time. We all look forward to another great meeting and celebrate our friendship and scientific contributions to the science and art of plastic surgery.
An ISAPS Symposium was held in Poznan, Poland on the 12\textsuperscript{th} of October, 2019, a beautiful old city at the southwest part of the country. More than 120 persons participated from Poland and surrounding countries. Invited speakers were Dr. Nazim Cerkes from Turkey (ISAPS President-Elect), Dr. Vakis Kontoes from Greece (ISAPS EC Chair), Dr. Gianluca Campiglio from Italy (ISAPS 2\textsuperscript{nd} Vice President) and myself as Co-Director of the Symposium.

The topics of the Symposium were Facial rejuvenation and Rhinoplasty. Dr. Cerkes gave five lectures on primary and secondary rhinoplasty, Dr. Kontoes gave three lectures on face lift, periorbital rejuvenation and minimally invasive techniques for facial rejuvenation, Dr. Campiglio spoke on secondary rhinoplasty, cervicoplasty and browpexy and I spoke about deep plane face lift, peels and filler complications. Local speakers, Jerzy Kolasinski, Samir Imbrahim (Local Chair) and Artur Sliwinski presented their experience on MACS lift, plasma face and neck rejuvenation, and face lift.

The organization of the Symposium was perfect due to the efforts of Dr. Maciej Kuczynski, Dr. Janusz Sirek (ISAPS National Secretary for Poland) and Samir Imbrahim (Local Chair). They also organized a wonderful faculty dinner. Many thanks to everyone who made this ISAPS Symposium a successful one.
While ISAPS member surgeons are aware of the signs and symptoms of BIA-ALCL in patients, primary care physicians are largely unaware of how to evaluate and manage a breast implant patient with a late-term periprosthetic fluid accumulation.

This virtual CME program, lasting an hour and fifteen minutes, focused on educating primary care physicians on BIA-ALCL signs and symptoms along with a process to evaluate breast implant patients who develop late-term seromas. Participants could join the program, for free, either as participants or observers.

A collaborative effort of the International Society of Aesthetic Plastic Surgery, the World Organization of National Colleges, Academies and Academic Associations of General Practitioners/Family Physicians (WONCA), and Haymarket Medical Education, it was produced through an unrestricted educational grant from Allergan.

The overall goal was to heighten primary care providers’ index of suspicion for and recognition of the early signs of BIA-ALCL and other breast-implant illnesses and to underscore the important role that primary care clinicians worldwide can play in educating their patients with breast implants about potential complications. The focus was what primary care physicians need to know about a patient who develops a late-term periprosthetic fluid accumulation that could be BIA-ALCL and the importance of early detection and treatment that affects survival.

The webinar was expertly moderated by ISAPS member Dr. Patricia McGuire of St. Louis, Missouri and included as faculty Drs. Richard Birtwhistle in Kingston, Ontario, Canada; Michel Danino in Montreal, Quebec, Canada; Anand Deva in Miranda, New South Wales, Australia, Arianna Di Napoli in Rome, Italy; and Hinne Rakhorst in Enschede, The Netherlands.

Besides educating primary care physicians on BIA-ALCL, there was an emphasis on referring patients to ISAPS member surgeons.

“Given the fact that textured-surface breast implants have been widely used throughout the world, education of primary care physicians on simple steps to evaluate late-term periprosthetic fluid is essential,” said Dr. McGuire.

ISAPS hopes to cooperate in more of these virtual education for primary care physicians, OB/GYN and internal medicine physicians.
After a 14-hour flight, the plane landed at the Tel Aviv International Airport. Before landing, the flight attendant announced that the plane had entered Israeli air space and everyone on the airplane must be seated. This reminded everyone that Israel is a country that may still be in a war with other countries. Surprisingly, when I left the airport and entered the city, it appeared to be very peaceful and safe. Local Israelis and international tourists were really enjoying life which is normal on a daily basis.

Tel Aviv is the second largest city in Israel. It is the financial district of the country with many high-rise buildings. The city has expanded tremendously in the last 10-15 years and has become a livable city just like any other metropolitan area in other parts of the world.

The next day, Professor Eyal Gur, head of the Department of Plastic Surgery at the Tel Aviv Sourasky Medical Center, greeted me in the morning and took me to his hospital. (Figure 1) The Tel Aviv Sourasky Medical Center is a 1600 bed tertiary hospital and has the largest Department of Plastic Surgery in the country with 10 faculty surgeons and is divided into several specialty programs such as head and neck reconstruction, breast reconstruction, and craniofacial surgery. It is the largest training program in Israel with residents not only from Israel, but also from some European countries and even from Palestine. The department has a very strong tradition in international plastic surgery education and has trained many foreign fellows. Each faculty member has done fellowships in the United States or Europe. They have not only a very cutting-edge reconstructive surgery practice in this public hospital, but also a private practice in other private hospitals. This is how they can maintain a cutting-edge reconstructive surgery practice as well as a private cosmetic surgery practice to augment their income. However, each faculty surgeon expressed to me their passion for excellence in plastic surgery.

The department organized a whole academic day for me during my visit. (Figure 2) All of the residents were excused from clinical duty and many faculty surgeons also participated.

Continued on page 24
I first presented a lecture titled, “What Do We Know Now About Fat Grafting?” followed by another lecture titled, “Facial Fat Grafting for Rejuvenation and Contouring: My Preferred Approach.” Both lectures were well received by the faculty surgeons and the residents and we had many in-depth discussions about fat grafting, regenerative surgery, and each preferred technique in facial fat grafting. My first lecture covered the common techniques in fat grafting, current concepts of fat graft survival, the role of adipose derived stem cells in fat grafting, regenerative plastic surgery with fat grafting, and cryopreservation of fat grafts. The second lecture introduced my preferred technique in facial fat grafting with a lot of feedback and discussion with the residents and faculty surgeons.

The second part of this scientific exchange was to present some difficult cases to the residents and then they presented their difficult cases to me. This section was quite exciting and many discussions resulted, especially regarding the different approaches in the United States and Israel for the same clinical problem. I also learned, firsthand, that many cutting-edge reconstructive plastic surgery procedures are performed in their medical center.

The third part of this scientific exchange was a lecture on breast reduction for the residents. I explained my criteria for patient selection and the preferred technique for inferior pedicle breast reduction as well as medical breast reduction. I also showed a video on how that procedure is performed in my practice. I also discussed other related techniques such as vertical mastopexy or inverted mastopexy.

During my visit, I also had a tour of their department and hospital. (Figure 3) The Department of Plastic Surgery has a special floor with some 40 plus beds for inpatient stays after reconstructive surgical procedures. The hospital, although it is public one, has many new buildings due to private donations. For example, the office of the Department Plastic Surgery and their floor are quite modern. The hospital itself is also well known for many other medical specialties such as cardiovascular surgery.

I enjoyed traditional local cuisine with the faculty at a high luxury restaurant near the hospital. (Figure 4) I had many informal discussions with the faculty surgeons about their life and what we are enjoying on a daily basis as a plastic surgeon. We discussed many common interests and how to achieve academic excellence in one’s personal life.

During my visit to Israel I had an opportunity to explore Tel Aviv. It has beautiful beaches and many activities near the beach. (Figure 5) People are quite active and seem to enjoy the beach very much. I also had an opportunity to visit the old city of Jerusalem (Figure 6) and understand the tradition and the culture of Jewish people and their rich history for the past 2,000 years.

Overall it is my great honor to serve as an ISAPS Visiting Professor in Israel. I must say that the extent of scientific exchange in plastic surgery was quite intense and I indeed have learned a lot from our Israeli colleagues. I am very happy to share my expertise in aesthetic surgery with Israeli plastic surgery residents, the faculty surgeons, and international trainees and visiting surgeons. I am very thrilled to help accomplish the mission of ISAPS of worldwide aesthetic education. (Figure 7) I was also able to explore Tel Aviv. It has beautiful beaches and many activities near the beach. People are quite active and seem to enjoy the beach very much. I also had an opportunity to visit the old city of Jerusalem and understand the tradition and the culture of Jewish people and their rich history for the past 2,000 years.

During my visit, I also learned much about Israel, as a relatively new country, and about the Jewish people. I certainly respect their vision, work ethic, and accomplishments in many areas of medicine in general and plastic surgery in particular.
On October 24, the US FDA released a draft guidance designed to enhance patient safety by increasing the amount and type of information that breast-implant manufacturers include in their packaging. These additions include a “black box warning,” patient-decision checklist; device/materials descriptions; rupture-screening recommendations; and an updated patient-device card.

The “black box warning” is a specific alert for both surgeons and patients regarding safety issues associated with specific drugs and medical devices. The FDA believes that a boxed warning to be added to labeling for breast implants would help clearly communicate risks that patients may not know about. This would include statements that breast implants are not lifetime devices; that the chances of developing complications increase the longer a patient has the implant and that additional surgery may be required to address the complications if required. Additionally, that breast implants have been associated with the risk of developing breast implant-associated anaplastic large cell lymphoma (BIA-ALCL) and may be associated with systemic symptoms such as fatigue or musculoskeletal pain.

A decision checklist is proposed as a way to help patients better understand the risks associated with breast implants. The FDA sees this as a way to better communicate with patients the potential risks of adverse events associated with breast implants, including rupture, BIA-ALCL, and reoperation.

The draft guidance also proposes that breast implant manufacturers include product ingredient information in the device’s labeling that is easy for patients to understand, as the FDA first suggested last spring following the March 2019 panel hearing. According to the FDA, improved access to this descriptive information will help better inform patients of the types and quantities of chemicals and heavy metals that are in breast implants.

The new draft recommendations propose that patients who do not have symptoms be screened with either ultrasound or MRI five to six years following implantation and every two years thereafter. An MRI is recommended if a patient has symptoms at any time or if ultrasound results are uncertain. The new proposed screening recommendations are based on data showing that rupture rates are higher five to six years after implantation. It appears that the FDA now recognizes that diagnostic ultrasound is an effective screening method for asymptomatic patients.

The agency is proposing an updated device card that contains more information besides style, size, and the serial number of the product. It will contain web links for patients to use for access to information about their implants.

While much of this is specific to the United States, it is expected that other regulatory agencies throughout the world will adopt similar recommendations regarding breast implants.
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Serotonin syndrome (SS), also known as serotonin toxicity, is a potentially life-threatening condition resulting from having too much serotonin in your body. This can be the result of illegal drug use, medications, or dietary supplements. Symptoms can range from mild to severe, depending on the level of serotonin in their body (Table 1). At best the signs and symptoms of serotonin are unpleasant; at worst, they can require intensive medical treatment. Rare occurrence and resemblance to other conditions makes it difficult to diagnose.

Serotonin (5-HT) is a chemical produced by the body that helps to regulate mood, social behavior, sexual desire, appetite, digestion, memory, sleep and much more. Serotonin is commonly thought to be a neurotransmitter but some consider it to be a hormone (often referred to as the ‘feel-good hormone’ of the human body). As a neurotransmitter, serotonin carries signals between nerve cells. It is produced in the intestines and the brain, but is also present in the central nervous system and blood platelets. As a result, serotonin is believed to influence a wide range of psychological and bodily functions. In the brain, serotonin is formed from tryptophan, stored in the presynaptic terminal of a neuron and released into the synapse where it acts on serotonin receptors on the postsynaptic terminal. It is degraded by monoamine oxidase in the presynaptic terminal.

