



The AAFPRS
"University"

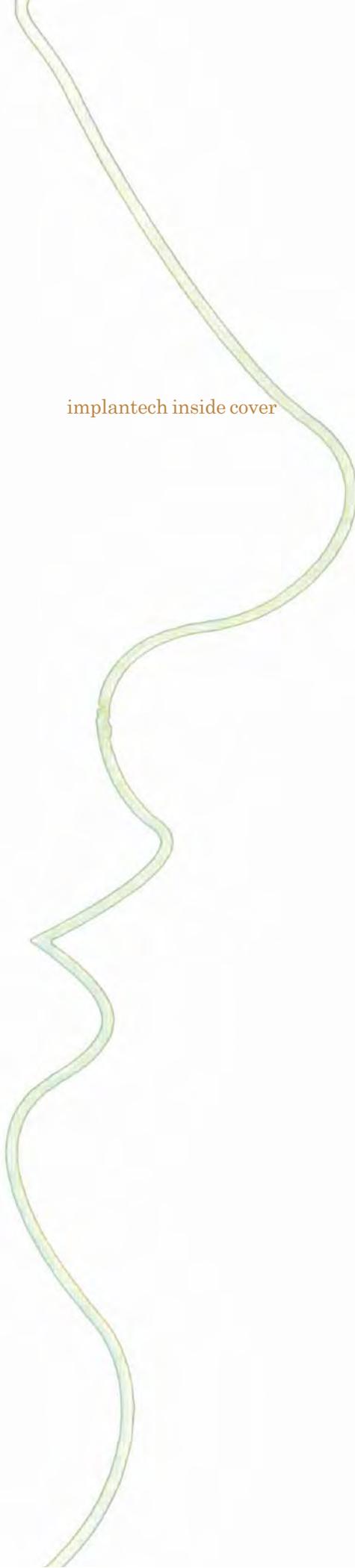


Fall Meeting

*Co-chairs: Edwin F. Williams, III, MD
and Theda C. Kontis, MD*

On-site Program and Course Catalog

**Boston, MA
September 23-26, 2010**



implantech inside cover

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Target Audience

The Fall Meeting of the AAFPRS Foundation is offered for continuing medical education of medical students, residents, fellows, and practicing physicians (MDs and DOs) in the field of facial plastic and reconstructive surgery. The program is for physicians with all levels of experience and covers aesthetic, reconstructive, and congenital issues relevant to this specialty.

Learning Objectives

The AAFPRS Foundation and CME Committee work to formulate a program that is contemporary, unbiased, and relevant. At the conclusion of the meeting, participants should be able to:

- Describe the process of rhinoplasty surgery from patient assessment to dealing with complicated revisions.
- Display a knowledge of the risks, benefits and nuances of the closed and open approaches to rhinoplasty.
- Demonstrate a working knowledge of procedures used to treat the aging face from patient assessment to postoperative management, as well as be familiar with the many surgical approaches that can be used safely and effectively for these procedures.
- Plan blepharoplasty surgery including patient assessment, intraoperative techniques, postoperative management and the avoidance of complications.
- Verbalize an appropriate awareness of the safety issues involved in the practice of facial plastic surgery.
- Utilize their updated knowledge about practice management in facial plastic surgery.
- Distinguish between technologies being developed and their potential use in facial plastic surgery.
- Evaluate minimally invasive technologies including fillers, neurotoxins, fat transfer and laser treatments and their requisite techniques.
- Compare and contrast the facial reconstruction options after trauma, neoplasm resection, for congenital anomalies.

Accreditation and Credit Designation

The Educational and Research Foundation for the American Academy of Facial Plastic and Reconstructive Surgery (AAFPRS Foundation) is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to sponsor continuing medical education for physicians.

The AAFPRS Foundation designates this educational activity for a maximum of 31.75 AMA PRA Category 1 Credit™. Physicians should only claim credit commensurate with the extent of their participation in the activity. (CME credit hours are based on the preliminary program and are subject to change.)



Welcome from the Chairs



Welcome to the "AAFPRS University." Because Boston is the location of many prestigious institutions for higher learning, we thought it would be appropriate to have a university theme for our Academy meeting.

You will notice that we have created a university logo, designed by Donn R. Chatham, MD. The logo contains the AAFPRS logo, a tree and a key symbolizing knowledge, a crossed scalpel and paintbrush symbolizing the artistry of surgery and eruditio saculorum (lifelong learning). (There will be a pop quiz on this, so be sure to remember your Latin!)



You will notice we have a completely new format featuring many new speakers, exciting new topics, and stimulating debates. Your course manual contains the program schedule as well as course descriptions for instruction classes given in the Schools of Rhinoplasty, Aging Face, Minimally Invasive Treatments, Basic Science, Business/Computer Science and Trauma/Reconstruction. The courses are numbered similar to college courses, with more basic courses in the 100s and more advanced courses numbered in the 200s. Of course, feel free to attend any level of course you prefer.

Our speakers represent a variety of medical and surgical specialties, both nationally and internationally. This year, the program highlights issues in safety and ethics. You won't want to miss the presentations by our keynote speakers. Mr. Juan Enriquez is a Harvard-educated best-selling author and businessman, who is recognized as one of the world's leading authorities on the impact of the life sciences on the economy. Edward Halperin, MD, Dean of the University of Louisville School of Medicine, will discuss the history and ethics of the Flexner Report. The Flexner Report was written in 1910 by Abraham Flexner and standardized the core curriculum for medical school training. (This might also show up on a pop quiz!) We will also hear from John "Mac" Hodges, MD, who will inspire us with his stories on his many humanitarian trips with our very own FACE TO FACE program.

I hope that your staff is here with you this year. We have worked closely with the Organization of Facial Plastic Surgery Assistants (OFPSA) to provide your staff with a program that is of highest quality. Also, don't miss the Pep Rally on Thursday afternoon--it will be filled with fun surprises.

We hope you enjoy this new format and find the meeting filled with fabulous learning opportunities for you and your staff.

Your chairs,
Edwin F. Williams, III, MD
Theda C. Kontis, MD

Welcome from the President



On behalf of the American Academy of Facial Plastic and Reconstructive Surgery, I would like to welcome you to Boston, the site of this year's Annual Fall Meeting. Drs. Edwin F. Williams, III, MD, and Theda C. Kontis, MD, have assembled an outstanding faculty in this city, famous as a center for higher

education. This year's meeting will feature a "university" theme that ensures a fresh and varied educational experience. The star-studded multi-disciplinary faculty will cover the gauntlet of facial plastic surgical procedures. The program includes instruction classes given in the Schools of Rhinoplasty, Aging Face, Minimally Invasive Treatments, Basic Science, Business/Computer Science, and Trauma/Reconstruction. Follow the color coded courses in the program directory to your desired level of educational experience. The 100 level courses represent a basic experience and the 200 level courses are more advanced. Take advantage of the program packed with nationally and internationally recognized speakers from multiple specialties. In keeping with our university theme, keynote speakers Mr. Juan Enriquez and Edward C. Halperin, MD, will offer memorable, stimulating addresses. Be certain to visit our exhibitors who represent the latest, cutting edge products and ideas to enhance your practice. Of course, Boston itself will be a great, new experience for the AAFPRS, with its rich heritage and history. Enjoy indoor access to shopping and restaurants at The Shops at Prudential Center and Copley Place. Stroll just a few blocks to Copley Square, the Charles River, or the Boston Common. I know you will find this to be an educational, interesting and fun trip. Welcome to Boston!

Sincerely,
Daniel E. Rousso, MD

Invited Guest Speakers



This year's *John Conley Lectureship* will be given by **Juan Enriquez**, managing director, Excel Venture Management and founding director, Harvard Business School's Life Science Project.

Mr. Enriquez, author, businessman, and academic, is one of the world's foremost authorities on emerg-

ing (and disruptive) medical technologies—how extraordinary advances in life sciences are changing the way we live and do business. He is the author of the global bestseller, *As the Future Catches You*—an analysis of the impact of genomics on business and society; and *The Untied States of America*, which explores why, as technology advances, some countries are successful while others disappear. Energetic and articulate, Mr. Enriquez will provide invaluable insight into which advances in the life sciences will matter to your firm and industry—and why—and how to turn the life science revolution to your advantage.



This year's *Jack Anderson Lectureship* will be given by **Edward C. Halperin, MD, MA**, Dean of the University of Louisville School of Medicine. He received a B.S. in Economics from The Wharton School of the University of Pennsylvania, his medical degree from the School of Medicine of Yale University, and his masters in Liberal Studies

from The Graduate School of Duke University. After an internship in internal medicine at Stanford University Medical Center, Dr. Halperin was a resident and chief resident in radiation oncology at the Massachusetts General Hospital/Harvard Medical School. From 1983 to 2006 he was on the faculty at Duke University where he served as L.R. Prosnitz Professor and Chairman of the Department of Radiation Oncology and R.J. Reynolds Professor of Medical Education and Vice Dean of the School of Medicine. Since 2006 Dr. Halperin has been the Dean of the School of Medicine of the University of Louisville and Ford Foundation of Medical Education and Professor of Radiation Oncology, Pediatrics, and History.

Dr. Halperin is the author/editor of five editions of *Pediatric Radiation Oncology* and of the 4th and 5th editions of *Principles and Practice of Radiation Oncology*. He has published over 190 articles in the peer-reviewed literature in the fields of the causes, prevention, and treatment of childhood cancer, radiation-induced immunosuppression, and the history of racial and religious discrimination in medicine, medical education, and medical ethics.



John "Mac" Hodges, MD is this year's *Gene Tardy Scholar*. Over the past several years, Dr. Hodges has traveled the globe on behalf of the AAFPRS FACE TO FACE program. Dr. Hodges has been a part of these humanitarian missions which deliver health care to third world countries.

His compassion for others and his love of teaching have driven him to undertake these challenges—whether it be operating on cleft lip and palates of children in the Philippines, or teaching young doctors the art of facial plastic surgery in Vietnam or China.

Dr. Hodges' unselfish nature and willingness to make a difference have impacted many lives for the better.



Each year, the Women in Facial Plastic Surgery Committee, invites a speaker to address the members of our Academy. This year's invited speaker is **Judith V. Jordan, PhD**, Director of the Jean Baker Miller Training Institute. In addition to her position at Wellesley Centers for Women (WCW),

Dr. Jordan is an assistant professor of psychiatry at Harvard Medical School. After graduating phi beta kappa and magna cum laude from Brown University, she earned her PhD in clinical psychology at Harvard University where she received commendation for outstanding academic performance. She was the director of psychology training as well as the director of the Women's Studies program at McLean Hospital. For the past 20 years she has worked with her colleagues, the late Jean Baker Miller, the late Irene Stiver, and Jan Surrey on the development of what has come to be known as the relational-cultural model of women's development. Dr. Jordan co-authored the book *Women's Growth in Connection* and edited *Women's Growth in Diversity and The Complexity of Connection*.

Dr. Jordan has a passion for and strong sense of mission about the work she does at WCW. She strongly believes the existing structures of psychology characterized by a separate-self model of development are destructive to women and to the fabric of community for all people. By carefully studying women's lives and women's struggles, she hopes to help create new models of human development which might transform some of the current distorting impact of competition, hyper-individualism, racism, sexism, heterosexism, and classism.

While most of her early work arose in the context of the practice of psychotherapy, increasingly she is applying this work to organizations and to making social change.

Registration

Hynes Prefunction A

Registration fees for physicians, OFPSA members, and allied health professionals include a badge; on-site program; attendance to the general sessions, instruction courses, seminars, and workshops (unless noted as optional); entrance to the Exhibit Hall; lunches, morning and afternoon breaks; and the Welcome Reception.

Spouses and guest fees include a badge; entrance to the sessions and Exhibit Hall; breaks and lunches; and the Welcome Reception. Spouses/guests who do not register for the meeting but wish to attend the Welcome Reception, may purchase a ticket for \$75. The spouse/guest fee carries no acknowledgement of course attendance.

Registration hours are as follows:

(At the Hynes Convention Center, Prefunction A)

Wednesday, September 22, 2010 2:00pm - 7:00pm

Thursday, September 23, 2010 6:30am - 6:00pm

Friday, September 24, 2010 6:30am - 6:00pm

Saturday, September 25, 2010 6:30am - 6:00pm

(At the Sheraton Hotel, Grand Foyer)

Sunday, September 26, 2010 7:30am-10:00am

Headquarters Hotel

Sheraton Boston Hotel

39 Dalton Street

Boston, MA 02199

Phone (617) 236-2000

Fax (617) 236-1702

Penfield's Business Center (Second floor of the Sheraton Boston Hotel); Phone (617) 236-6088

Business Center Hours:

7:00am-9:00pm, Monday-Friday

8:00am-6:00pm, Saturday-Sunday

Meeting Location and Exhibit Hall

Hynes Convention Center and Sheraton Hotel

The general sessions will be held at the Sheraton Hotel. Most breakout sessions, courses, and workshops, including the exhibitions will be held at the Hynes Convention Center. The Convention Center is a 3-4 minute walk from the hotel. The Exhibit Hall will be at Hynes Hall A.

Exhibit hours are as follows:

Thursday, September 23, 2010 12:15pm - 4:30pm

(re-open for Welcome Reception) 6:00pm - 7:30pm

Friday, September 24, 2010 9:30am - 4:30pm

Saturday, September 25, 2010 9:30am - 4:30pm

Credentials Table

Sheraton Independence Foyer

The Business Meeting and Elections is on Saturday, September 25, 2010 at 8:30am. Those who have not voted by mail need to pick up their ballots prior to the Business Meeting in order to vote. The Credentials Table will open at 8:00am on Saturday.

Speaker Ready Room

The Speaker Ready will be open daily and will be at the Sheraton Backbay A.

Women in Facial Plastic Surgery Luncheon

Sheraton Constitution B

All women in facial plastic surgery, Academy members and non-members are invited to attend this luncheon on Thursday, September 23, 2010 from 12:15pm to 1:45pm. The invited speaker is Judith V. Jordan, PhD.

Welcome Reception

Hynes Hall A

All registrants are invited to attend the Welcome Reception in the Exhibit Hall on Thursday, September 23, 2010 from 6:00pm to 7:30pm. Those spouses and guests who are not registered for the meeting may purchase a ticket to attend the reception.

Fellowship Directors Luncheon

Sheraton Republic A

All fellowship directors are invited to attend this luncheon on Friday, September 24, 2010 from 12:00pm to 1:00pm.

Academic Practice Luncheon

Hynes 103

All members in academic practice are invited to attend this luncheon on Saturday, September 25, 2010 from 12:30pm to 1:30pm.

Disclaimer

Registrants for this course understand that medical and scientific knowledge is constantly evolving and that the views and techniques of the instructors are their own and may reflect innovations and opinions not universally shared. The views and techniques of the instructors are not necessarily those of the Academy or its Foundation but are presented in this forum to advance scientific and medical education. Registrants waive any claim against the Academy or its Foundation arising out of information presented in this course. Registrants also understand that operating rooms and health-care facilities present inherent dangers. Registrants waive any claim against the Academy or Foundation for injury or other damage resulting in any way from course participation. This educational program is not designed for certification purposes. Neither the AAFPRS nor its Foundation provides certification of proficiency for those attending.

Courses and session codes

The codes next to the session titles reflect the codes on the evaluation forms. The courses (i.e. RHINO 101) are coded as such. Please make sure you double check the codes of the courses to match what you fill in when completing the forms.

You may access the evaluation forms on-line at: <http://www.aafprs.org/Content/NavigationMenu/Home/CME/Fall2010Eval.htm?> Make sure you have your member ID number handy when completing each section.

Schedule-at-a-Glance

The General Sessions and most luncheons will be held at the Sheraton Boston Hotel.
Most of the breakout sessions and the exhibition will be at the Hynes Convention Center.

Wednesday, September 22, 2010

6:30am-3:00pm Committee Meetings
Sheraton Hotel
2:00pm-7:00pm Registration
Hynes Prefunction A
3:00pm-10:00pm AAFPRS Board Meeting
Sheraton Republic B

Thursday, September 23, 2010

6:30am-6:00pm Registration
Hynes Prefunction A
7:00am-6:00pm General Session, Debates, Panels
Sheraton Grand Ballroom
9:05am *AAFPRS Grants and Awards*
11:30am *John Conley Lectureship*
1:45pm *Gene Tardy Scholar*
3:00pm *Presidential Outgoing Address*
3:15pm *Pep Rally*
7:00am-5:00pm OFPSA Program
Sheraton Bayback B/C
12:15am-4:30pm Exhibition
Hynes Hall A
12:15pm-1:45pm Lunch in the Exhibit Hall
Hynes Hall A
12:15pm-1:45pm Women in Facial Plastic Surgery
Luncheon (all invited)
Sheraton Constitution B
6:00pm-7:30pm Welcome Reception in the Exhibit Hall
Hynes Hall A
7:30pm-9:00pm Dinner and Lecture (non-CME)
Sheraton Constitution Ballroom
8:00pm-10:30pm Past Presidents' Dinner
(Off-site)

Friday, September 24, 2010

6:30am-6:00pm Registration
Hynes Prefunction A
6:30am-7:30am Breakfast Sessions 1-5
Hynes Convention Center
7:00am-5:00pm OFPSA Program
Sheraton Bayback B/C
7:30am-3:00pm General Session, Panels, Free Papers
Sheraton Grand Ballroom
10:45am *ABFPRS Awards*
11:15am *Jack Anderson Lectureship*
9:30am-4:30pm Exhibition
Hynes Hall A
Noon-1:00pm Lunch in the Exhibit Hall
Hynes Hall A
Noon-1:00pm Fellowship Directors Luncheon
Sheraton Republic A
1:00pm-5:50pm Instruction Courses Sessions 1-4
Hynes CC and Sheraton Hotel
2:00pm-5:00pm Laser Workshop
Sheraton Grand Ballroom
2:00pm-5:00pm Practice Financial Management
Sheraton Constitution Ballroom
6:30pm-11:00pm Founders' Club Dinner
(Off-site)

Saturday, September 25, 2010

6:30am-6:00pm Registration
Hynes Prefunction A
6:30am-7:30am Breakfast Sessions 6-10
Hynes Convention Center and
Boston Park Plaza Hotel
7:30am-10:30am General Session
Sheraton Grand Ballroom
7:45am *Emerging Trends and Technologies*
8:00am *Credentials Table Open*
8:30am *Incoming Presidential Address*
Business Meeting and Elections
9:30am-4:30pm Exhibition
Hynes Hall A
10:30am-12:30pm Instruction Courses Session 5-6
Hynes CC and Sheraton Hotel
12:30pm-1:30pm Lunch in the Exhibit Hall
Hynes Hall A
12:30pm-1:30pm Academic Practice Luncheon
Hynes 103
12:30pm-1:30pm Laser Luncheon (non-CME)
Hynes 102
1:00pm-6:00pm Essentials in Facial Plastic Surgery
Sheraton Grand Ballroom
1:15pm-4:15pm Injectable Fillers Workshop
Sheraton Republic B
1:30pm-3:30pm Hair Transplantation Workshop
Sheraton Constitution Ballroom
1:30pm-5:50pm Instruction Courses Session 7-10
Hynes CC and Sheraton Hotel
2:30pm-4:30pm IFFPSS Board Meeting
Sheraton Gardner Room
4:30pm-7:00pm ABFPRS Board Meeting
Sheraton Fairfax Room
6:00pm-7:00pm Residents Reception following the
Essentials Course
Sheraton Grand Ballroom
6:30pm-8:00pm Dinner and Lecture
Sheraton Constitution Ballroom
8:00pm-11:00pm IFFPSS Board Dinner
(Off-site)

Sunday, September 26, 2010

Bridge-Day
7:30am-10:00am Registration
Sheraton Grand Foyer
8:00am-10:00am Fat Grafting Workshop
Sheraton Constitution Ballroom
8:00am-10:00am Moh's Surgery: State of the Art with
Focus on Reconstruction
Sheraton Republic B
10:00am-1:00pm Advances in Microvascular
Reconstruction
Sheraton Republic B
1:00pm Meeting Adjourned

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|-----------------|--|--|--|
| 7:00am-7:15am | Sheraton Grand Ballroom Orientation and Opening Ceremony | 3:15pm-3:30pm | Pep Rally |
| 7:15am-8:45am | The Great Aging Face Debate PAN01 <i>Moderator: Peter A. Hilger, MD</i> (see side bar) | 3:30pm-4:15pm | Break in the Exhibit Hall Hynes Hall A |
| 8:45am-8:55am | GS01 General Session 01 Free Paper Presentation: Laser Facial Nerve Welding in a Rabbit Model Jason Bloom, MD | 4:15pm-5:45pm | The Great Rhinoplasty Debate PAN04 (see below) <i>Moderator: Minas Constantinides, MD</i> |
| 8:55am-9:05am | The Importance of AAO-HNS Involvement for the Facial Plastic Surgeon J. Regan Thomas, MD | 6:00pm-7:30pm | Welcome Reception in the Exhibit Hall Hynes Hall A |
| 9:05am-9:20am | AAFPRS Grants and Awards <i>(The Awards are generously underwritten by PCA SKIN)</i> | 7:30pm-9:00pm | Dinner & Lecture (non-CME) The Current Face of Aging Sheraton Constitution Ballroom Edwin F. Williams, III, MD <i>(Supported by Dermik, a business of sanofi-aventis, U.S. with a non-educational grant)</i> |
| 9:20am-9:30am | What You Need to Know About Maintenance of Certification (MOC) John S. Rhee, MD | <div style="border: 1px solid black; padding: 5px;"><p>The Great Aging Face Debate PAN01 Thursday, 7:15am-8:45am Sheraton Grand Ballroom</p><p>The MACS Lift - Straightforward Effective Rejuvenation <i>Philip J. Miller, MD</i> vs. Multiplane Facelift - More Options for Better Results <i>Shan R. Baker, MD</i></p><p>Laser Assisted Neck Lift - High Tech Tightening <i>Richard D. Gentile, MD</i> vs. Liposuction Corset Platysmaplasty Neck Lift <i>Jonathan M. Sykes, MD</i></p><p>Alloplasts - Predictable, Persisting MidFace Correction <i>William J. Binder, MD</i> vs. Fat Grafting for Precise Midface Rejuvenation: Works for Me <i>Mark J. Glasgold, MD</i></p><p>Full Spectrum Laser Resurfacing <i>Russell W.H. Kridel, MD</i> vs. Chemical Peeling and Dermabrasion: Time-Tested Skin Rejuvenation <i>E. Gaylon McCollough, MD</i></p></div> | |
| 9:30am-9:40am | Clinical Consensus Statement on Nasal Valve Compromise John S. Rhee, MD | | |
| 9:40am-10:00am | Break Sheraton Independence Ballroom | | |
| 10:00am-11:30am | Midface Panel Contemporary Management of the Midface <i>Moderator: Edwin F. Williams, III, MD</i> <i>Panelists: Shan R. Baker, MD; Wayne F. Larrabee, Jr., MD; Mark J. Glasgold, MD; and Anthony P. Sclafani, MD</i> | | |
| 11:30am-12:15pm | John Conley Lectureship LEC01 "Life Sciences, Technology and the Future Global Economy" Mr. Juan Enriquez | | |
| 12:15pm-1:45pm | Lunch in the Exhibit Hall Hynes Hall A | | |
| 12:15pm-1:45pm | Women in Facial Plastic Surgery Luncheon Sheraton Constitution B "The Power of Connection--New Models of Growth and Leadership" Judith V. Jordan, PhD | | |
| 1:45pm-2:15pm | Gene Tardy Scholar LEC02 Around the World with FACE TO FACE John "Mac" Hodges, MD FACE TO FACE Video Presentation Jose Garcia | | |
| 2:15pm-3:00pm | Cleft Panel What's New with Clefts <i>Moderator: Jonathan M. Sykes, MD</i> <i>Panelists: Manoj Abraham, MD; Tom D. Wang, MD; Scott A. Tatum, MD</i> | | |
| 3:00pm-3:15pm | Presidential Outgoing Address Daniel E. Rousso, MD | | |