The incidence of adverse drug reports with serotonergic drugs is increasing. More than 85% of physicians are unaware of the existence of serotonin syndrome. Poly-medicine is pandemic in our society.

Antidepressants are indicated for the treatment of depression or anxiety disorders. Although analgesic mechanisms are not fully understood, some antidepressants are prescribed off-label to treat problems such as chronic pain, low energy, and menstrual symptoms. Antidepressant use in chronic pain is especially promising for providing nonopioid analgesia in the face of a nationwide opioid crisis. Knowing which medications patients are on, over-the-counter remedies, supplements, and drugs of abuse may just save your patient’s life.
The most commonly used antidepressants in one study were: sertraline hydrochloride (Zoloft), citalopram hydrobromide (Celexa), fluoxetine hydrochloride (Prozac), trazodone hydrochloride (Desyrel), escitalopram oxalate (Lexapro), and duloxetine hydrochloride (Cymbalta). A complete list of drugs that can potentially cause serotonin syndrome are listed in Table 2.

Serotonin syndrome can occur if you combine an antidepressant medication with certain pain medications, such as opioids (e.g. fentanyl). There are increasing reports of serotonin syndrome occurring after surgery, including plastic surgery cases. Moreover, plastic and cosmetic surgery patients are a potentially susceptible group. In one study 33.6% of cosmetic patients and 46.3% reconstructive patients used at least one psychoactive drug. This is well above the average quoted at 12%. Serotonin syndrome can last for 24 hours in mild cases and in more severe cases it can take two weeks to return to normal.

Patients who have serotonin toxicity are likely to present with one or more symptoms of a triad of neuromuscular, autonomic and mental status changes (Table 3). Mild symptoms include nervousness, insomnia, nausea, diarrhea, tremor and dilated pupils. These can progress to moderate symptoms such as hyperreflexia, sweating, agitation, clonus (rhythmic muscle spasms), and ocular clonus (side to side eye movements). Severe symptoms include temperature greater than 38.5°C (101.3°F), sustained clonus or rigidity, confusion, delirium, rhabdomyolysis and eventually unconsciousness and death (Table 4).

Serotonin syndrome typically occurs when a patient takes two or more drugs that elevate serotonin levels through different mechanisms, but the syndrome can occur with the

Continued on page 30
use of individual agents. Mechanisms that cause serotonin syndrome include increased serotonin production, inhibition of serotonin reuptake, inhibition of serotonin metabolism, increased serotonin release, and stimulation of serotonin receptors. Certain drugs may affect serotonin levels through more than one mechanism. Serotonin syndrome also can occur when the metabolism and elimination of a serotonergic drug are altered. Mechanisms of action and their causative agent(s) are listed in Table 5.

Serotonin syndrome is found among people who take drugs with ingredients of lidocaine, especially for people who are female, age greater than 60, take folic acid, and have deep venous thrombosis. Drugs with ingredients of lidocaine include: Alphacaine, Dentipatch, Lidocaine, Lidoderm, Ztildo.

Clinical Signs and Symptoms
Clinical symptoms of serotonin syndrome typically develop within 2 hours of an increase in dose or the addition of a serotonergic drug. Approximately 75% of affected patients experience symptoms within 24 hours. Confusion about symptoms may be responsible for the difficulty in assessing the actual incidence of serotonin syndrome. Agitation is a cardinal symptom of serotonin syndrome, and it occurs to some degree with most SSRIs. The Hunter Serotonin Toxicity Criteria are recommended for diagnosing serotonin syndrome (Table 6).

Differential Diagnosis
One of the most important differential diagnoses is the symptoms that result from stopping or starting an antidepressant. There have been several articles written about increased bleeding with antidepressants however the overwhelming conclusions were to not stop the antidepressants prior to surgery. After stopping an anti-depressant, flu like symptoms, nausea, and balance, sensory disturbances,
hyperarousal and changes in mood, sleep and appetite are common. When starting an antidepressant or increasing a dose, anxiety, restlessness and irritability for 1-2 weeks is normal. Since serotonin toxicity is drug induced and dose related, an accurate drug history is necessary for diagnosis.

**Treatment**

In general, treatment of serotonin syndrome first involves discontinuing all serotonin enhancing drug(s) and providing the patient with supportive care. This should be done by a trained psychiatrist, not the plastic surgeon. Many mild-to-moderate serotonin syndrome cases are self-limiting and usually resolve within 24 to 72 hours. Resolution of more severe cases will likely take much longer. In such cases, supportive care, drug discontinuation, and administration of medication (e.g., diazepam 5 mg IV to reduce hypertonicity and neurologic excitability) may be sufficient to resolve mild symptoms. Patients with severe symptoms may need sedation, paralysis, and intubation in the intensive care setting.

Administration of drugs with serotonin antagonist properties, such as cyproheptadine and chlorpromazine, have been utilized. Cyproheptadine 4 mg orally (syrup or tablets) is the most widely used antidote for serotonin syndrome. Additionally, because platelets take up and store serotonin, serotonin is essential to normal platelet function. It has been long established that SSRIs, SNRIs, and the tertiary tricyclic antidepressants block the reuptake of serotonin, significantly decrease the serotonin content of platelets and consequently reduce normal platelet function. This effect results in an increase in bleeding during or after operative procedures. Physicians must be aware of this risk. Moreover, the plastic surgeon should not abruptly stop any anti-depressant therapy and this must be discussed with the physician that is prescribing the anti-depressant drugs and drug combinations with the propensity to cause serotonin syndrome, the mechanism of action associated with the syndrome, and common signs and symptoms of serotonin syndrome. The physician should thoroughly examine the patient’s medication history: What medication has the patient taken previously? What adverse drug reactions have been previously experienced? What medications are we planning on using on the patient pre-operatively, intra-operatively, and post-operatively? Preoperatively, the physician should ask about depression and anxiety history, verify current home medication list especially any OTC medications, herals and illicit drug use. Postoperatively, identify high-risk patients, note serotonin enhancing drugs used in the operating room such as fentanyl or methylene blue and maintain a high level of vigilance for any symptom in the PACU. Consider alternatives to common serotonergic agents, such as avoiding redosing ondansetron or avoiding fentanyl administration. An immediate alert of a potential drug-drug interaction should come to mind when providing drug therapy, whether it be for pain relief or for anxiety relief prior to surgery. Lidocaine may lead to serotonin toxicity. We must be cautious of our lidocaine dosing when using local anesthesia and/or wetting solutions. For example, if a patient is on two antidepressants and they are scheduled for large volume liposuction, we should consider lowering the dose of lidocaine. It is essential for the physician to apply knowledge of pharmacology of causative drugs and to carry out a risk-benefit assessment. Awareness of serotonin syndrome and education about its effects are vital. All of these factors must be considered to ensure ultimate patient safety.

**Summary**

Severe episodes of serotonin syndrome are generally considered rare with monotherapy; serotonin syndrome is more prevalent with polymedicine, even across medication classes. The physician should be knowledgeable about individual drugs and drug combinations with the propensity to cause serotonin syndrome, the mechanism of action associated with the syndrome, and common signs and symptoms of serotonin syndrome. The physician should thoroughly examine the patient’s medication history: What medication has the patient taken previously? What adverse drug reactions have been previously experienced? What medications are we planning on using on the patient pre-operatively, intra-operatively, and post-operatively? Preoperatively, the physician should ask about depression and anxiety history, verify current home medication list especially any OTC medications, herals and illicit drug use. Postoperatively, identify high-risk patients, note serotonin enhancing drugs used in the operating room such as fentanyl or methylene blue and maintain a high level of vigilance for any symptom in the PACU. Consider alternatives to common serotonergic agents, such as avoiding redosing ondansetron or avoiding fentanyl administration. An immediate alert of a potential drug-drug interaction should come to mind when providing drug therapy, whether it be for pain relief or for anxiety relief prior to surgery. Lidocaine may lead to serotonin toxicity. We must be cautious of our lidocaine dosing when using local anesthesia and/or wetting solutions. For example, if a patient is on two antidepressants and they are scheduled for large volume liposuction, we should consider lowering the dose of lidocaine. It is essential for the physician to apply knowledge of pharmacology of causative drugs and to carry out a risk-benefit assessment. Awareness of serotonin syndrome and education about its effects are vital. All of these factors must be considered to ensure ultimate patient safety.
This was the second BFIRST/BSSH trip to Tanzania. Our first visit was in December last year, and was essentially a scoping mission. Having received a request for help from Temeke Hospital in Dar Es Salaam (the former capital of Tanzania), BFIRST (the charitable arm of BAPRAS) and BSSH (The British Association for Surgery of the Hand) quickly put together a team comprising Wee Lam (Plastic Surgeon and Chairman of BFIRST), Stephen Hodgson (Orthopaedic Hand Surgeon and Global Surgery Representative of BSSH), myself (Plastic Surgeon and UK National Secretary of ISAPS) and Meghan Whittaker (Orthopaedic Trainee Surgeon).

We established a link with Dr. Amani Malima (Orthopaedic Surgeon and Medical Director of Temeke Hospital, Dar Es Salaam) and Dr. Ed Wayi (Plastic Surgeon and Medical Director of Tumbi Hospital, just outside Dar).

It quickly became apparent that there was a huge need for both Orthopaedics and Plastic Surgery, particularly in relation to lower limb and burn injuries to the hands in children.

Our mission comprised three fundamental aims:

- Teaching and Training (the main strength of BFIRST & BSSH)
- Capacity Building (based on the UK experiences of both BAPRAS and BSSH surgeons)
- Equipment Provision (or, more specifically, logistical support from BFIRST and BSSH, rather than financial support – neither organisation is cash rich!)

It is important to note that we were not there just to treat patients and go home, whether they were complex or simple. BFIRST and BSSH are very keen not to fall into the ‘surgical safari’ trap which many previous surgical charitable missions have quite rightly been accused of doing. We are very conscious that we are in ‘somebody else’s home’, we are not there to ‘take over’. We are very much there to ‘teach a person to fish’ rather than to ‘give them a fish,’ as the saying goes.

This, the second visit, was targeted towards ‘proof of concept,’ by aiming to assess and safely treat patients in the two hospitals, for the first time. We went in gently, allowing the local team to select patients and suggest treatment that would work for them. These patients were quickly assessed and in total...
19 patients were operated on, over 4 days. Four were adults and fifteen were children. The adults were predominantly orthopaedics cases, and the children were plastics, burns contracture cases. However, we were keen to emphasise the concept of ‘orthoplastics,’ i.e. cooperation and coordination between orthopaedics and plastics throughout the patient journey. This is something that we are very used to in the UK, especially with the recent advent of Major Trauma Centres. So, all operations were carried out with both specialities intimately involved.

We treated paediatric burns contractures (mostly in the hands, with Z-plasties and full thickness skin-grafts), but we were also presented with a few complex orthopaedic cases as well as one case of severe post-burns flexion contractures of the groins/hips. The latter case was managed with bilateral islanded, pedicled, myocutaneous anterolateral thigh flaps, possibly the first time this has been done in this way, for this indication in Tanzania (kudos Ed Wayi, Ed Fitzgerald, Foiz Ahmed and Dr Bryceson - amazing work! Please see the pictures).