| | | | |
|---|--|---|---|
| 6:30am-7:30am | Breakfast Sessions BS01-05 (Five sessions running concurrently, see page 18 for descriptions) | 11:15am-Noon | Jack Anderson Lectureship "Historical and Ethical Problems Posed by the 100th Anniversary of the Flexner Report" Edward C. Halperin, MD, MA, FACR |
| BS01 Hynes 101 | PR Seminar: Coffee Talk: How to Create a Media Buzz Around Your Practice (non-CME) Karen Carolonza and Deborah Sittig, Green Room PR | Noon-1:00pm | Lunch in the Exhibit Hall Hynes Hall A |
| BS02 Hynes 104 | Optimizing Results in Facial Reconstruction Yadro Ducic, MD <i>(Supported by Stryker, Craniomaxillo-facial, with an educational grant)</i> cancelled | Noon-1:00pm | Fellowship Directors Luncheon Sheraton Republic A |
| BS03 BS04 Hynes 102 | Developing a Facial Plastic Surgery Practice in an Academic Department J. Regan Thomas, MD | 1:00pm-1:50pm | Instruction Courses Session 1 Basic Techniques in Rhinoplasty <i>Professor: J. Regan Thomas, MD</i> |
| BS05 Hynes 103 | Investment Outlook and Insights (non-CME) Vicary M. Graham, Regional President, BNY Mellon Wealth Management | RHINO 101 Sheraton Republic B | Open Rhinoplasty: Challenging Cases <i>Professors: Peter A. Adamson, MD; Minas Constantinides, MD</i> |
| Sheraton Grand Ballroom | | RHINO 201 Hynes 101 | |
| 7:30am-8:45am | Rhinoplasty Panel PAN05 Many Ways to Skin a Cat: Comparison of External and Endonasal Approaches to Common Rhinoplasty Problems by Four Master Surgeons <i>Moderator: David W. Kim, MD</i> <i>Panelists: Jack P. Gunter, MD; Mark Constantian, MD; Norman J. Pastorek, MD; and Dean M. Toriumi, MD</i> | AF 103 Hynes 102 | Comprehensive Management of the Aging Lower Lid <i>Professors: Ira D. Papel, MD; Theda C. Kontis, MD; Elba Pacheco, MD; Lisa S. Bunin, MD</i> |
| GS02 General Session 02 | | AF 110 Hynes 104 | Midface Rejuvenation <i>Professor: Edwin F. Williams, III, MD</i> |
| 8:45am-9:15am | Issues in Patient Safety Greg Meyer, MD, Senior VP, Center for Quality and Safety, Massachusetts General Hospital | AF 180 Hynes 103 | Facelift; Tailoring the Technique to the Patient's Aging State; from Mini-lifting to Extensive Rejuvenation <i>Professors: Phillip R. Langsdon, MD; E. Gaylon McCollough, MD</i> |
| 9:15am-9:45am | What Every Facial Plastic Surgeon Should Know about MRSA Marlene Durand, MD, Infectious Disease, Massachusetts General Hospital | MI 101 Hynes 107 | Botulinum Toxin and Injectable Fillers for Facial Aesthetics <i>Professors: Andrew Blitzer, MD; William J. Binder, MD</i> |
| 9:45am-9:55am | Injectable Safety Coalition Update Ira D. Papel, MD | BUS 103 Hynes 108 | Five Must Haves for a Successful Aesthetic Practice (non-CME) <i>Professor: Catherine Maley, MBA</i> |
| 9:55am-10:00am | Free Paper Presentation: Bone Morphogenetic Protein-2 and Osteoactivin Administration by Bolus and Continuous Release: Results on Mesenchymal Cell Differentiation Oneida Arosarena, MD | SCI 104 Hynes 109 | How to Use Evidence-Based Practices in Facial Plastic Surgery <i>Professors: Paul L. Leong, MD; Sam P. Most, MD</i> |
| 10:00am-10:45am | Break in the Exhibit Hall Hynes Hall A | RECON 210 Hynes 110 | Advances in Orbital Trauma Surgery: Transorbital Endoscopy and Computer-Aided Reconstruction <i>Professors: Kris S. Moe, MD; Chris Bergeron, MD; Holger G. Gassner, MD</i> |
| 10:45am-11:15am | ABFPRS Awards | 2:00pm-5:00pm | Laser Workshop Sheraton Grand Ballroom (see page 10) <i>(Supported by Lumenis, Sandstone Medical Technologies, Syneron-Candela, with educational grants)</i> |
| | | LASER01 | |

2:00pm-5:00pm **PM01** Practice Financial Management for Facial Plastic Surgeons
Sheraton Constitution Ballroom (see page 11 for description)
Karen Zupko

2:00pm-3:00pm **Instruction Courses Session 2**

BUS 102 Facial Plastic Surgeons as Leaders
Sheraton Republic B
Professor: Jake Laban

2:00pm-3:00pm **Free Paper Sessions PS01-PS08** Hynes Convention Center (see page 11)

3:00pm-4:00pm Break in the Exhibit Hall
Hynes Hall A

4:00pm-4:50pm **Instruction Courses Session 3**

RHINO 102 Success Through Preparation in Rhinoplasty
Hynes 101
Professor: Michael S. Godin, MD

RHINO 202 Revision Rhinoplasty Pearls
Sheraton Republic B
Professor: Russell W.H. Kridel, MD

AF 101 Surgical Anatomy: Keys to Improving Your Facelift Results
Hynes 102
Professor: Holger G. Gassner, MD; Kris S. Moe, MD

AF 140 Unraveling the Mystery of the Aging Neck
Hynes 103
Professor: Fred G. Fedok, MD

MI 200 Off-label Applications of Liquid Injectable Silicone (LIS)
Hynes 104
Professor: Eric M. Joseph, MD

BUS 130 Speaking to Capture Consumers: Tips for Turning "Doc Speak" into Lay Language (non-CME)
Hynes 107
Professors: Wendy Lewis; Steven J. Pearlman, MD

AF 109 Endoscopic Browlift: A Critical Appraisal of Techniques and Fixation
Hynes 110
Professor: Corey S. Maas, MD

RECON 101 Aesthetic Otoplasty
Hynes 109
Professor: Shan R. Baker, MD

RECON 150 Secondary Cleft Lip and Nasal Repair: Strategies for Addressing Common Deformities
Hynes 108
Professors: Travis T. Tollefson, MD; Jonathan M. Sykes, MD

5:00pm-5:50pm **Instruction Courses Session 4**

RHINO 104 De-mystifying Nasal Osteotomies in Rhinoplasty
Hynes 101
Professor: C. Spencer Cochran, MD

RHINO 110 Structural Endonasal Rhinoplasty
Hynes 102
Professor: Edwin F. Williams, III, MD

RHINO 203 Mastery of the Nasal Tip
Hynes 103
Professors: Patrick J. Byrne, MD; Ira D. Papel, MD; David W. Kim, MD

AF 202 How I Changed My Facelift Technique and Why
Sheraton Republic B
Professors: Stephen W. Perkins, MD; Vito C. Quatela, MD

AF 210 Ethnic Blepharoplasty
Hynes 104
Professor: Ioannis P. Glavas, MD

AF 220 Laser Facelifts: A New Paradigm in Facelift Surgery
Hynes 107
Professor: Patrick G. McMenemy, MD

BUS 104 Seven-Step Marketing Plan: The Unique Needs of Facial Plastic Surgeons (non-CME)
Hynes 108
Professors: Candace Crowe; Linda Murray

SCI 107 Scar Treatment and Prevention
Hynes 109
Professors: Andrew Winkler; Paul L. Leong, MD

RECON 103 How to Use a Creative, Problem-based Approach to Moh's Defects
Hynes 110
Professor: Grant S. Hamilton, MD

Laser Workshop

LASER01 Friday, 2:00pm-5:00pm

Sheraton Grand Ballroom

LASER01-01 (first hour) LASER01-02 (second hour)
LASER01-03 (third hour)

2:00pm Fractional Lasers - Paul J. Carniol, MD
2:15pm Combining Fractional and Erbium Resurfacing Lasers - Harry Mittelman, MD
2:30pm Multi-laser Approach to Skin Rejuvenation
Richard D. Gentile, MD
2:45pm Fractionated Laser Treatment of Acne Scars
Michael A. Persky, MD
3:00pm Combining Facial and Cervical Resurfacing with Rhytidectomy - J. Kevin Duplechain, MD
3:15pm Laser Treatment of Patients with Darker Skin
Khalil Khatri, MD
3:30pm Laser Treatment of Vascular Lesions and Skin Cancer - Zeina Tannous, MD
3:45pm Evaluation of Laser Lipolysis and Transmission of Laser Energy - Jeffrey H. Spiegel, MD
4:00pm Technique for Safe Laser Lipolysis in the Face and Neck - J. David Holcomb, MD
4:15pm Noninvasive Fat Removal - Matthew Avram, MD
4:30pm Everything You Always Wanted to Know About Preventing and Managing Laser Complications
Part I - Ranella Hirsch, MD
4:45pm Everything You Always Wanted to Know About Preventing and Managing Laser Complications
Part II - Lisa D. Grunebaum, MD

(Supported by Lumenis, Sandstone Medical Technologies, Syneron-Candela, with educational grants)

Free Paper Presentations

2:00pm-2:54pm

There are eight (8) free paper sessions scheduled concurrently. (Refer to pages 38-55 for abstracts.)

New Tech + Aging Face

PS01 Hynes 101

Moderator: Taha Shipchandler, MD

2:00pm-2:08pm Facial Structures Can Predict Behavioral Personality Traits
Helen Perakis, MD

2:09pm-2:17pm Lateral Approach Platysmaplasty in Facelift Surgery: Avoidance of the Submental Incision
David Santos, MD

2:18pm-2:26pm Safety, Efficacy and Utility of Platelet-Rich Fibrin Matrix in Facial Plastic Surgery
Anthony Sclafani, MD

2:27pm-2:35pm Personalized Nasal Surgery Using Computational Fluid Dynamics: Emerging Technologies for Surgical Planning and Assessment of Outcomes
Sachin Pawar, MD

2:36pm-2:44pm Facial Skin Visco-elasticity Measurements After Topical Mandelic Acid
Stanley Jacobs, MD

2:45pm-2:54pm Coolskin-LSL-01-2010 - Evaluation in Anxiety and Pain Associated with Facial Injections through the Use of the CoolskinMedical Device in Rhytidectomy
Farhan Taghizadeh, MD

Rhinoplasty 1

PS02 Hynes 102

Moderator: Jason Guillot, MD

2:00pm-2:08pm Cosmetic Septorhinoplasty: To Pack or not to Pack
Carlos Ayala, MD

2:09pm-2:17pm The Alar Spanning Suture: A Useful Tool in Rhinoplasty to Refine the Nasal Tip
Ahmed Sufyan, MD

2:18pm-2:26pm Tongue in Groove Maneuver in Primary Endonasal Rhinoplasty: A Review of 366 Patients over a Five Year Period
Edwin F. Williams, III, MD

2:27pm-2:35pm Closed Techniques for the Open Rhinoplasty Generation
Anita Sethna, MD

2:36pm-2:44pm Volumetric Analysis of the Butterfly Spreader Graft
Scott Chalet, MD

2:45pm-2:54pm Porous Polyethylene Implants for the Correction of External Nasal Valve Collapse
Bedy Lau, MD

Aging Face

PS03 Hynes 103

Moderator: Shari Reitzen, MD

2:00pm-2:08pm Concurrent Structural Fat Grafting and Carbon Dioxide Laser Resurfacing for Perioral and Lower Face Rejuvenation
Evan Ransom, MD

2:09pm-2:17pm Six Long-term Analysis of Surgical Correction of the Senile Upper Lip
Paul Holden, MD

2:18pm-2:26pm 23 Mycobacterium Abscessus Outbreak After Facelifts Performed in an Outpatient Surgery Center
Anurag Agarwal, MD

2:27pm-2:35pm Low Hyoid and Obtuse Cervicomentum Angle: Addressing the Difficult Neck During Rhytidectomy with Hyoid Release
Nishant Bhatt, MD

2:36pm-2:44pm Neck Lifting: New Minimally Invasive Techniques
Grigorie Mashkevich, MD

2:45pm-2:54pm Rationale and Technique for Identifying and Achieving Ideal Vectors in Mid and Lower Face and Neck Lift Surgery
Craig Czyz, MD

Practice Financial Management for Facial Plastic Surgeons

PM01 Friday, 2:00pm-5:00pm

Sheraton Constitution Ballroom

PM01-01 (first hour) PM01-02 (second hour) PM01-03 (third hour)

Karen Zupko, President, KarenZupko & Associates, Inc.

Designed for facial plastic surgeons who want to lower overhead, improve cash flow, understand and implement audit controls and boost their aesthetic income.

Learning Objectives:

By attending this course you will know how to:

- Improve the Income and Expense Statement so it is more useful.
- Create a practice Financial X-ray Report (FXR)TM with key benchmark data.
- Evaluate financial policies for aesthetic patients, including charging for consults, quotations, surgical scheduling deposits, timing of balance collections, discounting, revisions, etc.
- Monitor financial controls that eliminate theft and "creative bookkeeping."

Courses and session codes

The codes next to the session titles reflect the codes on the evaluation forms. The courses (i.e. RHINO 101) are coded as such. Please make sure you double check the codes of the courses to match what you fill in when completing the forms.

You may access the evaluation forms on-line at: <http://www.aafprs.org/Content/NavigationMenu/Home/CME/Fall2010Eval.htm?>. Make sure you have your member ID number handy when completing each section.

Rhinoplasty and Practice Management

PS04 Hynes 104

Moderator: Timothy Minton, MD

- 2:00pm-2:08pm CT Imaging for Analysis of the Internal Nasal Valve
Jason Moche, MD
- 2:09pm-2:17pm The Role of the Nose Survey and Snoring Status in Screening for Obstructive Sleep Apnea
Andres Godoy, MD
- 2:17pm-2:27pm Study Evaluating the Pre Operative Incidence of Olfactory Dysfunction in Patients Undergoing Nasal Surgery; Implications for Nasal Surgeons
Jeff Jumaily, MD
- 2:27pm-2:35pm External nasal valve insufficiency: Grading and Management
Ha Chau, MD
- 2:36pm-2:44pm Perceptions of Aesthetic and Reconstructive Facial Surgery Among Medical Students
W. Wesley Heckman, MD
- 2:45pm-2:54pm A Demographic Analysis of the Scope of Practice of Fellowship-trained Surgeons in the Field of Facial Plastic and Reconstructive Surgery
Jonathan Kulbersh, MD

Basic Science

PS05 Hynes 107

Moderator: James Lucas, MD

- 2:00pm-2:08pm Maximizing Melanogenesis Inhibition
Jennifer Linder, MD
- 2:09pm-2:17pm A Phase I Double-Blind, Randomized, Placebo- Controlled Trial of Skin Health Experimental Product (SHEP) versus Placebo Taken Twice Daily to Support Healthy Skin
Steven Dayan, MD
- 2:18pm-2:26pm Diclofenac Sodium as a Novel Scar-Reducing Therapy: A Wound-healing Study on the Mouse Model
Tendy Chiang, MD
- 2:27pm-2:35pm The Effect of Corticosteroids on Functional Recovery and Neuron Survival After Facial Nerve Crush Injury
David M. Lieberman, MD
- 2:36pm-2:44pm Quantitative Modeling of Facial Osteocutaneous Ligaments Utilizing a Novel Technique to Measure Facial Laxity
Ryan Manz, MD

PS06 Forehead + Fillers

Sheraton Boston Hynes 108

Moderator: Laura Hetzler, MD

- 2:00pm-2:08pm Soft Tissue Filler Combination Treatment for Tear Trough Defects
Craig Czyz, MD
- 2:09pm-2:17pm Long Term Results of Autologous Periorbital Lipotransfer
Corey Yeh, MD
- 2:18pm-2:26pm Comparison of Onset of Action of Botox Cosmetic and Dysport in the Treatment of Crow's Feet
Kenneth Yu, MD

- 2:27pm-2:35pm Comparison of Efficacy of Action of Botox Cosmetic and Dysport in the Treatment of Crow's Feet
Kenneth Yu, MD
- 2:36pm-2:44pm Self Injection of "Cooking Oil" for Facial Augmentation
Michael Kohanski, MD
- 2:45pm-2:54pm A Blinded Evaluation of the Effects of Hyaluronic Acid Filler Injections on First Impressions
Steven Dayan, MD

Reconstructive

PS07 Hynes 109

Moderator: Noah Meltzer, MD

- 2:00pm-2:08pm Secondary Free Flap Reconstruction of the Salvage Laryngectomy
Isaac A. Bohannon, MD
- 2:09pm-2:17pm Reanimation of Bilateral Facial Paralysis Using Bilateral Temporalis Tendon Transfer and Fascia Lata Sling
Heather Waters, MD
- 2:18pm-2:26pm The Lateral Circumflex Femoral Artery Angiosome: Reconstructive Options and Construct Specific Donor Site Morbidity
Heather Waters, MD
- 2:27pm-2:35pm Creation and Closure of Circular Defects with Dog Ear Excisions to Promote Tissue Conservation
Thomas Lee, MD
- 2:36pm-2:44pm Anterolateral Thigh Free Flap for Soft Tissue Head and Neck Reconstruction in a Midwest Population: Evolving Practice Patterns
Noah Meltzer, MD
- 2:45pm-2:54pm Facial Contour Augmentation Using the Anterolateral Thigh Adipofascial Flap
Rahul Seth, MD

Reconstructive and Resurfacing

PS08 Hynes 110

Moderator: J. Jared Christofel, MD

- 2:00pm-2:08pm Short Flap Rhytidectomy with Fractional Carbon Dioxide Laser Rejuvenation
Farhan Taghizadeh, MD
- 2:09pm-2:17pm Platysmectomy: A Novel Procedure for Severe Neck Synkinesis in Patients with Facial Paralysis
Douglas Henstrom, MD
- 2:18pm-2:26pm Placement of Platinum Eyelid Weight Improves Quality of Life in Patients with Facial Paralysis
Douglas Henstrom, MD
- 2:27pm-2:35pm Clinical Features and Treatment of Pediatric Facial Dog Bites
Henry Chen, MD
- 2:36pm-2:44pm Safety of Simultaneous Full-face Carbon Dioxide Fractional Laser Resurfacing and Rhytidectomy: A Case of 21 Patients
Gustavo Diaz, MD
- 2:45pm-2:54pm The Benefits of Superficial Blended Chemical Peels
Jennifer Linder, MD

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| 6:30am-7:30am | Breakfast Sessions BS06-10 (Five sessions running concurrently, see page 18 for descriptions) | BUS 107 Hynes 108 | Internet Marketing, Social Networking, and Converting Patients Online (non-CME) <i>Professor: Robert Baxter</i> |
| BS06 Hynes 101 | Injectable Poly L- Lactic Acid Rebecca Fitzgerald, MD | SCI 101 Hynes 109 | Archives of Facial Plastic Surgery: The Second Decade and Beyond <i>Professors: John S. Rhee, MD; Wayne F. Larrabee, Jr., MD</i> |
| BS07 Hynes 102 | Advanced Concepts and Surgical Management of Hemangiomas Marcelo L. Hochman, MD and Edwin F. Williams, III, MD | RECON 200 Hynes 110 | Microtia Reconstruction: a Multicenter Perspective on Current Options for Comprehensive Management <i>Professors: Travis T. Tollefson, MD; Anthony E. Brissett, MD; Kofi D. Boahene, MD; Craig S. Murakami, MD; Jeffrey Vrabec, MD; Tom D. Wang, MD</i> |
| BS08 Hynes 103 | Ten Tools to be a Successful Surgeon Peter A. Adamson, MD | | |
| BS09 Hynes 104 | Contemporary Treatment of Facial Nerve Weakness Tessa A. Hadlock, MD | | |
| BS10 Boston Park Plaza Hotel | The Nose-Inside and Outside-Functional and Aesthetic Considerations for the Surgeon American Rhinologic Society Breakfast Symposium (CME provided by ARS); free to AAFPRS members but registration required | 11:30am-12:20pm | Instruction Courses Session 6 |
| Sheraton Grand Ballroom | | RHINO 155 Sheraton Republic B | Primary and Revision Ethnic Rhinoplasty <i>Professor: Paul S. Nassif, MD</i> |
| GS03 General Session 03 | | RHINO 160 Hynes 101 | The Crooked Nose Algorithm: Seven Critical Steps <i>Professors: Benjamin C. Marcus, MD; Travis T. Tollefson, MD</i> |
| 7:45am-8:30am | Emerging Trends and Technologies Forum (see list of topics on page 15) Moderator: Harry Mittelman, MD | AF 115 Hynes 103 | Midface Rejuvenation-Minimally Invasive to Subperiosteal Approaches <i>Professor: Keith A. Laferriere, MD</i> |
| 8:30am-9:45am | Incoming Presidential Address Jonathan M. Sykes, MD Business Meeting and Elections | AF 175 Hynes 102 | Management of the Aging Face: Surgical Alternatives <i>Professor: Shan R. Baker, MD</i> |
| 9:45am-10:30am | Break in the Exhibit Hall Hynes Hall A | MI 102 Hynes 104 | What's New in Intense Pulsed Light (IPL) <i>Professors: John J. Martin, MD; Brett Kotlus, MD</i> |
| 10:30am-11:20am | Instruction Courses Session 5 | BUS 106 Hynes 107 | Internal and External Marketing (non-CME) <i>Professors: Steve H. Dayan, MD; Tracy Drumm</i> |
| RHINO 120 Hynes 102 | Profile Refinement in Aesthetic Rhinoplasty <i>Professor: Shan R. Baker, MD</i> | BUS 110 Hynes 108 | Social Media and Networking (non-CME) <i>Professor: Anne Cohen</i> |
| RHINO 210 Sheraton Republic B | Mastery of the Nasal Tip Without Grafts <i>Professor: Robert L. Simons, MD</i> | BUS 120 Hynes 109 | Six Legal Tips <i>Professor: Thomas Rhodes, Esq.</i> |
| AF 102 Hynes 107 | Blepharoplasty: Assessment and Basic Techniques <i>Professors: Gregory H. Branham, MD; Arash Moradzadeh, MD</i> | SCI 102 Hynes 110 | Photography in Facial Plastic Surgery <i>Professors: Grant S. Hamilton, MD; Raffi DerSarkissian, MD</i> |
| MI 103 Hynes 101 | Fractional CO2 Laser Resurfacing: the Anti-aging Breakthrough of the Decade <i>Professors: Ryan N. Heffelfinger, MD; Howard D. Krein, MD; Lisa D. Grunebaum, MD; and Michael A. Persky, MD</i> | 12:30pm-1:30pm | Lunch in the Exhibit Hall Hynes Hall A |
| MI 106 Hynes 103 | Adding Chemical Peels to Your Practice <i>Professors: Stephen W. Perkins, MD; Devinder S. Mangat, MD</i> | 12:30pm-1:30pm | Academic Practice Luncheon Hynes 103 |
| BUS 101 Hynes 104 | Getting Started in a Facial Plastic Surgery Practice <i>Professors: Mathew A. Kienstra, MD and Stacie D. McClane, MD</i> | 12:30pm-1:30pm | Laser Luncheon (non-CME) Fractionated CO2 Laser for Off-The-Face Resurfacing Treating the Entire Body Using UltraPulse TotalFX Hynes 102 J. Kevin Duplechain, MD (Supported by Lumenis with a non-educational grant) |

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| 1:00pm-6:00pm ESS01 | Essentials in Facial Plastic Surgery Sheraton Grand Ballroom (see page 16 for schedule) Stephen S. Park, MD | 2:30pm-3:20pm | Instruction Courses Session 8 |
| 1:15pm-4:15pm INJ01 | Injectable Fillers Workshop Sheraton Republic B (see page 15 for schedule) William H. Truswell, MD <i>(Supported by Medicis Pharmaceutical Corporation, Merz Aesthetics, and Dermik, a business of sanofi-aventis U.S. with educational grants)</i> | RHINO 170(2) Hynes 102 | Endonasal Mastery of the Nasal Tip (2nd hour) <i>Professor: Norman J. Pastorek, MD</i> |
| 1:30pm-3:30pm HAIR01 | Hair Transplantation Workshop Sheraton Constitution Ballroom (see page 16 for description) Jeffrey S. Epstein, MD; Lisa Ishii, MD and John Bitner, MD | RHINO 270 Hynes 103 | Use of Osseocartilaginous Rib Grafts in Rhinoplasty <i>Professors: Peter A. Hilger, MD; Jared Christophel, MD</i> |
| 1:30pm-2:20pm | Instruction Courses Session 7 | RHINO 230 Hynes 101 | Lessons Learned in Revision Rhinoplasty to Improve the Results in Primary Rhinoplasty <i>Professor: Steven J. Pearlman, MD</i> |
| RHINO 135 Hynes 101 | Grafting in Rhinoplasty-From Cartilage to Implants <i>Professor: Roxana Cobo, MD</i> | MI 140 Hynes 104 | Fat Grafting for Facial Volume Enhancement <i>Professor: Babak Azizzadeh, MD</i> |
| RHINO 170(1) Hynes 102 | Endonasal Mastery of the Nasal Tip (2 hours) <i>Professor: Norman J. Pastorek, MD</i> | MI 105 Hynes 107 | Is CO2 Laser Resurfacing Still the Gold Standard? <i>Professors: J. Kevin Duplechain, MD; Steve H. Dayan, MD; Bradford S. Patt, MD</i> |
| RHINO 220 Hynes 107 | The State of the Art for the One Unit Cartilaginous Reconstruction of the Nasal Tip support with Septal and Conchal Cartilage in Revision Tip Surgery by Endonasal Approach <i>Professor: Fernando C. Pedroza, MD</i> | BUS 105 Sheraton Backbay B/C | Avoiding the Ten Most Common Marketing Blunders: How to Thrive, Not Just Survive, in Today's Hyper-Competitive World (non-CME) <i>Professors: Candace Crowe; Linda Murray</i> |
| AF 170 Hynes 103 | Comprehensive Management of the Aging Face Patient: From Consultation to Diagnosis to Surgery <i>Professor: Jonathan M. Sykes, MD</i> | SCI 108 Hynes 108 | Managing the Difficult Patient and Turning Anger into Appreciation <i>Professors: Edmund A. Pribitkin, MD; Howard D. Krein, MD</i> |
| BUS 140 Hynes 108 | Financial Management for the Facial Plastic Surgeon <i>Professors: Min Ahn, MD; Beth Brooks</i> | SCI 105 Hynes 109 | Skin Care in the Eyes of a Dermatologist: What Works and What Doesn't <i>Professor: Jennifer Linder, MD</i> |
| BUS 115 Sheraton Backbay B/C | Reputation Management (non-CME) <i>Professors: Tom Seary; Robert Baxter; C. Spencer Cochran, MD</i> | RECON 180 Hynes 110 | Auricular Reconstruction 2010: From Non-Surgical Ear Molding, Incisionless Otoplasty to Microtia Repair <i>Professor: Robert O. Ruder, MD</i> |
| BUS 150 Hynes 109 | What You Need to Know About Getting Your Surgicenter Accredited <i>Professors: Neil A. Gordon, MD; Andrew A. Jacono, MD</i> | 3:30pm-4:00pm | Break in the Exhibit Hall Hynes Hall A |
| SCI 111 Hynes 110 | Off Label Uses of Neurotoxin-Botulinum Toxin in Facial Wound Healing <i>Professors: Holger G. Gassner, MD; David E. Sherris, MD</i> | 4:00pm-4:50pm | Instruction Courses Session 9 |
| RECON 220 Hynes 104 | Handling Extensive Facial Fractures and Nasal Reconstruction After Total Avulsion <i>Professors: Phillip R. Langsdon, MD; John L. Frodel, Jr., MD; Fred G. Fedok, MD</i> | RHINO 140 Hynes 104 | The Nasal Valve: Anatomy and Repair <i>Professors: Stephen A. Goldstein, MD; Oren Friedman, MD</i> |
| | | RHINO 152 Hynes 103 | External Revision Rhinoplasty: Strategies for Effective Restoration <i>Professor: Richard Davis, MD</i> |
| | | RHINO 240 Hynes 107 | Endonasal Rhinoplasty: Versatility and Naturality <i>Professor: Nabil Fuleihan, MD</i> |
| | | AF 104 Hynes 108 | Surgical Pearls to Successful Endoscopic Brow Lifting <i>Professor: Guy G. Massry, MD; Paul S. Nassif, MD</i> |