There were cases we could not treat, such as Apert’s hands and cleft palates – none of this team were trained congenital hand surgeons or cleft surgeons. We don’t do this at home, so we aren’t going to start in Tanzania. We have deferred them to a future visit, which we hope will include congenital hand surgeons, hand therapists and a cleft team.

This trip allowed us to make a basic assessment of the facilities that currently exist in the two hospitals and we feel we made a reasonable start in getting as far as treating mostly straightforward cases, as well as a few complex ones.

We also made a good initial assessment of what is lacking in these units. Basic ortho instruments are needed, neither hospital has intra-operative x-rays, and one of the hospitals will need to ensure that orthopaedic surgery can be carried out in an environment that isn’t compromised by other emergencies such as emergency obstetric cases. Hand therapy, speech therapy and orthodontics for clefts are totally absent. We are hoping to help solve these with time.

We also met with a senior representative in the Ministry of Health of Tanzania, ‘Dr Linda’ (nephrologist and former physician) and with her help, we hope to soon carry out an assessment of existing facilities and potential need in the Dar Es Salaam and Coastal regions of Tanzania. The report from this visit will be presented to the Ministry, and we hope to then target future efforts from BFIRST and BSSH as per the needs identified, as always with the emphasis of enabling local teams to better manage their patients themselves, rather than us, as outsiders, coming in to ‘save the day.’ The ultimate aim is for Tanzania to be able to produce her own ‘Board Certified’ plastic surgeons (no local programme for this exists), with a local curriculum and examination. This should lead to an increase in capacity and hopefully attract the finances to provide more equipment.

So, let’s see: we plan to be back soon, we’ve made a great start, and the project is looking very promising.

If anyone from ISAPS feels that they possess the relevant skills, please do get in touch. nav@realplasticsurgery.co.uk BFIRST and BSSH have other projects, please have a look at those as well, as there is sure to be something that fits your skills. This is highly satisfying work. Life is about variety, and global surgical work can provide all of us with a much-needed change of scenery as well as allowing us to do a lot of good. Please don’t be shy!
HOW YOUR NATIONAL SECRETARY CAN HELP YOU?

As an ISAPS member, you should know that in most countries, you have a National Secretary and in countries with at least 50 members, one or two Assistant National Secretaries. A National Secretary is elected by the members in his or her country when there are at least three members. They are available to provide any information you need about ISAPS programs, educational courses, or benefits of membership. They are your contact with the ISAPS Board of Directors. As the current elected Chair of National Secretaries, I am a voting member of the Board of Directors and can bring any issues presented by our National Secretaries on behalf of their members to the attention of the Board.

Our National Secretaries also approve ISAPS membership applications by confirming that the applicant is board certified in plastic surgery in their country, has been sponsored by an Active or Life member, is a current active member of their national society, and has all the appropriate training required. They can help you create a scientific event in your country which can be an official Course or Symposium, or a program endorsed by ISAPS, after application to the Education Council. They can also support you to have an intensive educational program for residents with an ISAPS Visiting Professor. Moreover, your National Secretary can recommend ISAPS teaching faculty from your country, who can contribute to strengthen the Education Council’s teaching program. Finally, the National Secretary can encourage or facilitate the submission of scientific papers from members to *Aesthetic Plastic Surgery*, the official scientific journal of ISAPS, or to ISAPS News, the official newsletter of ISAPS. Your National Secretary can help you contact colleagues from other countries through our global network of 108 National Secretaries worldwide.

The National Secretary is the official representative of ISAPS of your country. That means that he or she is your voice as an ISAPS member. Please take part actively in the periodic elections and vote to have the colleague whom you consider the most active member to serve your country in ISAPS.

Finally, I would like to congratulate National Secretaries and Assistant National Secretaries elected in 2019 for a four-year term, joining the powerful National Secretary network:

Scott INGRAM, MBBS, FRACS(Plast) (Australia), Heike KLEPETKO, MD, PhD (Austria), Marcelo Eduardo CISNEROS QUINTANILLA, MD (Ecuador), Kaarlo STAHLBERG, MD (Finland), Katrin MUELLER, MD (Germany), George LI, MD (Hong Kong, China), Amer AL MANSORY, MD (Iraq), Francesca DE ANGELIS, MD, PhD (Italy), Andrea MARGARA, MD (Italy), Mazen BDOUR, MD (Jordan), Victor GLOBA, MD (Kazakhstan), Souad TERRAB, MD (Morocco), Berend VAN DER LEI, MD, PhD (The Netherlands), Argentina VIDRASCU, MD, PhD (Romania), Dmitry MELNIKOV, MD (Russian Federation), Vitaly ZHOLTIKOV, MD (Russian Federation), Woffles T. L. WU, MBBS, FRCS(Edin), FAMS(Plast) (Singapore), Reha YAVUZER, MD (Turkey), Naveen CAVALE, MD (United Kingdom), (UK), Mo AKHAVANI, MD (United Kingdom) and Gabriele MIOTTO, MD, Med (United States).

To contact your National Secretary simply go to [https://www.isaps.org/medical-professionals/isaps-organization/national-secretaries/](https://www.isaps.org/medical-professionals/isaps-organization/national-secretaries/)
MESSAGE FROM THE EDITOR-IN-CHIEF

BAHMAN GUYURON, MD - UNITED STATES

I am happy to report that our submissions have continued to increase in spite of our restricted selectivity in accepting articles and considering that this journal no longer accepts articles unrelated to the aesthetic field, except for occasional articles pertaining to breast reconstruction.

You will notice an even greater number of invited discussions by experts, expounding upon the values, positive attributes, and limitations of the given article – especially those articles with potentially controversial topics.

The journal reach continues to grow, and it currently has the largest distribution among aesthetic plastic surgery journals and the second largest among any plastic surgery journals. This means that your submitted articles will be read internationally by the largest group of plastic surgeons interested in aesthetic surgery.

The social media committee, with Lisa Gfrerer’s endless energy, and advice from experienced committee members that include Steve Cohen and Ashkan Ghavami, is starting to make a difference. The articles that this committee deem to be of interest are exposed to the public through this new format. Lisa informs me that we are currently focused on Instagram, and in a short period we have garnered 675 followers, mostly plastic surgeons from all over the world, in both academia and private practice. The committee has been getting a great deal of positive feedback from our authors, stating that they enjoy the posts about their work. The audience has also been enjoying the editorial board member videos.

I am delighted to announce that the Portuguese and Nicaraguan societies have affiliated with our journal. You will see the addition of the Sociedade Portuguesa de Cirurgia Plástica Reconstrutiva e Estética (SPCPRE) on the cover of the next issue, followed by the Asociación Nicaragüense de Cirugía Plástica (ANCP) on our first issue in 2020. Welcome to both societies.
ASAPS dubbed 2018 the ‘Year of the Body’ which speaks to consumer interest in this exploding market segment. In fact, non-surgical fat reduction was ranked as the third most popular non-surgical procedure with 174,244 treatments performed.¹

It should come as no surprise that non-invasive body shaping has shown unprecedented growth in recent years. The new generation of minimally invasive technologies has shown considerable improvement over past generations, with improved patient safety, outcomes, reduced treatment and recovery time, as well as minimal discomfort. The result is that patients of all ages and genders are seeking out these treatments across the globe.

Today’s patients not only want to treat their face, they are very body conscious as well. Driven by social media images, celebrity behavior, and beauty and fashion trends, more consumers of all genders are seeking quick procedures with none to minimal downtime and reasonably low discomfort to get back to their daily lives quickly. The emerging range of laser and light treatments and non-surgical services can now effectively address many common aesthetic concerns.

Although liposuction and surgical procedures may deliver more dramatic and longer-lasting results, many patients are unwilling to undergo surgery, anesthesia, hospitalization and a prolonged recovery. Therefore, offering an alternative and less serious treatment option can fill an unmet need in a traditional plastic surgical practice.

For these reasons, the addition of non-invasive body contouring shows great potential for a busy surgical practice with a robust patient base. It serves as a new modality to offer surgical patients, as well as a viable option for many patients who are resistant to undergoing invasive surgery. In addition, if the system you choose can be delegated to staff, it can serve as an excellent source of passive income. In essence, a plastic surgeon can be in the OR performing a tummy tuck or facelift, while a nurse may be freezing fat cells or toning patients’ muscles under the same roof.

The Business of Body Shaping
The emergence of energy-based systems and innovative technologies has paved the way for more companies to enter the aesthetics sector, so there are many new choices available and more on the horizon. The business side of incorporating energy-based systems into a plastic surgery
practice starts with doing your research so you can make a quality purchase or lease and integrating it into your current service menu. It is highly recommended to speak with several colleagues who have direct experience with any devices you are considering to get the true story.

Body treatments have become more comfortable over time and most energy-based devices have greatly improved patient safety features. The ease of use of these devices has also advanced and results are more reproducible, which allows for most treatments to be delegated to physician extenders. Depending on your local regulations, this may include a medical assistant, medical aesthetician, LPN, RN, NP or PA. If only an MD can perform the treatments, your cost per treatment will rise substantially.

Key Considerations to Know Before You Buy:
- Average fee charged per treatment in your market
- Brand recognition
- Capital equipment cost
- Clinical evidence and research
- Comfort and safety for patients
- Competitive advantages
- Consumables per treatment or area
- Direct to consumer marketing
- Ideal patient selection
- Maintenance contract, warranty fees
- Manufacturer or distributor support
- Number of devices sold in your market
- Number of treatments suggested
- Regulatory status in your market
- Size/dimensions of the device
- Sizes and shapes of available handpieces
- Training or certification required
- Who can perform treatments in your market

From a safety standpoint, the manufacturer or representative should be able to provide all current information on the system's clinical research, physician experience, and patient satisfaction. Reliable brands that are known to consumers in your market through their popularity and marketing programs offer the advantage of attracting new patients faster due to critical name recognition.

The system you select should fit into your current patient demographic to bypass substantial marketing expenses to bring new patients into the practice. If you choose the wrong system for your practice, it may end up being an expensive coat hanger or take up coveted floor space in your treatment rooms.

If you plan correctly, the system could ideally be used on a consistent basis from introduction. With multifunctional systems, you may be able to use them as a stand-alone treatment or with other devices to obtain superior outcomes. Many practices that are serious about body shaping may bring on multiple devices that can be utilized in different ways, and work together synergistically to establish a body shaping center theme.

For the most dramatic and lasting results, liposuction or more invasive surgery may be the preferred option. However, there has been a sea change in the mindset and goals of consumers, resulting in slower growth in the surgical category. Although non-surgical or minimally invasive treatments may not be the right fit for obese patients or patients with excessive skin laxity, a large percentage of consumers are willing to accept a lesser result from a lesser procedure.

If you are seeing patients who are candidates for non-invasive body contouring and have the means to have it done, you may consider bringing on a GP or other MD to perform the treatment, or a physician extender to work per diem or part time. This will enable you to keep those patients in your practice rather than losing them to another practice that is unlikely to refer them back to you for surgery in the future.