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| BUS 132 Sheraton Backbay B/C | So You Want to Be Famous (non-CME) <i>Professor: Catherine Maley, MBA</i> |
| SCI 109 Hynes 109 | How to Recognize Signs of Body Dysmorphic Disorder and Other Personality Disorders <i>Professor: Henri P. Gaboriau, MD</i> |
| SCI 110 Hynes 110 | Contemporary Management of Melanoma <i>Professor: Edward D. Buckingham, MD</i> |
| RECON 102 Hynes 101 | Reconstruction of the Protruding Ear and Acquired Ear Defects <i>Professors: Fred J. Stucker, MD; Sunny S. Park, MD</i> |
| RECON 104 Hynes 102 | Basic Cleft Lip and Palate Surgery <i>Professor: Tom D. Wang, MD; Christian Stallworth, MD</i> |
| 5:00pm-5:50pm | <u>Instruction Courses Session 10</u> |
| RHINO 130 Hynes 102 | Use of Cartilage Grafts for Rhinoplasty <i>Professors: Alvin I. Glasgold, MD; Robert A. Glasgold, MD</i> |
| RHINO 150 Hynes 101 | Alar Base Resection: Indications, Techniques, and Complications <i>Professor: Alireza Mesbahi, MD</i> |
| RHINO 265 Hynes 107 | Surgical Techniques for the Severely Short and Contracted Nose <i>Professor: Dong Hak Jung, MD</i> |
| MI 104 Hynes 104 | 1444nm Interstitial Pulsed NdYAG Laser, Laser Tissue Interaction and Applications in Facial Aesthetic Surgery <i>Professors: J. David Holcomb, MD; Daniel E. Rousso, MD</i> |
| BUS 135 Sheraton Backbay B/C | Update on Patient Coordinators: In Superior Successful Practices <i>Professor: Karen Zupko</i> |
| SCI 103 Hynes 109 | Concepts of Attractiveness: The Male Facial Aesthetic <i>Professors: Michael J. Reilly, MD; Babak Azizzadeh, MD; Diana Ponsky, MD; Patrick J. Byrne, MD</i> |
| SCI 112 Hynes 110 | Using Extracellular Matrices (ECM's) to Camouflage Flaws, Support Sagging Tissues and Fill Defects in Facial Aesthetic Surgery <i>Professors: Edmund A. Pribitkin, MD; Ryan N. Heffelfinger, MD</i> |
| RECON 160 Hynes 103 | Facial Reanimation-Contemporary Management (The Cutting Edge) <i>Professors: Patrick J. Byrne, MD; Kris S. Moe, MD; Tessa A. Hadlock, MD</i> |
| 6:00pm-7:00pm | Residents Reception following the Essentials Course Sheraton Grand Ballroom |

6:30pm-8:00pm
SDIN02

Dinner and Lecture (CME)
Advances in Neuromodulators:
Integrating Botox Cosmetic and Dysport
and Improving Outcomes
Sheraton Constitution Ballroom
(See description on page 16)
Corey S. Maas, MD
*(Supported by Medicis Pharmaceutical
Corporation with an educational grant)*

Emerging Trends and Technologies Forum

Saturday, 7:45am-8:30am Part of GS03
Sheraton Grand Ballroom

- Biofilms, Before Injecting Another Filler, You Need to Know
Steven Dayan, MD
- The Future of 'Lipodissolve' for Emulsifying Submental Fat
Michael Villano, MD
- Selphyl Platelet Rich Fibrin Matrix for Guided Tissue Regeneration
Anthony P. Sclafani, MD
- Review of Fat Sculpting Devices and Their Potential in the Head and Neck
Jason Pozner, MD
- Body Contouring with VaserShape MC1
Paul Zieg, MD
- A Novel No Downtime, No Pain RF Device for Achieving Modest Skin Rejuvenation
Steven Dayan, MD
- Advances in Lip Augmentation---The Permanent Choice
Peter Raphael, MD

Injectable Fillers Workshop

INJ01 Saturday, 1:15pm-4:15pm
Sheraton Republic B
Faculty: William H. Truswell, MD (Moderator)

- INJ01-01**
- 1:15pm-1:30pm Introduction and Fillers Overview
William H. Truswell, MD
 - 1:30pm-1:42pm What We Can Use Up There and You Can't Down Here
David A. F. Ellis, MD
 - 1:42pm-1:54pm Calcium Hydroxylapatite for Filling and Volumizing
Stuart H. Bentkover, MD
 - 1:54pm-2:06pm The Poly-L-lactic Acid Experience
Albert J. Fox, MD
 - 2:06pm-2:18pm My Preference for Hyaluronic Acids
Roger A. Allcroft, MD
 - 2:18pm-2:30pm Polymethylmethacrolate in Practice
Frank P. Fechner, MD
- INJ01-02**
- 2:30pm-4:30pm Live Patient Injection Demonstrations

(Supported by Medicis Pharmaceutical Corporation, Merz Aesthetics, and Dermik, a business of sanofi-aventis U.S. with educational grants)

Essentials in Facial Plastic Surgery

ESS01 Saturday, 1:00pm-6:00pm

Sheraton Grand Ballroom

Optional, no charge for residents.

ESS01-01

1:00pm-1:10pm Introduction and Welcome
Stephen S. Park, MD

1:10pm-1:50pm Cutaneous Lesions and Flaps
Stephen S. Park, MD

A review of common skin lesions in terms of diagnosis and treatment options. Algorithms for local flap selection and proper design will be covered.

1:50pm-2:30pm Facelift/Liposuction/
Cutaneous Resurfacing
Edward H. Farrior, MD

This will cover the management of the aging lower face with emphasis on patient selection, treatment options, surgical techniques, and complications.

ESS01-02

2:30pm-3:10pm Syndromes and Congenital Problems
Jonathan M. Sykes, MD

This will include an overview of cranial facial problems such as clefts, microtia, and syndromes involving the face, head, and neck. It covers the heredity, initial team management, and surgical techniques.

3:10pm-3:20pm Beverage Break

ESS01-03

3:20pm-4:00pm Head and Neck Reconstruction/
Facial Paralysis
Terry A. Day, MD

A review of the major flaps utilized in head and neck reconstruction, including the "nuts & bolts" of myocutaneous and microvascular flaps. This also covers the basic management and rehabilitation of facial paralysis.

4:00pm-4:40pm Browlift, Blepharoplasty, and
Office-based Procedures
Tom D. Wang, MD

Rejuvenation of the aging upper face will include the analysis, indications, and various surgical techniques used. In addition, office-based procedures including fillers and botulinum toxin will be covered.

ESS01-04

4:40pm-5:20pm Maxillofacial and Soft Tissue Trauma
John L. Frodel, Jr., MD

An overview of soft tissue trauma and facial fractures in terms of their diagnosis and management will be provided.

5:20pm-6:00pm Rhinoplasty
Dean M. Toriumi, MD

Cosmetic and functional aspects of rhinoplasty are covered including evaluation, fundamental techniques and complications.

6:00pm-7:00pm Residents Reception

Hair Transplantation Workshop

HAIR01 Saturday, 1:30pm-3:30pm

Sheraton Constitution Ballroom

Jeffrey S. Epstein, MD; Lisa Ishii, MD; and John Bitner, MD

Surgical hair restoration for the past 10 years has been able to provide truly natural appearing results. Microscopic assisted follicular unit dissection and the newer follicular unit extraction techniques have multiple applications, beyond the treatment of male pattern hair loss. This workshop, conducted by several facial plastic surgeons whose practices vary greatly in the percentage of hair work, is able to provide valuable information to colleagues looking to familiarize with treatment options to those seeking to add hair to their surgical armamentarium.

Dinner and Lecture

Advances in Neuromodulators: Integrating Botox Cosmetic and Dysport and Improving Outcomes

SDIN02 6:30pm-8:00pm

Sheraton Constitution Ballroom

Corey S. Maas, MD

This course will provide an overview of the clinical trial data on currently approved botulinum neuromodulators as well as those in phase III clinical trials. Video demonstrations of individual treatment techniques by acknowledged experts will be presented. Animated video and still photography demonstrating before and after results for the currently approved neuromodulators with pre and post assessment will provide participants with points of discussion for improving outcomes. Data from the internally controlled (split face) study comparing onabotulinum toxin type A and abobotulinum toxin type A will be presented with the implications of this data in clinical practice.

The course will address, in detail, various methods for reconstitution currently employed in busy practices for both approved neuromodulators with recommendations on dosage and subtle differences with these products. The participant will also hear strategies for implementation of the FDA mandated patient disclosure information –Risk Evaluation and Management Strategies (REMS).

(Supported by Medicis Pharmaceutical Corporation with an educational grant)

Courses and session codes

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Bridge Day Sunday

Sheraton Constitution Ballroom

8:00am-10:00am Fat Grafting Workshop
BD01-01 (first hour); **BD01-02** (second hour)
Director: Mark J. Glasgold, MD
Speakers: Edward D. Buckingham, MD; Lisa M. Donofrio, and Thomas L. Tzikas, MD
Topics will include:
•Aesthetic Evaluation
•Technique
•Integrating Fat Grafting Into an Existing Practice
•Fat Grafting and Stem Cells

Sheraton Republic B

8:00am-10:00am Moh's Surgery: State of the Art with a Focus on Reconstruction
BD02-01 (first hour); **BD02-02** (second hour)
Moderator: Patrick J. Byrne, MD
•Moh's Surgery
Tom D. Wang, MD
•Skin Cancer Management from the Head and Neck Surgeon's Perspective
Jeremy Richmond, MD
•Aesthetic Principles as Applied to Mohs Defects
Peter A. Hilger, MD
•Lip Reconstruction
Brian Jewett, MD
•Management of Small and Superficial Nasal Defects
Shan R. Baker, MD
•What Flaps to Use Where?
Patrick J. Byrne, MD
•Management of Massive Facial Defects
Michael Fritz, MD

Sheraton Republic B

10:00am-1:00pm Advances in Microvascular Reconstruction
BD03-01 (first hour); **BD03-02** (second hour); **BD03-03** (third hour)
Moderator: Daniel S. Alam, MD
•The Evolution of Microvascular Reconstruction
Brian Burkey, MD

Part I: Maxillary and Midface Reconstruction

•Microvascular Flaps in Total Nasal Reconstruction
Patrick J. Byrne, MD
•Microvascular Reconstruction of the Midface
Neal Futran, MD
•Gracilis Microvascular Flaps for Facial Paralysis
Babak Azzizadeh, MD

•Orbitomaxillary Reconstruction with a Layered Fibula Flap
Michael Fritz, MD
•Microvascular Reconstruction of Combat Injuries
Joseph Sneizak, MD
•Free Flap Reconstruction of Large Cutaneous Cancers
Jennifer Kim, MD

Part II: Pharyngeal/Mandibular/Skull Base Reconstruction

•Partial Pharyngeal Reconstructions with Free Flaps in Chemoradiated Patients
Ted Teknos, MD
•Pharyngeal Reconstruction with Laryngeal Preservation to Manage Complete Hypopharyngeal Stenosis
Michael Nuara, MD
•Primary Surgical Management of T3-4 Hypopharyngeal Tumors with Free Flap Reconstruction
Steve Cannady, MD
•Osteocutaneous Radial Forearm Flaps for Mandible Reconstruction
Eben Rosenthal, MD
•Reconstruction of the Anterior and Lateral Skull Base
Derrick Lin, MD
•Lateral Skull Base Defects: Microvascular Free Tissue Reconstruction with or without Prosthetic Augmentation.
Chad Zender, MD
•Pediatric Microvascular Reconstruction
Yadro Ducic, MD

Part III: Technical Advances in Microvascular Surgery

•The Utility of Flap De-epithelialization at time of Harvest
Keith Blackwell, MD
•Robotic Microvascular Reconstruction
Tamir Ghanem, MD
•The Versatile Circumflex Femoral Artery and Vastus Lateralis Flap
Kofi Boahene, MD
•Free Flaps for Volumetric Reconstruction
Dan Knott, MD
•Implantable Dopplers for Free Flap Monitoring
Jason Hunt, MD
•Optimal Management of Donor Site Defects (Xenografts, VACs)
Ryan Heffelfinger, MD
•Making the Extraordinary Ordinary/Trends for the Future
Daniel Deschler, MD

1:00pm

Meeting Adjourned

BS01 Public Relations Seminar: Coffee Talk: How to Create a Media Buzz Around Your Practice (non-CME)

Deborah Sittig and Karen Carolonza, Green Room PR
Start your day off with a fresh look at how to improve public relations in your practice. The Academy's PR firm will discuss the fundamentals of how to identify newsworthy stories and attract the right media to cover them. Participants will also receive an overview of the new AAFPRS PR Tool Kit. The tool kit was developed to provide Academy members with essential materials to empower and support their publicity efforts. Discussion will focus on how to use these materials and to answer questions on how to optimize your media presence.