The two critical questions you should ask before buying a system are: “How many treatments do we need to perform to pay off the system?” and “How long will it take us to pay off the system?”

The Body Shaping Market
Advanced technologies enable many wavelengths and energies to be used on all skin types and skin colors. More practices are expanding their treatment menu as myriad effective options for fat reduction, cellulite treatment, and skin tightening continue to evolve. Body shaping encompasses a wide range of procedures that target weight loss, fat reduction, contouring, toning, firming and cellulite reduction.

Continued on page 38
Four Body Treatment Categories

- **Skin tightening**
  Common areas treated: Abdomen, arms, thighs, knees
  Modalities: Radiofrequency, ultrasound, microneedling RF, ablative/non-ablative lasers, combination wavelengths.

- **Fat reduction, body contouring**
  Common areas treated: Abdomen, hips, thighs, knees, buttocks, back, arms, axillary folds, chest (men), submental
  Modalities: Heat (radiofrequency), cold (cryolipolysis), ultrasound, lasers, injection lipolysis, combination procedures.

- **Cellulite reduction**
  Common areas treated: Thighs, buttocks, knees, abdomen
  Modalities: Subcision, acoustic waves, poly-L-lactic acid (PLLA), RF

- **Muscle toning**
  Common areas treated: Buttocks, abdomen, upper arms, thighs, core, calves
  Modalities: Electromagnetic energy, multi-directional stimulation

A good way to differentiate your practice is by adding an energy-based non-invasive system that can tighten lax skin in conjunction with fat reduction to offer additional benefits. Body shaping encompasses a wide range of procedures that target weight reduction, as well as toning, firming and cellulite reduction. Skin-tightening procedures address skin laxity and contour defects on the face as well as the body.

Actual fat loss will vary from person to person, results are usually not immediate, and multiple treatment sessions are typically required. Whereas the ideal candidates should be at a healthy weight with localized fat deposits, these treatments are commonly used on patients with a higher BMI, of all sizes, shapes and conditions successfully.

Each system comes with its own limitations based on the energy and configuration of handpieces for maximum efficiency. For example, some systems may only offer handpieces that are too large for small body areas like upper arms, submental and knees. It is important to know before you buy exactly what conditions and areas the system will treat at that moment, not just what is planned for the future. Most non-invasive systems mainly destroy fat cells and are not intended for serious skin tightening, so you may need more than one device to treat a wider range of patients.

Consider which areas your current patients are most interested in treating and what their comfort level is vis-à-vis downtime, discomfort, and price point. It can be risky to bring on a new device with the sole purpose of attracting a brand-new segment of patients, unless you have a huge marketing budget. Ideally, you should already have existing patients to target first, and then you can focus on recruiting new patients over time.

As many as 80-90% of post-puberty woman will have cellulite⁴, which accounts for a vast number of patients who have a potential interest in this treatment category. Cellulite patients come in all shapes and sizes; even skinny women can present with dimples and irregularities. Cellulite reduction results have been inconsistent historically, with many treatments focusing mainly on surface irregularities, but new therapies are changing the way practitioners approach cellulite.

Each patient represents a unique set of circumstances, which can make the consultation process especially challenging. When treating cellulite, it is critical to be honest with patients and not to overstate claims. Every woman has heard of miracle cures and most have a healthy degree of skepticism about new treatments. Let patients know up front what

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Figure 3 - Before and 12 weeks after 1 truSculpt iD® treatment (Cutera®). Procedure by Stephen Ronan, MD.
they can expect, how many treatments they will need, and build in a maintenance program from the outset. Advise patients of the fact that cellulite is chronic, it often gets worse with age, and it requires a multifactorial approach to keep it under control. Consider partnering with allied professionals to offer patients referrals to specialists in nutrition and fitness to provide a complimentary service for patients to help maintain their results for longer.

**Patient Compliance**

Patient selection is a critical success factor in everything you do. Managing patient expectations with body shaping technologies should also be a top priority.

Although going in for a 15 to 25-minute treatment seems like a quick fix for stubborn fat pockets, it can be challenging to keep patients on track and doing their part. It is important for the staff to emphasize that if they do not watch what they eat or keep up with a consistent fitness routine, the results they achieve may be in vain. If a patient does not comply with their own treatment plan, they will not be satisfied and will likely blame the surgeon.

Therefore, just as with liposuction patients, weighing and measuring patients and taking pristine photographs before every treatment session is essential to track their progress.

**Expanding Applications**

If you find that patients are asking about services that you do not yet offer, and you routinely refer them to colleagues and/or competitors, you are essentially leaving money on the table. Thus, it makes good business sense to take a hard look at how to keep those patients in your practice.

Try analyzing what you already have in your clinic that may be underutilized. For example, if you already own a multi-platform device that targets brown, reds, hair, pigmentation, and acne, you already have the ability to do off-face treatments without incurring additional costs. The first areas to expand laser therapies tend to be the chest or décolleté and the hands. For example, if you are currently doing IPL or skin tightening treatments for the face, apply the same treatment for other areas where patients may have discoloration, crepey skin texture and other signs of sun damage and aging skin.

Aesthetic patients are not only conscious of the skin quality on their face and neck; they also want to improve the aging skin of the body. This treatment category offers an opportunity to convert current patients to come back to your practice regularly for other treatments that can be delegated to staff.

As the body shaping market continues to evolve, many new modalities are under development. Among future treatments that are expected to come to market as early as 2021 in the US, for example, is an injectable Collagenase Clostridium Histolyticum (CCH) for the treatment of cellulite in the buttocks. This substance breaks up the collagen structure of fibrous septae that cause cellulite.

In 2020, in many markets it may become essential for plastic surgeons to incorporate non-surgical, minimally invasive and non-invasive body options into their treatment portfolio to remain competitive and ensure future growth. Therefore, investigating new opportunities to help expand your practice, increase patient retention and encourage new patients to choose you over competitors is a smart strategy.

*The author is a speaker for BTL Aesthetics® and a consultant for Cutera® Inc.*
GLOBAL PERSPECTIVES

ESTHETIC ADIPOLYSIS OF THE FACE, NECK AND BODY

Introduction
While volume deficiencies of the face can easily be corrected by injecting absorbable fillers or permanent micro-lobules of fat and adipose and stromal cells, volume excesses are more difficult to correct, especially if they are small and located in delicate visible areas.

Adipolysis
An approach that we use is to deliver a perfectly stable, calibrated current (Direct Pulsed 0.3/5.3 at 20 W, 27 W or 38W, in the Coag. function) to the subcutaneous tissues, immediately beneath the dermis or in a deeper position, by means of a partially insulated Electromaniple of 0.10 or 0.15 mm in diameter (Figure 1).

The programmed timed surgical current generated by the Timed apparatus (Korpo) shrinks the subcutaneous tissue,
without causing the tissue retraction that occurs after liposuction, without incisions, without stitches and without skin scars.

Adipolysis is a percutaneous aesthetic technique; unlike surgery, it does not require skin incision or a sterile field and does not give rise to fibrosis or scarring. If necessary, the procedure can be repeated after two months in order to perfect the result. Adipolysis is a rapid, simple and inexpensive way to correct all small volume excesses in the face and neck, many of which cannot be satisfactorily corrected by means of the traditional techniques. Adipolysis requires an anesthetic all around the area to be reduced, as the technique acts exclusively through direct contact with the adipocytes. The stromal tissue is not damaged. Normally, 50 to 100 passages of the electrode are performed.

Applications
The applications of Adipolysis are numerous: the elimination of malar pouches (Figure 2), the reduction or symmetry of nasolabial folds (which enables us to considerably reduce the amount of filler that will need to be injected later), the reduction of drooping cheeks, and the correction of double chin.

Adipolysis has proved particularly useful in volume correction immediately before elastic MACS and neck-lifting procedures, and in correcting defects that remain visible after liposuction (Figures 3-4-5).

Conclusion
Adipolysis is well tolerated and the results are much appreciated by patients. Volumetric imperfections are corrected by means of a precise dermatological treatment that leaves no residual signs.

At the end of the 1970s, programmed diathermosurgery was invented and the first programmable diathermocautery was made (Capurro 1979, USA patent US4352357). The author is a shareholder in the Korpo Society that produces the Timed apparatus.

Figure 2 - Adipolysis easily corrects malar pouches. Any volumetric deficits are corrected by means of Adipofilling.

Figure 3 – A neck with a prominent hyoid bone is a familial esthetic problem and is difficult to correct by means of traditional lifting procedures with dissection. In this case, the result of liposuction and the implantation of an elastic thread between.

Figure 4 - Adipolysis corrects small excesses of fat after liposuction of the knees.

Figure 5 - Adipofilling corrects the imperfections caused by liposuction of the abdomen.
Noninvasive and minimally invasive procedures are growing year after year. The noninvasive concept in aesthetics is proven and works. In most cases, it is a complement, not a replacement, for traditional surgical procedures.

Growing investment in research and development have made possible new technologies to treat different pathologies. Patients are informed and eager to try new alternatives, especially as they are less invasive and patients accept moderate results.

Noninvasive fat reduction was the third most popular treatment in 2018 after Botulinum toxin and fillers. Cryolipolysis was the first technology to address NFSR being the most effective and proven. Fat cells are more sensitive to cold than surrounding tissue.

**Indications**
Fat cell numbers are determined in adolescence. If a patient gains or loses weight the lipid content in the remaining adipocytes may vary, but the number of fat cells remains constant. Cryolipolysis destroys fat cells. The ideal patient is one with normal body mass index and localized fat. Cold is delivered with hand pieces that adapt to different body areas. The operator must carefully assess the patient’s needs and indicate the right combination and location of hand pieces. Once a procedure is done, two or three months are needed to complete clearance of dead adipocytes and view results. After that period of time, more treatments can be done if needed.

**Personal experience**
As a result of a five-year experience, 1082 patients were treated with a female/male ratio of 87/13%.

**Body areas**
- Flank: 39.4%
- Upper Abdomen: 18.2%
- Lower Abdomen: 12.1%
- SubMental: 12.1%
- Chest: 6.1%
- Upper Back: 6.1%
- Arms: 3.0%
- Inner Thigh: 3.0%

The overall satisfaction rate was high or very high and results are consistent and accepted. It is very important to assess expectations in the first interview and to be very conservative with expected results. We must explain that we are not speaking of a slimming machine, but of a noninvasive method of reducing localized fat.

The patient must be encouraged to maintain a healthy lifestyle and not to consider the treatment as a miracle machine in order to keep eating. On the contrary, they must be encouraged to start a diet and improve physical activity.
Results

Clinical Considerations

During the treatment - Feeling of pinching and pricks, intense cold, tingling, stinging, pain and cramps. All these feelings disappear as the area becomes numb.

Immediately after treatment - Redness and firmness, temporal blanching or peripheral hematomas. Tingling.

Figure 2 - Cryolipolysis Results - ABDOMEN

Figure 3 - CoolSculpting® Results - ABDOMEN

Figure 4 - Cryolipolysis Results - ABDOMEN

Complications

In my experience, I saw only a few cases of late onset pain, a neuritic localized pain successfully treated with gabapentin. There is a rare complication called paradoxical adipose hyperplasia with an incidence of 0.0051%. I have not seen it in my patients, but was referred four patients to be treated with conventional liposuction. I believe it is important to let the patient know about this rare occurrence.

A few patients, even after a very conservative consultation, were not satisfied with the results. Some of them benefited from unipolar radiofrequency while others needed to repeat the cycles.

Conclusion

Noninvasive fat removal has been an important addition to my practice, giving me the opportunity to treat patients I would not have reached as well as increasing surgical ones. Given the popularity of this treatment among clinical specialties, plastic surgeons must consider this option in order to keep up to date with the market.

References


2. Late Onset Pain Associated with Cryolipolysis Procedures. Mathew Avram, MD, JD, Jeffrey Dover, MD, FRCP, Steven Horowitz, MD, and Michael Kaminer, MD, June 16, 2011

3. Single treatment cycle at −10°C for 60 minutes. Optional second treatment delivered 6 weeks after initial treatment at investigator’s discretion. Patient lost 1.4 lbs from baseline; †Patient reported; ‡p<0.0001.


5. Four patients experienced numbness in treated area after the formal study period, but this resolved without need for additional therapy; †Identified by 2/3 of reviewers.


7. Paradoxical Adipose Hyperplasia After Cryolipolysis. H. Ray Jalian, MD1,2 Mathew M. Avram, MD, JD,2,3 Lilit Garibyan, MD, PhD,2,3 Martin C. Mihm, MD,4 and R. Rox Anderson, MD2
A variety of energy-based devices is available for non-surgical body contouring. The energy modalities include radiofrequency heating, non-thermal focused ultrasound, high intensity focused ultrasound, low level laser therapy, and external laser lipolysis. The many choices can be confusing and some devices lack clinical studies and proven efficacy, some have moderate efficacy, but poor patient tolerability, and some show occasional efficacy but poor reliability. For non-surgical patients, the choice for safe, effective, and reliable treatment with high patient satisfaction is CoolSculpting®.

CoolSculpting® is based on cryolipolysis technology which utilizes controlled cooling to selectively target undesirable subcutaneous fat. CoolSculpting® by ZELTIQ Aesthetics, an affiliate of Allergan plc, is a popular non-invasive body contouring procedure that brings in new patients asking for the procedure by name.

Grant Stevens first described the clinical and commercial experience at his practice. The article revealed the new patient population for non-surgical body contouring and how it could grow a plastic surgery practice. The data showed that CoolSculpting® is a gateway procedure, particularly for male patients, and these new patients remained with the practice for additional services and goods, such as skin rejuvenation procedures, injectables, laser hair removal, and skin care over subsequent years.

CoolSculpting® received FDA clearance in the US for non-surgical reduction of fat in the flank area in 2010, abdomen in 2012, thighs in 2014, submental area in 2015, back fat, bra fat, and underneath the buttocks in 2016, upper arms in 2016, and submandibular area in 2018. CoolSculpting® is approved for fat reduction in over 70 countries worldwide – throughout Europe, and including China, Canada, Brazil, and Australia.

The CoolSculpting® System consists of a control module and an array of applicators for contouring different areas of the body. There are several vacuum applicators that pull the targeted tissue into a contoured cup or apply surface cooling from parallel panels. The vacuum applicator sizes and cup curvature accommodate a range of patient sizes and treatment areas, such as abdomens and inner thighs. A non-vacuum conformable surface cryolipolysis applicator allows treatment of fibrous, non-pinchable fat in areas such as the lateral thighs.

Some countries have the first-generation parallel plate applicators that treat tissue in 60-minute cycles. The second-generation applicators from CoolSculpting® are the CoolAdvantage™ family, featuring a contoured cup that offers greater comfort and shorter treatment times. The CoolAdvantage™ cup geometry maximizes tissue contact with the cooling surface, which increases treatment efficiency. The lower temperature protocol and applicator geometry reduce treatment time from 60 to 35 minutes. The targeted tissue seats fully against the cooled cup and the reduced skin tension results in greater patient comfort.

With the interchangeable contours, one applicator can treat a variety of body areas, including flat areas such as the inner thighs and arms, curved contours such as the abdomen, and sharply curved sites such as the flanks.
The 9-year Coolsculpting® experience at Saltz Plastic Surgery has been very satisfactory with patients, staff and revenue. We have a total of 4 systems, 2 in Salt Lake and 2 at the Park City office. We average over 36 cycles per week with more than 8500 patients treated. It is popular with both men and women and like Grant Stevens’ experience, it has increased the number of men and the number of aesthetic neophytes coming to the clinic. It is a safe, effective, affordable alternative to surgical fat removal. Most importantly the treatments are delivered by my staff while I am busy in the operating room.

**CS Applicator Portfolio**

**Patient Treatment Examples**

**References**


6. Klein KB, Bachelor EP, Becker EV, Bowes LE. Multiple same day cryolipolysis treatments for the reduction of subcutaneous fat are safe and do not affect serum lipid levels or liver function tests. Lasers Surg Med. 2017 Sep;49(7):640-644.


The author is a member of the Coolsculpting Advisory Board, but has no financial interest in any product of company named in this article.

GLOBAL PERSPECTIVES: FUTURE THEMES

March 2020: Abdominoplasty
Deadline: January 15

June 2020: Breast Augmentation
Deadline: April 15

To contribute an article of 500-750 words, please forward it to ISAPS@isaps.org with the subject line: ISAPS NL Series. This should be a non-referenced opinion piece of several paragraphs giving your observations and perspectives on the topic. What do you do in your practice? What unique approaches do you use? What do you see your colleagues doing in your country or region? Photos are welcome, but must be high resolution JPG files attached, not embedded in your article. Please include photo captions.

Articles must be submitted as WORD documents.
SHORT CASE STUDY

BODY CONTOURING IN THE MASSIVE WEIGHT LOSS PATIENT

BABIS RAMMOS, MD, FACS - UNITED STATES

Introduction
There has been a dramatic rise in obesity over the years. Accordingly, weight loss surgical procedures and diet and exercise programs have gained popularity. Body contouring in the massive weight loss patient requires careful perioperative planning and recognition of changes that occur with weight fluctuations. Massive weight loss has dramatic effects on the breast mound with extensive deflation of the entire breast, ptosis and loss of projection. Patients present with Grade II or III ptosis, with vertical and horizontal skin excess. The lower breast area is relatively full, and the nipple-areola complex requires a long transposition. There is also flattening of the superior pole, and most of the breast parenchyma is below the inframammary fold. Patients also present with moderate to severe amounts of skin excess of the abdomen with poor elasticity and stretch marks.

Goals and expectations of the patient are discussed in detail during consultation, and a thorough personal and family history is performed.

Markings
Augmentation Mastopexy and Fleur-de-Lis Abdominoplasty

The patient is marked in the upright standing position, and the following markings are made:

1. **Augmentation Mastopexy**
   - The new nipple location is marked by transposition of the inframammary fold to the front of the breast, at the level of the meridian.
   - The top of the areolar opening is marked 1-2 cm above the new nipple position. With the use of a keyhole breast reduction marker (42 mm), the areola opening is marked.
   - The breast is displaced, first laterally and then medially. Vertical lines are drawn from the lower portion of the new areola to a point 1 cm above the inframammary fold.
   - Measurements are made bilaterally, from sternal notch to nipple, and from midline to ensure symmetry.

2. **Fleur-de-Lis Abdominoplasty**
   - Patient is asked to pull upwards on the lower skin excess and the lower incision is marked, at the level of the symphysis pubis, approximately 1/3 inferior to the level of the hairline.
   - A vertical line is drawn from the xiphoid to the commissure. Incision length is determined by the laterality of the patient’s skin laxity. The upper incision line marking for the skin resection pattern is only an estimation.
   - An additional proposed vertical excision pattern is marked.

Technique
The patient is brought to the operating room and placed in the supine position on the operating table with the arms extended up to 90 degrees and well secured to the arm boards. Both shoulders should be at the same height. The patient is sat up to evaluate the preoperative status. The
operation commences with the breasts. An augmentation mastopexy is performed using the Wise pattern technique with a short horizontal scar. A silicone implant is used in the ptotic breasts to achieve superior pole fullness. The incision is made through the mastopexy resection pattern and a subpectoral pocket is created. The tester gel implant is placed, and temporary tailor tacking of the skin is performed. The formal implant is then placed using the Keller funnel and the no touch technique, and the pocket is closed. The nipple areola complex is left in situ, and the intervening skin is deepithelialized. A superior pedicle is created, and appropriate vertical and horizontal amount of tissue is removed, and recorded. The lower areola to inframammary fold distance is chosen on average at 7 cm. Vertical pillar sutures are placed, and the wounds are closed in layers. Attention is then turned to the abdomen. The initial part of the procedure proceeds as a traditional abdominoplasty. The corners of the proposed vertical excision are grasped with towel clamps and then crossed over each other with equal tension at the low midline. Towel clamps are used to approximate the vertical resection pattern and then bimanual palpation is used for confirmation. The skin is then incised sharply and the flap margins are divided with cautery. After conclusion of the procedure, the patient is placed again in an upright seated position for final appreciation.

Result
This 33-year-old female had significant breast ptosis and abdominal skin redundancy following massive weight loss of approximately 200 lbs (Figure 1a,b). A superior pedicle augmentation mastopexy was performed, with smooth round full projection silicone implants. This was followed, at the same operative setting, by a Fleur-de-Lis abdominoplasty. She was pleased with her postoperative outcome (Figures 2a,b).
VISIT AN ISAPS expert

ITALY

RAJAN GARACH, M.CH – INDIA

Ever since I became an ISAPS member in 2018, the concept of “Visit an ISAPS expert” has fascinated me. For those who aren’t familiar, ISAPS describes itself as “An open forum for the exchange of aesthetic plastic surgery knowledge worldwide.” And it truly lives up to this. As an associate member, I took advantage of the ‘Visit an ISAPS expert’ programme. This is designed for young trainees to visit established and reputed surgeons around the world, as an eye-opener, to augment their skills and increase their knowledge of aesthetic surgery. The environment of training and teaching that has been curated by this Society along with the enthusiasm and dedication of every expert amazes me!

I first heard Dr. Gianluca Campiglio during the ISAPS course in Kolkata, India in January 2019. His ease of describing his methods with the use of detailed, precise videos caught my attention. When I got an opportunity to visit Milan in the fall of 2019, I had no hesitation in contacting Dr. Campiglio. His reply was prompt and my tickets were booked.

I found him to be a warm and welcoming person. Before every surgery, he would give me a brief summary of the patient and guide me through his method of markings. Though I didn’t speak much Italian, he made it a point to translate what the patient was saying so that I could follow. During the surgery, he would clearly demonstrate the essential steps. These small, but thoughtful gestures helped me learn something new in each surgery.

It was extremely kind of him to allow me to attend his consultations thus enabling me to pick up nuances for interaction with new and old patients. I got to see several of his operative results and be involved in the post-operative care of the patients. Even with decades of experience under his belt, his down to earth approach and critical view with respect to his results, is something each budding aesthetic surgeon needs to learn.