BS02 Optimizing Results in Facial Reconstruction Yadro Ducic, MD

This session will review a number of simple techniques which I have found useful in optimizing the results of reconstruction in some traditionally challenging situations. Complex scalp, midfacial, orbital and oromandibular reconstructive challenges will be addressed. Both deformities arising from trauma and oncologic resection will be covered.

BS03 cancelled

BS04 Developing a Facial Plastic Surgery Practice in an Academic Department

J. Regan Thomas, MD

Successful steps and strategies will be presented to develop active facial plastic surgery practice in an academic environment. Academic faculty relationships, required facilities, practice development and marketing and "key pearls" will be discussed. The participants should be able to: discover role and relationships of facial plastic surgeons in academics; understand important aspects of practice development and how it differs from private practice; and understand strategy for dealing with department heads and fellow faculty.

BS05 Investment Outlook and Insights (non-CME)

Vicary M. Graham, Regional President, BNY Mellon Wealth Management

Selecting the right wealth management partner is more critical than ever before. BNY Mellon Wealth Management will share its current thinking on investing through global diversification and opportunistic strategies with optimum tax efficiency. Through client objective driven investing techniques, BNY Mellon will share insights on the importance of strategic asset allocation for wealth preservation, accumulation, and multigenerational family portfolios. BNY Mellon will highlight its best practices in family philanthropy and governance.

BS06 Injectable Poly L- Lactic Acid

Rebecca Fitzgerald, MD

Although the sequence of events noted in the aging face are predictable, their pace is very individualized. This session will review recent literature outlining the pathophysiology of facial aging, and the role of PLLA in addressing those changes. This will include use of the product to address volume loss in multiple structural tissue layers to address the changes in facial shape, balance, and proportions that accompany the aging process, as well as the currently recommended guidelines to ensure both safe and effective use of this product.

BS07 Advanced Concepts and Surgical Management of Hemangiomas

Marcelo L. Hochman, MD and Edwin F. Williams, III, MD

Hemangiomas and other vascular anomalies affect over 400,000 babies every year in the US alone and millions around the world. Facial plastic surgeons are in a unique position to be at the forefront of the treatment of these patients whose tumors occur in the face and head/neck in over 80% of cases. As medical, laser and surgical techniques evolve a consensus in treatment is emerging. This breakfast meeting will focus on clinically applicable information for the surgeon who is interested in incorporating the treatment of vascular anomalies into his/her practice.

BS08 Ten Tools to be a Successful Surgeon

Peter A. Adamson, MD

This keynote presentation describes 10 attitudinal and practical administrative concepts and processes that can be used to enhance the quality of one's professional life and management of the business aspects of practice. Some of the tools covered include time management, development of one's unique ability, strategic planning, maintaining a positive focus, adding value to one's practice and patient care, planning lifetime goals and celebrating progress. This is a motivational type of presentation. Participants should be able to: learn about specific attitudes which can improve a surgeon's perspective of professional and personal life; learn about specific business management tools which will improve productivity and enhance value of the experience delivered to patients; and illustrate the means by which these tools may be instituted into one's professional and personal life.

BS09 Contemporary Treatment of Facial Nerve Weakness

Tessa A. Hadlock, MD

In this session, we will discuss the full range of strategies for the management of facial paralysis, from appropriate medical management in the acute stages, through physical therapy for hypertonicity and zonal weakness, through botulinum toxin chemodenervation, through surgical strategies. Contemporary office-based surgical interventions will be covered, as well as local, regional, and free tissue options and nerve grafting, in managing the different facial zones.

BS10 The Nose-Inside and Outside-Functional and Aesthetic Considerations for the Surgeon

Off-site, Boston Park Plaza Hotel

American Rhinologic Society Breakfast Symposium

Moderator: Michael Setzen, MD

Panelists: Daniel G. Becker MD, Minas Constantinides MD, Paul Toffel MD; and Dean M. Toriumi MD

Discussion will focus on what functional goals both the rhinologist and facial plastic surgeon hope to accomplish during nasal surgery with an emphasis on diagnosis and surgical treatment including septoplasty, turbinectomy, endoscopic sinus surgery and functional rhinoplasty- Can we work together or alone?

RHINO 101 Basic Techniques in Rhinoplasty

Professor: J. Regan Thomas, MD

A step-by-step presentation including preoperative evaluation, basic techniques of modification by anatomic component using both “open” and endonasal approaches.

Learning Objectives:

- Evaluate the nose preoperatively and select operative plan based on anatomy and aesthetic goals
- Understand relative value of various rhinoplasty techniques
- Avoidance of complications

RHINO 102 Success Through Preparation in Rhinoplasty

Professor: Michael S. Godin, MD

Rhinoplasty is widely acknowledged to be the most technically demanding of all facial plastic surgical procedures. Proper preparation can make the difference between successful and disappointing results. This course will describe all the necessary steps the surgeon must take to prepare the patient and himself for a favorable outcome. Consultation skills, photography, patient selection, nasal analysis, preoperative patient protocols, and preparation of a step-by-step written plan for the procedure will be discussed in detail.

Learning Objectives:

- Acquire an understanding of the crucial role of preparation in rhinoplasty
- Understand how to select appropriate patients and avoid the patient who will not be satisfied under any circumstances
- Learn how to gauge and, when necessary, adjust patient expectations prior to surgery to help insure that the patient will be satisfied with the ultimate result
- Learn how to use photographs and documented goals to construct a step-by-step plan of surgical techniques to help achieve a favorable result

RHINO 104 De-mystifying Nasal Osteotomies in Rhinoplasty

Professor: C. Spencer Cochran, MD

This didactic course examines the normal anatomic variants of the boney nasal vault and describes specific osteotomy techniques to optimally address each abnormality including: the wide boney base, wide boney dorsum, deviated nose, and narrow dorsum. An in-depth technical description of both the percutaneous and intranasal methods of performing nasal bone osteotomies in rhinoplasty is presented. Pearls and steps that can be taken to avoid common pitfalls are discussed.

Learning Objectives:

- Be able to recognize common anatomic variants of boney nasal vault
- Understand the indications for osteotomies in rhinoplasty
- Learn the various techniques and options for performing osteotomies in rhinoplasty

RHINO 110 Structural Endonasal Rhinoplasty

Professor: Edwin F. Williams, III, MD

Endonasal Rhinoplasty has often and unfairly been described as reduction rhinoplasty by advocates of the open structural approach. Endonasal Rhinoplasty with

an emphasis on the appropriate use of cartilage grafts and structural re-orientation can be executed with a small amount of surgical dissection, fewer surgical maneuvers and variables thus resulting in an approach that is consistent in delivering long term results. This course will describe in detail, indications, complications, pearls and technical maneuvers used in primary structural rhinoplasty.

Learning Objectives:

- Understand the endonasal approach to rhinoplasty
- Understand structural reorientation using suture technique
- Learn cartilage grafting and minimal reduction

RHINO 120 Profile Refinement in Aesthetic Rhinoplasty

Professor: Shan R. Baker, MD

A one-hour course will explore a multitude for surgical techniques for creating the ideal profile as part of aesthetic rhinoplasty. Management of the high, low, under projected, and over projected radix is discussed. Likewise, correction of an over projected and under projected nasal tip is an important focus of the presentation. Methods of increasing the projection of the tip with sutures and grafts are presented. Similarly, techniques for reducing intrinsic and extrinsic over projection of the nasal tip are discussed. Often the surgeon is required to perform a combination of augmentation and reduction of the dorsal line to ensure an ideal profile and techniques to facilitate this are presented. Management of saddle deformity and under projected dorsum is discussed in relationship to severity of deformity. Costal cartilage grafts, septal cartilage grafts and the “Turkish Delight” are considered when focusing the discussion on augmentation of the nasal bridge.

Learning Objectives:

- Know the ideal dimensions of the nasal profile
- Know how to analyze the nasal profile
- Understand the many techniques for increasing and decreasing the projection of the radix, dorsum and nasal tip and their advantages and disadvantages

RHINO 130 Use of Cartilage Grafts for Rhinoplasty

Professors: Alvin I. Glasgold, MD; Robert A. Glasgold, MD

The use of cartilage grafts has made rhinoplasty an architecturally constructive procedure. It provides the surgeon the tools to deal with the most challenging nasal problems and produce nice, natural appearing noses. It is particularly useful in creating appropriately shaped nasal tips when the cartilage structure is deficient – correcting asymmetries and producing excellent results in revision and ethnic rhinoplasty. We will describe the various applications of cartilage grafting in rhinoplasty - the indications for the use of cartilage grafts, the secondary effects of grafts and the ways to limit any possible drawbacks. The source of cartilage grafts are nasal septum, auricular cartilage, and rib. We will describe the advantages and disadvantages of each, the techniques of harvesting cartilage and the way cartilage is shaped to produce the appropriately shaped graft structure. We will describe the technique of insertion of cartilage grafts and

the manner in which they are permanently fixed. The areas of cartilage grafting will encompass columella supporting grafts, tip-contouring grafts, extended shield grafts, alar rim grafts, spreader grafts, and alar batten grafts. We will show appropriate examples of the use of each graft and the results we achieved in patients.

Learning Objectives:

- Learn indications for use of cartilage in nasal surgery
- Be able to harvest and contour grafts
- Learn technique for graft placement
- Avoid complication when using nasal grafts

RHINO 135 Grafting in Rhinoplasty-From Cartilage to Implants

Visiting Professor (Colombia): Roxana Cobo, MD

The course will focus on the multiple grafting options that are available when performing a rhinoplasty. A graduated approach to grafting in rhinoplasty will be presented starting from the most basic, simple grafts and progressing to the more sophisticated and complicated ones. Indications for each will be presented. Techniques on the different sites for cartilage grafting will be shown. Different implant options will be discussed including their advantages and disadvantages. Short videoclips explaining the different surgical techniques will be shown and pre and post-surgical cases will complement the overall presentation

Learning Objectives:

- Identify the different site options for cartilage grafting and understand the basic harvesting techniques of the different sites where cartilage is available
- Describe the most common grafts used in rhinoplasty and their surgical indications
- Discuss other grafting options for more complicated and elaborate rhinoplasties
- Identify the different implants that are available for rhinoplasty and understand their advantages and disadvantages

RHINO 140 The Nasal Valve: Anatomy and Repair

Professors: Stephen A. Goldstein, MD; Oren Friedman, MD

This talk will include the complex anatomy of the nasal valves both at rest and during respiration. After review of correctly diagnosing the area of collapse, a discussion of simple to complicated valve obstructions will be reviewed. A stepwise approach for repair and restoration of the nasal valves will be shown. A variety of repair techniques starting with septoplasty and turbinectomy to suturing and preferred cartilage grafts will be explained.

Learning Objectives:

- Understand valve anatomy
- Know the common cause of valve collapse
- Learn multiple repair techniques

RHINO 150 Alar Base Resection: Indications, Techniques, Complications

Visiting Professor (Iran): Alireza Mesbahi, MD

This talk will cover aesthetic analysis of the nasal base and who needs alar base resection. A discussion regarding different groups of patients who need alar base surgery will take place and the speaker will show different techniques of alar base surgery (wedge

resection, sill excision, combined procedure with video clips. The speaker will share his own experience on alar base surgery because alar base surgery may produce for the patients some irreversible pathologic changes if do without indication or with incorrect technique.

Learning Objectives:

- Know the aesthetic landmarks for alar base
- Know who needs alar base resection
- Learn different techniques of alar base surgery
- Know the complications of alar base resection and who we can prevent or manage these complications

RHINO 152 External Revision Rhinoplasty: Strategies for Effective Restoration

Professor: Richard Davis, MD

The immense popularity of cosmetic nasal surgery has resulted in a growing number of adverse surgical outcomes. Although widely regarded as among the most challenging of all cosmetic surgical procedures, revision rhinoplasty is currently being performed in greater and greater numbers. To achieve successful restoration of the damaged nose, the revision surgeon must first understand the underlying pathology responsible for in the unsatisfactory surgical outcome. Failure to develop effective surgical strategies to prevent and correct the underlying pathology will only worsen an already regrettable situation and perhaps lead to a non-salvageable nose.