I saw a variety of surgeries like facial rejuvenation (upper and lower eyelid blepharoplasty with his method of brow fixation), breast augmentations and mastopexy (with and without implants). Rhinoplasty, primary and revision formed a significant bulk of his operative list.

On the days that Dr. Campiglio was not operating, he spoke to his colleagues who willingly allowed me to enter their operating rooms and consultations. This enabled me to learn other facets of aesthetic surgery like hair transplantation and breast oncoplasty.

Several of these things may seem routine for those reading this, but in my country, exposure to aesthetic surgery during residency is negligible. We learn from shadowing senior surgeons or during ISAPS seminars and courses. Thus, this kind of teaching goes great lengths in boosting our confidence and enhancing our skill set.

Based on my experience, I would strongly recommend all residents and junior plastic surgeons desirous of enhancing their knowledge in aesthetic surgery to avail themselves of this fabulous opportunity that ISAPS provides and become a member, if they are not already. It has been a professionally enriching journey and I thank ISAPS for making this possible.
WHERE IN THE WORLD
TRAVELS THROUGH THE MAYAN CIVILISATION

PETER SCOTT, MD – SOUTH AFRICA
ISAPS Historian

As ISAPS Historian, I have had a love of history and archaeology of ancient civilisations for many years and have pursued this interest around the world. Winston Churchill in a speech to the House of Commons in 1948 said “those that fail to learn from history are condemned to repeat it.”

Starting in 2000, a campaign to select the seven Modern Wonders of the World started and 100 million people, including myself, voted.

Many years ago, as part of a teaching faculty, I got to see the Great Wall of China and then on an independent trip, Machu Picchu in Peru. The other five came courtesy of ISAPS: the Taj Mahal in India on an ISAPS Official Course; Christ the Redeemer in Brazil during an ISAPS World Congress; Petra in Jordan as part of an ISAPS Symposium in Eilat, Israel; the Colosseum in Rome, Italy while at an ISAPS Board Meeting and finally Chichen Itza in Mexico.

My recently concluded study tour of Mayan culture was organised by Andante Travel with David Drew, archaeologist and author, and Francesca Moo, Local Mexican guide of Mayan decent, both extremely knowledgeable about anything Mayan.

The Mayan lands cover the whole of the Yucatan peninsula and much of the Mexican States of Chiapas and Tabasco, all of Guatemala and Belize and even parts of Honduras and El Salvador.

There is evidence of hunter-gatherers entering the area from 10,000 BC to 1800 BC which was the start of the Pre-classic period and the real growth seems to be from 500BC when the first great stone pyramids were constructed. Between 400 BC and 250 AD major architectural sites were created and during this classic period hieroglyphic writing emerged. The dynasties that came after this, between 250 AD and 900 AD, used these monuments to commemorate their achievements and in reality the height of Mayan civilization was in the 8th century AD with a population of up to ten million. There was farming in a sustainable fashion, with attention to soil changes and climate changes, and as time went on they covered most of Meso-America from coast to coast and were involved in long distance trade using large canoes as they interacted with other civilisations in the area.

For clarity, the Olmec were the first society to emerge at the first millennium BC and did influence the start of Mayan civilization. The Mayan language is still present today with different dialects descending from a “Proto-Mayan” ancestor from 2000BC.

At the end of this classic period, the Mayan civilization collapsed due to a combination of climate change, over usage of natural resources and no further construction and carving of records of Mayan rulers. At that stage, there

Continued on page 52
was very little jungle although the jungle has certainly crept back in since that time and the beauty of travelling in the Yucatan in Mexico are the pyramids rising up through the jungle tree canopy.

For the sake of completeness, the Aztec civilization came to prominence around 1325 and it was this group that became the dominant power in the Valley of Mexico in 1420. They were the Mexicans under Moctezuma who interacted with the Spanish conquerors – who managed to conquer them with a mixture of warfare and germs such as the great pox, small pox and measles.

Our tour started in Mexico City with a visit to the Aztec Templar Mayo in Mexico City and a worthwhile day visit to the National Museum of Anthropology (Figure 1) which I rate one of the best I have seen in my extensive travels and well worth a visit. We flew down to Tuxtla Gutierrez on the edge of the beautiful Chiapas Highlands and the colonial town of San Cristobal De Las Casas. This was the start of twelve amazing days visiting eleven Mayan sites with in- depth site visits and lectures.

The first visit was to Toniná which is in the lush Ocosingo Valley between the Chiapas Highlands and jungles surrounding Palenque. Here we were exposed to our first ball court (Figure 2) and our first time climb of a pyramid. We moved onto Palenque which I regard as the best site of the visit. These are also on the lowest slopes of the Chiapas Highlands and was a lost city first visited in 1746. The famous explorers, John Lloyd Stephens and Fredrick Catherwood, described it in 1830. The iconic building is the Temple of the Inscriptions which contains the tomb of Pakal (AD 615 - 683) only discovered in 1952 (Figure 3).

Next was Bonampak with remarkable preserved painted murals (Figure 4) and on by motor launch to Yaxchilan with its famous carved lintels, a number of which now reside in the Mexican Gallery of the British Museum courtesy of Alfred Maudsley who brought them to London in the 1880’s.

Of interest here is the well-preserved ball court, the largest of which is at Chichen Itza. The game was played using seven on a side, sometimes with captured prisoners. The court represents the cosmos and the men are divine forces...
moving the stars symbolised by the ball. There are sloping walls on each side with a large stone ring on each wall, although the object seems to be to move the ball from one end to the other using either elbows, thighs or the pelvis to propel the ball. It seems that the losing team were sacrificed by decapitation which would not sit well with our sportsmen of today. This is often depicted in the friezes surrounding the courts (Figure 5).

The next must-see site is Uxmal, a complex and harmonious example of Puuc architecture. These sites are in an area of poor water and very few cenotes, the natural water cisterns and in fact water storage and man-made cisterns (chultunes) were built by them. The Pyramid of the Magician stands out from the jungle and had five phases of construction between the sixth and tenth century AD (Figure 6) each stage building a new temple on top of the previous one. This is an important site to spend time as some of the structures can be climbed, friezes seen up close and one of the highlights being the Jaguar Throne carved as a two headed jaguar (Figure 7). The facade of the Pyramid of the Magician shows a Chac Mask with large rectangular eyes and a curly moustache.

The major highlight of this tour was Chichen Itza where ongoing excavations are still happening. It has the largest of the ball courts and the El Castello which is the final wonder of the world on my bucket list (Figure 8). Symbolically it has 91 steps on each side making up 365 steps with the platform on the top. Large crowds gather at the Equinox to see the shadow moving down the stairs as if this were a serpent. This site also contains very large cenote where sacrifices were performed. In reality, Chichen Itza has no original architecture and there is no proof whether it was built by native Mayan people or outsiders such as the Toltecs from central Mexico. Chichen Itza began to decline soon after 1000 AD and appears to have gone in to decay in about 1220 AD.

Tulum, our final site on the coast near Cancun, perhaps remained as the final stronghold of the Mayans where large ocean going canoes set off to trade and where the early Spanish landed.

This is but a brief introduction to the Mayans and I hope that this will stimulate the reader to undertake their own journey of exploration.
How and why did you choose plastic surgery as a career? Have you changed the focus of your practice over the years? What do you like best about being a plastic surgeon?

Shortly after starting medical school, I felt that I wanted to become a surgeon. I was more prone to the direct treatment of the patient, a more straightforward way of acting. In my fourth year of medical school, I had contact with plastic surgery faculty and I really fell in love with the specialty. I was astonished by the wide scope and the finesse of this aspect of surgery so I started participating as a volunteer in the plastic surgery urgent care area and was lucky enough to start assisting and seeing, in my last year of medical school (my 6th year,) my mentor and master, Dr. António Paralta de Figueiredo, in the military hospital.

I worked with him for more than twenty years and he taught me most of what I know today. As he worked a lot in aesthetic surgery and I liked this field because of the artistic side of the specialty, I gained experience and pleasure in this area. Over the years, I changed the focus of my activity to aesthetic surgery mainly, although I continue to work as Head of a Department of Plastic Surgery in a Public Hospital close to Lisbon - Hospital Garcia de Orta.

What is beautiful about plastic surgery is that you cover almost the whole body during your treatments, it requires creativity, and there is always a bit (or a lot) of art in what you do.

You are well-known internationally in plastic surgery. Can you tell us what interests you have outside your professional practice? Outside plastic surgery, I have a lot of interests but little time to develop them. One of my oldest interests is dancing and even nowadays, I try to attend dance classes once or twice a week (mostly Latin American and African Music). All my life, I participated in several sports, but with the shortage of time I had to quit a few.

As I was born in the South of Portugal, in a wine producing area, I appreciate very much fine wines, mostly red wine. Another interest is yoga.

Do your outside interests influence your surgery in any way? Do you think that these other interests add anything to your work, or make you different from other plastic surgeons? I believe that outside interests can be very important for the physical and psychological stability of the surgeon. I started yoga four or five years ago after a very sad event
in my family and I can tell you that it helped me a lot for my internal well-being and stability. Also, after a hard day working, going to dance class releases your body and mind with music - it is worthwhile!

You recently became the President of the European Association of Societies of Aesthetic Plastic Surgery (EASAPS). Where do you plan to take this organization in the future? EASAPS had its 12th Anniversary this year and by keeping in mind the basics introduced by our founder, Ulrich Hinderer – “to organize, promulgate and disseminate an interchange of knowledge and ideas . . . for the benefit of plastic surgeons practicing aesthetic surgery” – we set out to prepare the society for the next ten years and beyond, with a long-term vision in mind.

I have the responsibility, as the President elected for the next two years, with my team, as a non-profit international non-governmental organization, to promote the European spirit of diversity, along with friendship of European plastic surgeons dedicated to aesthetic surgery, while serving and promoting the national societies.

Following the path of the previous presidents of the society, we defend our specialty of plastic, reconstructive and aesthetic surgery and believe it is one unified specialty. In Europe, we intend to work closely with other European societies such as ESAPRAS and EURAPS and internationally we intend to work very closely with ISAPS, the leading society of aesthetic plastic surgery worldwide.

Our purpose is to serve European aesthetic plastic surgeons and their national societies within our niche: information, collection and distribution in Europe.

As a society our core values are:
• Serve our member societies and individual European plastic surgeons
• Collect and distribute relevant information, concerning Europe mainly
• Promote patient safety
• Promote good aesthetic plastic surgery training
• Keep high ethical standards

The European spirit is an integral part of our society’s vision. We need to stand shoulder to shoulder and defend our specialty from untrained practitioners. Europeans are used to compromise and finding consensus in difficult situations. We welcome diversity and see it as an opportunity to see things from a different angle. Also, there are specific issues for Europe such as training centers, VAT, and GDPR that must be discussed among us.

You have served as our National Secretary for Portugal for many years. What have you learned by being part of this special ISAPS family? Twenty years ago, my teacher and head of the department during my Residency, Prof. Dr. Boléo Tomé, from whom I learned a lot and I thank him for his marvelous teaching, as a man and as a professor, offered me the possibility to join ISAPS (he was National Secretary for Portugal at that time), and since then I have been involved with ISAPS.

Some years ago, I was elected ISAPS National Secretary for Portugal, by recommendation of Prof. Boléo Tomé, and since then I have been part of a new family.

After being in several positions as a member, as a committee chair, and as a National Secretary I have seen that it is marvelous to join people who have the same ideals as you, that we believe in aesthetic plastic surgery, that we are worried about our patients’ safety, wherever they are, that we move ourselves through the world fighting for our ideals and for our patients.

ISAPS, and especially the family of National Secretaries representing their countries, turned out to be a second family to me. When colleagues ask me what I have learned, I simply answer; “I defend my ideals and my patients and wherever I go in the world, I have a friend who has the same ideals and whom I can count on,” – a friend in every port.
JOSEPH-FRANÇOIS MALGAIGNE: SURGEON, HISTORIAN, JOURNALIST, POLITICIAN AND POLEMIST (1806-1865)

For orthopedic surgeons, the name of Malgaigne is generally associated with a special type of forearm fracture (also named the Monteggia fracture), to a vertical fracture of the pelvis, to shoulder fracture and to a method of foot amputation. For anatomists, the line of Malgaigne, also called the Poupart’s ligament, is the ligament joining the iliac crest to the pubis; the triangle of Malgaigne is the space containing the bifurcation of the common carotid artery. For plastic surgeons, Malgaigne may be recalled for his method of cleft lip repair. For historians of medicine, the name of Malgaigne is praised for his outstanding contributions to the history of surgery from the most ancient times. However, for his colleague, Jules Guérin, Malgaigne was the man who attacked him publicly and undermined his controversial theory on the cause of congenital deformation of the skeleton. Who was in fact this polyvalent surgeon of the 19th century?

The Surgeon
Son and grandson of provincial surgeons, JF Malgaigne completed his medical studies in Paris, where he succeeded so well that he remained there, became a hospital surgeon, then a professor at the faculty and president of the Academy of Medicine (Figure 1). At the age of 25, Malgaigne had been the head of a military ambulance on the front lines of the Polish uprising against Russia. He witnessed the assault on Warsaw and left the country only with its last defenders. In the same year, he published a Manual of Operative Medicine (1834) based on his experience and readings. Throughout his career, he continued to present and publish articles on anatomy and various surgical procedures such as hernias, bladder stones and clefts. He also wrote a few papers on vision and, strangely enough, on “auricular acupuncture”.

Medicine and surgery during the first half of the 19th century was still relying on ancient concepts. One had to wait for the discoveries of Pasteur and Lister concerning the management of infections, and the advent of scientific medicine initiated by Claude Bernard during the second half of the century, for a renewed approach to surgical practice. In spite of the fact that he did not participate in these discoveries, Malgaigne can be considered a pioneer for his time and should be acknowledged for his precise anatomic studies, his systematic use of statistics, the longtime follow up of his patients, the use of ether for general anesthesia as soon as it entered in the practice of surgery, and the avoidance of veno-sections which were still commonly practiced during his time. His Manual of Operative Medicine had seven editions and was translated in seven languages. In the field of orthopedic surgery, he invented several instruments and operative methods which he described in his Treaty on Fractures and Dislocations (1847).

Of interest for the plastic surgeon, he developed a new method for the harelip operation that he published in 1844, emphasizing the need of a careful longtime follow up of the
patients (1). As an introduction to his publication, Malgaigne declares: “I have had occasion to remark how operative medicine, so rich in procedures and maneuvers, becomes poor and miserly when it is a question of reporting results.” He had noticed that with a straight-line closure, a whistling deformity was the almost inevitable sequel due to the linear contracture of the scar, and he thought of something to prevent it. His method later inspired Germanicus Mirault (1796-1879), who duly recognized his debt to the “ingenious discovery” of Malgaigne (2) (Figure 2). The idea is to consider the cleft as a loss of substance and in consequence to add little flaps at the vermillion border in order to recreate the median lobule of the lip and prevent a notch on the vermillion border. For Malgaigne, closing a cleft lip is not only a cheilorrhaphy, but should be a cheiloplasty.

The Historian
Malgaigne had two of the historian’s essential qualities: a curiosity about details and a taste for explanations and generalizations. He wrote biographies of surgeons such as Astley Cooper, Alexis Boyer and Dupuytren, but his main publications concern surgery in ancient times in Egypt, Greece or as described in the Bible. To understand the original texts, he learned Hebrew and, as several doctors of his time, he had a thorough knowledge of ancient Greek. In his “Studies on Anatomy and Physiology of Homer” (3), he singled out all the terms used by the poet to describe the various organs of the body, particularly those involved in injuries. Considering that the Iliad and the Odyssey were composed 800 BC, that is a long time before the Hippocratic treatises. Malgaigne noted that the first physicians borrowed some of their anatomical and physiological terminology from the Homeric poems. These terms have sometimes remained up to our present days. For example:

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<th>Greek</th>
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<tr>
<td>ἐντερα</td>
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<tr>
<td>στήθος</td>
<td>stethos</td>
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<td>στέρνον</td>
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<td>κεφαλή</td>
<td>kephale</td>
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<td>στόμαχος</td>
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<td>thenar</td>
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<td>καρπός</td>
<td>carpus</td>
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Another important task of Malgaigne was to collect and publish the entire surgical writing of Ambroise Paré, the famous surgeon of the 16th century, often called the father of surgery. In his long introduction, he also relates in detail the history of surgery from the 5th to the 16th century (4), recalling the work of another 16th century surgeon, Pierre Franco, who surpassed Paré in the description of several new operations and inventions, in particular for the operations of cleft lips (5). As a professor, Malgaigne fought to introduce the history of medicine in the Faculty of Medicine and himself gave a course on the philosophy of surgery.

The Journalist and the Politician
FJ Malgaigne was a born journalist. At the age of 19, he was already writing articles in several newspapers. At his return from Poland, most French journals published one or the other of his articles. He then wrote several papers on various and often polemical subjects, gaining a vindictive reputation (Figure 3). Later, he became the editor and the owner of the Journal de Chirurgie de Paris, which insured him a substantial revenue. In 1847, he was elected deputy to the Parliament of Seine during the monarchy and participated to several commissions on medicine, hygiene and education.

The Defamation Trial
Born 5 years before Malgaigne, Jules-René Guérin (1801-1886) was the director of a private orthopedic establishment and oversaw the orthopedic clinic at the Hôpital des enfants malades. He prided himself for being a great innovator in surgical concepts that he described in lengthy articles. One of his theories was that, to avoid infections and wound suppuration, one had to operate subcutaneously, by performing small incisions and reach blindly muscles and articulations.
– procedures premonitory of today’s endoscopic surgery? His experiments on dogs led to multiple hematomas, but apparently a reduced rate of infection. Another theory of Guérin was that all congenital deformations of the skeleton were due to a unique cause: muscular retraction. Therefore, the unique remedy was to divide the muscles and the tendons at the origin of these abnormal curvatures of the rachis or the limbs. Using his subcutaneous method and dividing in each case several muscles and tendons, he operated a series of children who suffered of congenital deformations of the limbs and spine, praising himself for the good results he obtained. Most surgeons questioned this method, but only Malgaigne took the initiative to search for and examine the patients operated by Guérin. He was able to show the crippling effects of these procedures and published his observations under the title: “On the abuse and danger of tendon and muscle sections in the treatment of certain deformities,” disclosing the mediocre results obtained by this method. Guérin, furious, sued Malgaigne for defamation, which was pleaded on 14 November 1843 and partially lost by Guérin. He appealed and lost again in 1844. Malgaigne triumphed, and the Paris Surgical Society gave a large banquet in his honor, praising his courage and his talent as a defender. This trial could be considered anecdotal, but it is certainly a turning point in the history of surgery. Up to the mid-nineteenth century, operations described by the most famous surgeons and professors were never questioned, whatever the results obtained. In case of complications or lack of success, the blame was put on the operator or sometimes on the patient himself.

**Malgaigne’s Philosophy**

Full of respect for his teachers and the traditions in medicine and surgery, Malgaigne did not take for granted operative protocols based on the notoriety of their creators. He always wanted to confront the methods with the end results. As a founding member of the Société de Chirurgie de Paris, he used its motto: “Probity in science, morality in art.” He was remembered by his pupils as a great teacher and contributed to the development of modern surgery. At his funeral, one of his pupils said: “Joseph-François Malgaigne was one of the greatest intelligences to serve surgery. He had this undeniable merit of having fought all his life to replace dogma with free examination and experience. It was Bacon’s experimental method that he had rejuvenated and modernized at a time when authority tended to replace reason. The only authority he recognized was the authority of the facts, and so he developed his historical method. Criticism being a form of judgment, it must be based on facts, it is not by discussing or fighting reasoning, that it can achieve its purpose, it is only in the light of the facts that it must ask for the revelation of the truth.”

**Bibliography**


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1Francis Bacon (1561–1626) was an English philosopher and statesman. His works argued for the possibility of scientific knowledge based only upon inductive reasoning and careful observation of events in nature. The general idea of the importance and possibility of a skeptical methodology makes Bacon one of the initiators of the scientific method.
IN MEMORIAM

BRUCE F. CONNELL
1927–2019

It is with great regret that we received notice of the passing of Professor Bruce Connell on September 16th at his home in Laguna Beach, California. Bruce was born in 1927 in Detroit, Michigan and spent his youth in Alabama. He was drafted into the US Army in 1946 and sent overseas. After honorable discharge, he attended pharmacy school in Alabama and medical school in Buffalo, New York. He was a plastic surgeon at the Western Medical Center in Santa Ana, Newport Beach and Laguna Beach (Mission) Hospital in California.

Bruce did his surgery training at Los Angeles County Medical Center and his plastic surgery training was completed at the Mayo Clinic in Rochester, Minnesota. He moved to Orange County, California in 1958 where he practiced until his retirement at the age of 85. It has been said that Dr. Bruce Connell is regarded as “the father of the postmodern face lift.”

He was an active ISAPS faculty member in many congresses and courses and travelled often to Brazil. He had great influence on Brazilian plastic surgeons and in fact surgeons from around the world. He dared to change many details in the facelift procedure. One of his techniques was the use of a zig-zag pre-capillary incision in forehead lifts, very close to the hairline, first to avoid extending the forehead, and second to allow him to reduce a long forehead when necessary. Another of his most controversial ideas was not to use compressive bandages after a facelift. Actually, he did not use any dressing. He would ask the patient to put a small pillow under the neck and sleep with the extended neck to improve circulation and lymphatic drainage. He thought that by using no face dressing he could inspect any swellings and possible hematomas immediately. The dressing would not prevent bleeding, he would say, thus it was not necessary. Many points in his technique were controversial and he got used to defending himself against doctors who thought differently.

One of my first contacts with Bruce was when I started presenting internationally in the 1980’s. Bruce had watched my presentation and came to speak to me after the lecture. He asked me to go with him to the speaker ready room and show him the lecture again. He then did something only a great teacher does. Very patiently he would ask me “why is this slide here? It does not have the same quality as the others.” Or, he would comment, “the light on the pre-op slide is different from the post-op.” To which I replied, “but this was the only photo I had.” He would say, “It does not matter. Take it out. You are in the big league now.” A lesson I never forgot.