Learning Objectives:

- Better recognize iatrogenic tissue damage and/or adverse wound healing characteristics leading to disappointing surgical outcomes
- Better appreciate the unique emotional, ethical, and medical circumstances involved in revision rhinoplasty
- Recognize physical and emotional signs and symptoms associated with the unfavorable revision rhinoplasty patient
- Develop effective strategies for the successful treatment of the favorable revision rhinoplasty patient

RHINO 155 Primary and Revision Ethnic Rhinoplasty

Professor: Paul S. Nassif, MD

All aspects of primary and revision ethnic rhinoplasty (Hispanic, Asian, African American and Mediterranean) will be discussed including the evaluation of the ethnic Patient with emphasis on a detailed history, diagnosis of what the patient is unhappy with, including the amorphous, over-resected typical ethnic rhinoplasty. Examination, diagnosis and operative plan with video of harvesting of autologous grafts (costal, conchal, deep temporalis fascia and septal). Video and slide presentation of all the steps in ethnic rhinoplasty including open rhinoplasty dissection, nasal SMAS harvest, tip grafting and contouring, dorsal augmentation and alar base reduction.

Learning Objectives:

- Learn to identify problem list and perform all aspects of nasal techniques in ethnic primary and revision rhinoplasty
- Know how to use diced cartilage in ethnic rhinoplasty
- Demonstrate techniques in harvesting autologous tissue (costal, conchal, and deep temporalis fascia)
- Learn to perform alar base reduction with minimal scarring and achieve natural alar contours

RHINO 160 The Crooked Nose Algorithm: 7

Critical Steps

Professors: Benjamin C. Marcus; Travis T. Tollefson, MD

This course will present a state of the art approach for the evaluation and treatment of the crooked nose. Particular attention will be paid to the anatomy of nasal injuries as well as their classification. The author will present an algorithm for managing the crooked nose in a step-wise fashion. The explanation of each method will be illustrated with case examples and video of the technique. Wherever possible supporting literature will be presented to support the presenter's plan.

Learning Objectives:

- Understand the etiology and anatomy of the crooked nose
- Understand how to analyze the crooked nose and how to classify the injuries
- Understand a step-wise algorithm for treating the crooked nose

RHINO 170 Endonasal Mastery of the Nasal Tip

(2 hours)

Professor: Norman J. Pastorek, MD

Mastery of the nasal tip requires an understanding of the patient's aesthetic goals, an complete anatomic analysis of the nasal tip deformity, and an appreciation of the long term healing response of the endonasal approach to rhinoplasty of the lower third of the nose. The course will describe treatment trees indicated for normal, under, and over projected nasal tips, techniques for rotating and de-rotating, support grafting of the columella, augmenting the nasal tip, handling thick skin, addressing the deviated nasal tip, supporting soft nasal ala and the indications for final morsel grafting. Case examples of all of the above aesthetic problems and solutions are discussed with diagrammatic slides and videos showing the sequential steps to a successful long-term surgical dénouement of nasal tip deformity.

Learning Objectives:

- Conceptualize nasal tip deformity by a complete nasal tip analysis
- Plan a rhinoplasty solution based on proven simple methods to obtain a pleasing normal post-operative appearance
- Understand the nuances of grafting to obtain consistent good long-term results

RHINO 201 Open Rhinoplasty: Challenging Cases

Professors: Peter A. Adamson, MD; Minas Constantinides, MD

One of the two course instructors will present an interesting/challenging/instructive rhinoplasty case. The non-presenting instructor will act as a moderator for an interactive discussion with audience participation as to "why's and wherefore's" of the techniques selected for the case under review. The moderator will ask questions of the presenting surgeon to elucidate his thinking and discuss with participants the rationale behind the treatment plan, the results will be critiqued and optional treatment plans presented by the audience and instructors. The learning points and educational values of the case will be summarized and emphasized. Instructors will alter their roles as presenter and moderator for each subsequent case. 8-10 selected cases

will provide an in-depth review of current techniques utilized, potential problems and results achievable with open septorhinoplasty today.

Learning Objectives:

- Review a select number of rhinoplasty cases which will emphasize a variety of aesthetic and functional challenges associated with this procedure
- Engage audience participants to analyze the techniques employed with each case and compare these to their own preferred approach
- Stimulate audience discussion to arrive at consensus, or disparate, opinions regarding the preferred technical approaches for a variety of challenges in rhinoplasty

RHINO 202 Revision Rhinoplasty Pearls

Professor: Russell W.H. Kridel, MD

We will discuss how to avoid mistakes. We will also discuss how to fix common problems including tip irregularities, tip drop, dorsal saddling, alar notching, and open roof.

Learning Objectives:

- Learn how to prevent rhinoplasty mistakes
- Learn how to correct tip irregularities, tip drop, poor tip definition, dorsal saddling, alar notching, and the open roof deformity
- Learn which grafts to use and when

RHINO 203 Mastery of the Nasal Tip

Professors: Patrick J. Byrne, MD; Ira D. Papel, MD; David W. Kim, MD

We will present an overview of available techniques for the alteration of nasal tip projection, rotation, and contour. The predominant concepts will be covered in detail sufficient to provide context. The course will then focus on advanced techniques. Case examples will be used to illustrate points. This will include the management of alar retraction and the alar columellar relationship, lengthening the short nose, managing extremes of skin thickness, and more.

Learning Objectives:

- Have an algorithm for steps to produce the desired changes in the nasal tip
- Be able to accurately diagnose challenging noses and match an appropriate treatment plan to each type.
- Be able to perform several specific techniques to treat alar columellar disproportion
- Know specific techniques to apply to the nasal tip with very thick or thin skin

RHINO 210 Mastery of the Nasal Tip Without Grafts

Professor: Robert L. Simons, MD

Preservation of inherent strength with repositioning of cartilaginous elements will highlight this talk on nasal tip procedures without the use of grafts. Long-term evidence of the value of vertical dome division in providing solutions to the problems of projection or width will help to support the suggested methodology.

Learning Objectives:

- Learn how to recognize a tip that does not need grafts
- Understand ways to change tip projection without grafting
- Learn methods to narrow the wide tip without using alar struts

RHINO 220 The State of the Art for the One Unit Cartilaginous Reconstruction of the Nasal Tip Support with Septal and Conchal Cartilage in Revision Tip Surgery by Endonasal Approach

Visiting Professor (Colombia): Fernando C. Pedroza, MD

This course present the basic techniques to reconstruct the cartilaginous structure that support the nasal tip depending on the presurgical functional and aesthetic diagnosis of the tip deformity like alar retraction, alar pinching, external valve collapsing, poor defining tip, under projected tip, asymmetric tip, hanging columella, retracted columella, internal valve collapsing, overrotated tip with shorted nose. I show in detail the concha cartilage harvesting, how to sculpture and molding the cartilage and how to place the one unit total graft each side separately or in one block depending on the tip of the patient. I will show pre and post photos, movies and illustrations of each technique in detail.

Learning Objectives:

- Understand the importance of the presurgical diagnosis and the surgical plan and how to do it
- Show and understand how is possible to reconstruct the structure of cartilage that support and give the appearance to the nasal tip with septal and conchal cartilage in revision rhinoplasty
- Learn step by step how to do the seagull wing graft technique by the endonasal approach

RHINO 230 Lessons Learned in Revision Rhinoplasty to Improve the Results in Primary Rhinoplasty

Professor: Steven J. Pearlman, MD

Rhinoplasty is often considered the most difficult procedure in facial plastic surgery. A number of complications can be avoided by preventative measures exercised during the primary procedure. By studying the findings in revision rhinoplasty cases, the presenter identifies the most common complications. These complications are discussed along with a review of how to prevent them from occurring. Sample cases will be presented with findings, causes and surgical correction.

Learning Objectives:

- Identify the most common complications from rhinoplasty
- Correlate rhinoplasty complications with the causes for those findings
- Discuss ways to avoid complications in primary rhinoplasty
- List the most common techniques in the surgical treatment of rhinoplasty complications

RHINO 240 Endonasal Rhinoplasty: Versatility and Naturality

Visiting Professor (Lebanon): Nabil Fuleihan, MD

The course will stress different endonasal techniques for tip modification using the transvestibular and the extended delivery approaches. It stresses suture and grafts techniques in complex cases with intraoperative video documentation and long-term results. Fourteen types of endonasal sutures can be applied and will be described. Knowledge of endonasal rhinoplasty techniques is essential to any rhinoplastic surgeon.

Learning Objectives:

- Present endonasal rhinoplasty techniques for different types of tip deformities including: bulbous tip, droopy tip, asymmetric tip, overprojecting tip
- Stress different endonasal suture techniques used in tip modification
- Show intraoperative pathology, surgical techniques
- Expose advantages of conservative endonasal rhinoplasty and its versatility

RHINO 265 Surgical Techniques for the Severely Short and Contracted Nose

Visiting Professor (Korea): Dong Hak Jung, MD

Short and Contracted nose is common entity in Asians as a congenital malformation or late complication of primary rhinoplasty. It is the difficult task for any rhinoplasty surgeon to correct contracted nose. In this course, we can learn about the different surgical techniques to treat the contracted nose.

Learning Objectives:

- Learn lengthening of short nose with autologous cartilage
- Learn alar advancement rotational flap to reduce nostril show
- Know how to correct combined deformities with contracted nose

RHINO 270 Use of Osseocartilaginous Rib Grafts in Rhinoplasty

Professors: Peter A. Hilger, MD; Jared Christophel, MD

Cartilaginous rib grafts from the 6th, 7th, and 8th rib complex for use in rhinoplasty carry the risk of time-dependent warping or mobilization; the extent of which is not always determined in the OR. There have been many attempts to minimize or predict the warping, such as concentric carving, setting the graft aside in saline for two hours, or an in-plane K-wire. Use of an osseocartilaginous rib graft from the 11th rib combines the benefits of a bone graft that does not warp or mobilize, and a cartilaginous distal tip. The use of bone provides stability of dorsal and tip projection, and allows for osseointegration with the nasal bones for improved graft survival and decreased mobilization. The distal cartilaginous portion of the graft allows the surgeon to shape the tip contour, and serves as an onlay spreader graft. The harvest site also allows for further harvesting of cartilage-only grafts from the 9th/10th fused rib complex if needed

Learning Objectives:

- Describe surgical harvest of 11th rib
- Describe indications for use of osseocartilaginous rib graft versus cartilage only rib graft
- Describe benefits of osseocartilaginous rib grafts

The School of Rhinoplasty is supported by LifeCell Corporation with an educational grant.



AF 101 Surgical Anatomy: Keys to Improving Your Facelift Results

Professors: Holger G. Gassner, MD; Kris S. Moe, MD
Advances in surgical technique frequently result from an enhanced and more detailed understanding of surgical anatomy. This applies especially to the evolution of face-lift techniques. Control of the nasolabial fold and elevation of the midfacial soft tissues continues to be incomplete, even with well-executed deep plane face lift techniques. The key to improving surgical techniques and results is a more complete and more detailed understanding of the facial soft tissue anatomy. The authors present intraoperative observations from years of surgical experience as well as results from an anatomic and histologic study of 100 cadaveric facial halves. The 3-dimensional architecture of the melolabial fold is presented in detail. Its layered architecture and contributions of various ligamentous, muscular and fatty tissues are explained in detail. The relation of the SMAS with the melolabial fold, midfacial musculature and soft tissues is elaborated. Implications of these and more novel findings for modern face-lift techniques are discussed and illustrated with representative clinical cases.

Learning Objectives:

- Better understand the complex 3-dimensional structure of the melolabial fold
- Learn about novel aspects of the surgical anatomy of the facial ligaments, the medial SMAS and the facial fat
- Appreciate shortcomings of current face-lift techniques
- Apply implications of these novel aspects into modern surgical techniques

AF 102 Blepharoplasty: Assessment and Basic Techniques

Professors: Gregory H. Branham, MD; Arash Moradzadeh, MD

This course will introduce upper and lower blepharoplasty covering the evaluation and pre-operative management, surgical techniques and postoperative management and expectations. The basic techniques for upper and lower eyelid blepharoplasty including transcutaneous and transconjunctival techniques will be discussed including fat transposition, fat excision and orbicularis suspension techniques. The emphasis will be on the ability to provide a safe and reliable surgical outcome with avoidance of pitfall patients and potential complications.