For over ten years, I organized with the late Mico Djuricic “Recent Advances in Plastic Surgery Symposia – RAPS” in Belgrade, Serbia. In 2004, I invited Bruce. The faculty included Daniel Baker from the US, Daniel Marchac from France, Ithamar Stocchero from Brazil – and Bruce. Usually, there are no heated discussions in plastic surgery meetings. Doctors don’t want to cause trouble at a meeting, or create enemies. But this time, the audience could see a heated discussion between Daniel Baker and Bruce Connell, each one trying to prove his technique was better. In the end, the winners were all the participants who could learn in great detail all the intricacies of each facelift technique.

Bruce had a great sense of humor and wonderful teaching skills. In 2004, at their San Diego conference, the American Society of Plastic Surgery gave us funny badges that said: “I survived 10 years of ASPS Teaching Courses” to thank the faculty members who had been teaching for more than ten years. I was very proud of my badge, having taught for 15 years. Then I saw Bruce, who had three badges, having “survived” more than 30 years of courses.

Even after his retirement from practice in 2013, he continued to teach and give advice to plastic surgeons who would contact him seeking guidance. Bruce was also a quiet philanthropist for many causes in Laguna Beach. His favorite hobby was gardening. Recently, he had been suffering from spinal stenosis that had completely debilitated him for the past several months. He passed away peacefully surrounded by family and longtime friends.

You will be missed Bruce!
Luiz Toledo, MD – UAE
# MEETINGS CALENDAR

## Emirates Plastic Surgery Congress 2020
- **Dates:** 16 January – 18 January 2020
- **Location:** Dubai, UNITED ARAB EMIRATES
- **Venue:** Raffles
- **Contact:** Dr. Sanjay Parashar
- **Website:** [https://www.epsc.ae](https://www.epsc.ae)

## ISAPS Course – Belgium: International Fresh Cadaver Aesthetic Dissection Course on Rhinoplasty and Facial Anatomy
- **Dates:** 16 January – 18 January 2020
- **Location:** Liege, BELGIUM
- **Note:** Limited to 32 participants
- **Contact:** Mrs. Anne-Marie Gillain
- **Website:** [www.isapscourse.be](http://www.isapscourse.be)

## The Closed and Open Rhinoplasty Course – Live Streamed Surgery Course
- **Date:** 19 January 2020 @ 12:00 pm - 5:00 pm
- **Location:** Online Only – Webinar – 12:00pm – 5:00pm CET
- **Contact:** Dr. Carlo Gasperoni
- **Website:** [http://www.olymposeducational.com](http://www.olymposeducational.com)

## 1st Annual SESPRS/ISAPS Periorbital and Facial Symposium
- **Date:** 23 January 2020
- **Location:** Atlanta, Georgia, USA
- **Venue:** Intercontinental Hotel – Buckhead
- **Contact:** Susan Russell
- **Website:** [www.sesprs.org](http://www.sesprs.org)

## IMCAS Live Aesthetic Surgery Course
- **Date:** 31 January 2020
- **Location:** Paris, FRANCE
- **Venue:** Palais Des Congres
- **Contact:** Olympe Barone
- **Website:** [http://www.imcasurgery.com](http://www.imcasurgery.com)

## Baker Gordon Educational Symposium 2020
- **Dates:** 06 February – 08 February 2020
- **Location:** Miami, Florida, USA
- **Venue:** Hyatt Regency Hotel
- **Contact:** Mary Felpeto
- **Website:** [http://www.bakergordonsymposium.com](http://www.bakergordonsymposium.com)

## ISAPS Symposium – India
- **Dates:** 15 February – 19 February 2020
- **Location:** Mumbai, INDIA
- **Venue:** Cruise Costa Victoria (Mumbai-Kochi route)
- **Contact:** Mrs. Arohi Bhimajiani
- **Website:** [www.aesurg2020.com](http://www.aesurg2020.com)

## 12th American-Brazilian Aesthetic Meeting
- **Dates:** 27 February – 01 March 2020
- **Location:** Park City, Utah, UNITED STATES
- **Venue:** Park City Marriott
- **Contact:** Susan Russell
- **Website:** [http://www.americanbrazilianestheticmeeting.com/](http://www.americanbrazilianestheticmeeting.com/)

## 3rd SOAP Meeting – State of the Art in Plastic Surgery
- **Dates:** 27 February – 29 February 2020
- **Location:** Bremen, GERMANY
- **Venue:** Dorint Park Hotel
- **Contact:** Jens Kramer
- **Website:** [http://www.soap-meeting-bremen.de](http://www.soap-meeting-bremen.de)

## ISAPS Symposium – Paraguay
- **Date:** 04 March 2020
- **Location:** Asunción, PARAGUAY
- **Note:** Immediately preceding the VIII Congreso Paraguayo de Cirugía Plástica, Reconstructiva y Estética” (March 4th-6th, 2020)
- **Contact:** SPACPRE 2020 Organizing Agency
- **Website:** [https://spacprecongreso2020@bcocongresos.com](https://spacprecongreso2020@bcocongresos.com)

## ISAPS Symposium – Egypt
- **In collaboration with the 50th Anniversary of the ESPRS meeting**
- **Date:** 05 March 2020
- **Location:** Cairo, EGYPT
- **Venue:** Dusit Hotel
- **Contact:** Mourad Elansary
- **Website:** [www.Isaps-egypt.org](http://www.Isaps-egypt.org)

## ISAPS Course – Bangladesh
- **Dates:** 12 March – 14 March 2020
- **Location:** Dhaka, Bangladesh
- **Venue:** Bangladesh Specialized Hospital, 21 Shymoli, Dhaka
- **Contact:** Dr. Sayeed Ahmed Siddiky
- **Website:** pending
ISAPS F.A.S.T. ADVANCED 2020 – COMPLICATIONS AND DIFFICULT CASE MANAGEMENT
DATES: 13 March – 15 March 2020
TOPIC: Face and Rhino Advanced
LOCATION: Moscow, RUSSIA
VENUE: Golden Ring Hotel, Smolenskaya str., 5
CONTACT: Anna Pimenova
TEL: +7 (495) 287-46-45
FAX: +7 (495) 287-46-45
EMAIL: orgcom@isapsfast.ru
WEBSITE: www.isapsfast.ru

ISAPS COURSE – SOUTH AFRICA
DATES: 20 March – 22 March 2020
LOCATION: Cape Town, SOUTH AFRICA
VENUE: Lord Charles Hotel, Somerset West
CONTACT: Hendrika van der Merwe
TEL: +27-21-981-3081
EMAIL: congress.isaps@eliteconfer.co.za
WEBSITE: http://www.isapscourse.co.za
NOTE: Optional post-course safari to Thornybush Game Lodge, March 23-25. See website for additional information and cost.

HIGHLIGHTS OF PLASTIC SURGERY SYMPOSIUM 2020
DATES: 26 March – 28 March 2020
LOCATION: Panama City, PANAMA
VENUE: The Pacific Center Hospital Complex
CONTACT: Mrs. Isqueira Villalaz
TEL: 507-6780-9286 in Spanish – 507-6747-9911 in English
EMAIL: infohighlightsofplasticsurgery@gmail.com
WEBSITE: https://www.highlightsofplasticsurgery.com

ISAPS COURSE – GREECE
DATES: 09 April – 11 April 2020
VENUE: War Museum www.warmuseum.gr
LOCATION: Athens, GREECE
CONTACT PERSON: Vicky Delidimitriou, vdelidimitriou@noufio.gr
TEL: +30 210–2775219
FAX: +30 210–2714437
WEBSITE: www.isapscourseathens2019.gr
ORGANIZING SECRETARIAT: NOUFIO www.noufio.gr

IPSAC’S 4TH BUTTOCK COURSE
DATES: 16 April – 18 April 2020
LOCATION: Paris, FRANCE
VENUE: Anatomy Lab, Marriott Convention Center
CONTACT: Charlie Pascal
TEL: +33 4 72 83 77 69
EMAIL: charles@ipsac.eu
WEBSITE: http://www.ipsac.eu

BARCELONA RHINOPLASTY 2ND COURSE
DATES: 29 April – 02 May 2020
LOCATION: Barcelona, SPAIN
VENUE: Centro Medico Teknon
CONTACT: Silvia Vila
TEL: 34 9 33933 128
EMAIL: svila@vilarovira.com
WEBSITE: http://www.barcelonarhinoplasty.com

ISAPS SYMPOSIUM – SERBIA
Immediately preceding the SRBSAPS Congress – May 8-9
DATE: 07 May 2020
LOCATION: Belgrade, SERBIA
VENUE: Hilton Hotel
CONTACT: Dr. Violeta Scorobac
TEL: +381-11-244-3152
EMAIL: drvioleta@dionahospital.com
WEBSITE: https://srbsapscongress.rs

ISAPS F.A.S.T. ADVANCED 2020 – COMPLICATIONS AND DIFFICULT CASE MANAGEMENT
DATES: 22 May – 24 May 2020
TOPIC: Breast Advanced
LOCATION: Moscow, RUSSIA
VENUE: Golden Ring Hotel, Smolenskaya str., 5
CONTACT: Anna Pimenova
TEL: +7 (495) 287-46-45
FAX: +7 (495) 287-46-45
EMAIL: orgcom@isapsfast.ru
WEBSITE: www.isapsfast.ru

ISAPS COURSE – RUSSIA
DATES: May 28-31, 2020
LOCATION: St. Petersburg
VENUE: Pribaltiyskaya Park Inn
CONTACT: Igor Bogoroditskiy
EMAIL: ibogoroditski@yahoo.com
WEBSITE: isapscourse-spb2020.org

ISAPS SYMPOSIUM – CHILE
DATES: 07 August – 08 August 2020
LOCATION: Santiago, CHILE
VENUE: Hotel Plaza El Bosque Nueva Las Condes
CONTACT: Dr. Montserrat Fontbona
TEL: 56-226-320-714
EMAIL: sccpchile@gmail.com
WEBSITE: www.sccp.cl

SECONDARY OPTIMIZING AESTHETIC SURGERY SYMPOSIUM (SOS) 2020
DATES: 31 August – 01 September 2020
LOCATION: Vienna, AUSTRIA
VENUE: Andaz Belvedere Vienna Hotel
CONTACT: Barbara Boeld
TEL: +49-89-18-90460
EMAIL: congress@bb-mc.com
WEBSITE: http://www.sos2020.eu

25TH WORLD CONGRESS
25th Congress of ISAPS – 50th Anniversary Celebration
DATES: 02 September – 05 September 2020
LOCATION: Vienna, AUSTRIA
VENUE: Austria Center Vienna
CONTACT: Barbara Boeld
TEL: +49-89-18-90460
EMAIL: congress@bb-mc.com
WEBSITE: www.isapsvienna2020.com
GUESS WHO?

Answer:
Peter Scott, ISAPS Historian, on a recent study tour of Mayan civilization with the Pyramid of the Magicians in Uxmal, Yucatan Mexico in the background.
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HOT TOPICS

- Live Surgery on Complication Cases (SOS)
- Cadaver courses
- Marking courses
- Best & worst case session
- Problems and solutions panels
- Migraine surgery labs
- Best of the World competition
- Reboot your practice
- Innovations in industry
- Social media training

www.isapsvienna2020.com