Learning Objectives:

- Have an understanding of the relevant orbital and eyelid anatomy necessary for blepharoplasty
- Be able to assess the prospective patient for appropriateness for blepharoplasty
- Be able to describe transcutaneous and transconjunctival approaches for upper and lower eyelid blepharoplasty and to describe fat excision, fat transposition and orbicularis suspension techniques
- Have an understanding of the common problems and complications and how to avoid them

AF 103 Comprehensive Management of the Aging Lower Lid

Professors: Ira D. Papel, MD; Theda C. Kontis, MD; Elba Pacheco, MD; Lisa S. Bunin, MD

This expert panel of oculoplastic and facial plastic surgeons will discuss the assessment and treatment of the aging lower lid complex from an interdisciplinary point of view. Patient cases will be presented to the panelists and each physician will describe his/her assessment and treatment options. Topics will include evaluation of the patient from an oculoplastic surgeon's perspective, treatment of the tear trough deformity, and how to handle prolapsed fat and skin laxity. Patients with hypoplastic malar prominences and lower lid laxity will be discussed. The role of midface elevation will also be described.

Learning Objectives:

- Describe the preoperative evaluation for rejuvenation of the lower lid complex
- Differentiate the surgical options for rejuvenation of the lower lids
- Describe the role of ancillary procedures which can be used for complete rejuvenation of the lower lids

AF 104 Surgical Pearls to Successful Endoscopic Brow Lifting

Professors: Guy G. Massry, MD; Paul S. Nassif, MD

This course will provide a detailed description of the equipment, anatomy and surgical technique necessary to become efficient at endoscopic brow lifting. There will be an emphasis on a number of surgical caveats (pearls) which make surgery easier and help promote outcome and avoid complications. This will include concepts such as patient preparation, maintaining a bloodless field and tricks to avoid neuropraxia, splaying of the brows, the use of adjunctive Botox, etc. A slide presentation with surgical series, before and after photos, and various complications will be presented. The goal of the course is to build familiarity and confidence with the procedure and enhance outcome.

Learning Objectives:

- Learn a detailed knowledge of anatomy, equipment and patient selection
- Be familiar and comfortable with the procedure
- Identifying factors which promote outcome and avoid complications
- Outline a variety of surgical caveats to enhance success

AF 109 Endoscopic Browlift: A Critical Appraisal of Techniques and Fixation

Professor: Corey S. Maas, MD

This course will provide participants a pictorial video review of fixation techniques used in endoscopic browplasty. The great variation in "standard" surgical techniques for approaching the aging forehead will be discussed with emphasis on reliable methods for release when using the endoscopic approach. A critical appraisal of bioadhesive use for endoscopic browplasty will be included with series presentation and presentation of the published literature and results. This course is designed as a forum for advanced and intermediate endoscopists to discuss and improve results. Thumb drives with cases for presentation and discussion in the final 15 minutes are encouraged.

Learning Objectives:

- Discuss standard and advanced techniques in endoscopic browplasty
- Demonstrate a complete understanding of current methods of brow fixation in endoscopic browlift
- Discuss case presentations and complications
- Delineate various of management techniques

AF 110 Midface Rejuvenation

Professor: Edwin F. Williams, III, MD

Until recent years, rejuvenation in the midface was largely ignored. A clear understanding of the aging process in the midface/lower eyelids continues to evolve as well as various techniques and options. This course would address the aging process in detail and discuss the nuances of all non-surgical and surgical techniques used to rejuvenate. Additionally, pearls, limitations and pitfalls of midfacial rejuvenation will be addressed.

Learning Objectives:

- Understand three-dimensional midfacial anatomy
- Understand the multiple approaches to the midface

AF 115 Midface Rejuvenation-minimally Invasive to Subperiosteal Approaches

Professor: Keith A. Laferrriere, MD

Knowledge of midface lifting is essential for complete facial rejuvenation in 2010. The midface is a continuum from the lower eyelid to the perioral area and recognition of aging changes in this region guides the treatment options. This instruction course will concentrate on deciphering the different approaches to midface rejuvenation, from minimally invasive techniques to the deep plane facelift, transorbital subperiosteal, and trans-temporal subperiosteal procedures. Post operative course, longevity and complications of the techniques presented will be included. Videos of the various approaches will enhance the learning experience.

Learning Objectives:

- Discuss a variety of techniques to achieve good results in midface lifting
- Describe in detail the differences and why one would choose one technique over the other

- Be familiar with the post-operative course, complications and expected longevity with each of the procedures
- Understand that there is not a single perfect approach for midface rejuvenation

AF 140 Unraveling the Mystery of the Aging Neck

Professor: Fred G. Fedok, MD

The management of the aging neck can be approached systematically by first characterizing the anatomic features of the patient's age related deformities. Once understood, the surgeon can apply a limited number of surgical techniques to achieve improvement. Each of these techniques has a spectrum of expected outcomes and limitations that can be predicted and imparted to the patient. In this course there is a video and graphical illustration of these techniques, outcomes and limitations. The speaker completes the presentation with suggestions for revisions and complication management.

Learning Objectives:

- Understand the desirable local aesthetics
- Understand the anatomic features of aging
- Understand the surgical techniques for correction

AF 170 Comprehensive Management of the Aging Face Patient: From Consultation to Diagnosis to Surgery

Professor: Jonathan M. Sykes, MD

This course will provide a comprehensive overview of the management of the aging face patient. It will include details of the consultation and selecting and deselecting patients for surgery. The course will help the participant learn which aging face procedures will fit different aging patients. The course will include periorbital rejuvenation including brow lifting, blepharoplasty, and ptosis repair. Volume enhancement of the mid-face including injectable materials and fat augmentation will be emphasized. The participants will learn which patients are better suited for minimally invasive procedures and which require more invasive surgeries. Lastly, management of surgical complications will be discussed.

Learning Objectives:

- Learn various components of periorbital aging including brow ptosis, blepharoptosis, and eyelid malpositions
- Diagnose and manage deflation of the mid-face including augmentation with poly-L-lactic-acid and fat augmentation
- Learn to match various deformities of the aging face to different surgical procedures

AF 175 Management of the Aging Face: Surgical Alternatives

Professor: Shan R. Baker, MD

A one-hour presentation discussing the presenters approach to surgery of the aging face. Topics include open vs. closed forehead lifting and biplane forehead lifts.

Alternative methods of fat preservation lower lid blepharoplasty are discussed including septal reset and suture repair of pseudo herniated fat. Lower face-lifting techniques are presented including the presenters preferred method of submentoplasty. Alternative SMAS techniques and advantages and disadvantages discussed.

Learning Objectives:

- Understand advantages and disadvantages of open vs. closed forehead lifting
- Understand techniques for fat preservation lower lid blepharoplasty and the advantages
- Understand the various SMAS techniques and the advantages and disadvantages of each

AF 180 Facelift; Tailoring the Technique to the Patient's Aging State; from Mini-lifting to Extensive Rejuvenation

Professors: Phillip R. Langsdon, MD; E. Gaylon McCollough, MD

The spectrum of facelift techniques, along with pearls will be discussed, with emphasis on applying the technique to the aging state and needs of the patient; from limited lifting to extensive rejuvenation procedures.

Learning Objectives:

- Understand the tried and true facelift techniques available
- Understand the differing aging states
- Understand how to apply the technique to the needs of the patient

AF 202 How I Changed my Facelift Technique and Why

Professors: Stephen W. Perkins, MD; Vito C. Quatela, MD

There are a variety of different approaches to face-lifting and there are continuing differences of opinion as to what techniques are the safest, most effective, and long lasting. Two presenters will provide 25-30 plus years of experience and philosophical approaches to face-lifting.

The evolution of face-lifting techniques and individualizing a given facelift technique for each patient will be stressed. Extended SMAS imbrications techniques as well as deep-plane face-lifting technique will be presented in detail. Indications for each technique will be outlined. Detailed patient selection criteria will be presented.

Learning Objectives:

- Learn a variety of techniques that have been used in face lifting over the last thirty plus years
- Learn which techniques tend to fail early and which techniques are more long lasting
- Learn how to choose a specific technique, yet individualize the approach for each patient's needs

AF 210 Ethnic Blepharoplasty

Professor: Ioannis P. Glavas, MD

Ethnic blepharoplasty does not include only the modification for Asian Eyelids. Other ethnic groups have anatomic characteristics that should be considered during surgical planning. Skin type and healing issues will be reviewed. What is the best way to achieve the eyelid fold and how much fat to remove?

Learning Objectives:

- Know the relevant anatomy (skin, muscle, septum, fat, supporting structures) of ethnic eyelids
- Learn marking and planning for the surgery
- Know standard eyelid surgery technique for ethnic eyelids surgery

AF 220 Laser Facelifts: A New Paradigm in Facelift Surgery

Professor: Patrick G. McMenemy, MD

There are no magic techniques that surpass experience, judgment, and critical evaluation of our cosmetic facelift surgery. Fourth generation laser lipolysis technology uses light and heat energy subcutaneously to provide skin and tissue tightening in the face. Following DiBernardo's work on uniform application of energy to create measurable skin temperature elevations (38-41°C), we have developed 4 major categories for performing laser facelifts. These include revision facelifts, younger vs. more mature patients, and heavy neck patients with very limited open mini SMAS tightening techniques.

The first year we performed 25 laser facelifts using tumescent anesthesia and oral sedation only. We extend past the nasolabial line and aggressively address the jowl, oral commissure, and the lateral lips. Our closed laser technique has surpassed our open procedures in these areas. We have had no burns or major complications. There have been no injuries to the facial nerve. All of our patients (except the open SMAS category) have returned to work and social events within 1 week (many within 2-3 days). Somewhat normal sensation has returned in 7-10 days. The discussion will include tumescent anesthesia, operative technique for minimally invasive surgery, wavelength parameters, tissue heating characteristics, and postoperative care. Various stages of healing and the range of results we have encountered (including suboptimal outcomes and patient satisfaction) will be openly presented.

Learning Objectives:

- Determine if this technology is a worthwhile investment for their practice
- Incorporate tumescent anesthesia into their face lifting technique
- Critically evaluate the perioral area and compare the laser results with their own

MI 101 Botulinum Toxin and Injectable Fillers for Facial Aesthetics

Professors: Andrew Blitzer, MD, DDS; William J. Binder, MD

This course will review the pharmacology, dosing and technique of using Botulinum toxin for aesthetics improvement of the upper, middle and lower face, neck and masticatory muscles. It will also review the current injectable fillers available, differences in products, and where and how to use them successfully. The limitation of these minimally invasive techniques will be reviewed. Managing adverse events will also be covered.

Learning Objectives:

- Learn about the various Botulinum toxins and mechanism of action
- Learn how to successfully use the botulinum toxins for aesthetic improvement
- Learn about the similarity and differences among injectable filling agents
- Learn how to successfully use injectable fillers for aesthetic improvement

MI 102 What's New in Intense Pulsed Light (IPL)

Professors: John J. Martin, MD; Brett Kotlus, MD
We will give a brief overview of the physics involved with an IPL machine, and how they work. We will then discuss the various uses for the IPL treatments: for example rosacea, uneven pigmentation, teleangiectasias, scars, and hair removal. We will discuss which wavelengths are optimal for the different conditions, and how they can be combined for additional benefit. We will go over possible complications, and instruct them in how to use the machines safely even in darker skin tones. We will show how to use IPL to optimize facial surgical procedures.

Learning Objectives:

- Understand how IPL actually works for photo rejuvenation
- Know what conditions can be improved with IPL
- Know basic treatment parameters for the different conditions
- Understand complications possible with IPL and how to avoid them

MI 103 Fractional CO2 Laser Resurfacing: The Anti-aging Breakthrough of the Decade

Professors: Ryan N. Heffelfinger, MD; Howard D. Krein, MD; Lisa D. Grunebaum, MD; Michael A. Persky, MD

The Fractional CO2 laser has revolutionized skin rejuvenation, and was in fact named the antiaging breakthrough of the decade by WebMD. We will review the science and histologic data supporting fractional lasers. There are many fractional CO2 lasers in the market, and we will examine the differences between them. We will review the indications, efficacy, and potential pitfalls of the FCO2 laser. Finally, we show video of a patient treatment, pointing out anesthetic tips, safety requirements, tips for patient comfort, and specific laser settings.

Learning Objectives:

- Understand the physiology and histology of the fractional CO2 laser
- Understand the differences between the different commercially available fractional CO2 Lasers
- Know the indications and contraindications for fractional CO2 laser treatment
- Know how to avoid complications by selecting the correct patient, treating the appropriate areas, and delivering an appropriate treatment

MI 104 1444nm Interstitial Pulsed NdYAG Laser-Laser Tissue Interaction and Applications in Facial Aesthetic Surgery

Professors: J. David Holcomb, MD; Daniel E. Rousso, MD

The course will help current and potential users better understand the nature of lipolysis fiber laser tissue interaction; available data directly comparing lipolysis lasers of various wavelengths will be shared. Core concepts include tissue thermal response time, thermal confinement and thermal diffusivity; each of these is affected by laser treatment parameters (eg pulse energy, repetition rate, total energy) and tissue factors (eg prior injectable soft tissue augmentation, relative hydration, target tissue volume). Clinical applications including lipolysis/interstitial laser assisted facial contouring and adjunctive use of the 1444 nm laser during rhytidectomy will be covered in detail; emerging novel skin rejuvenation and tightening applications will also be introduced. Substantial differences in laser tissue interaction among currently available laser wavelengths have safety implications, enable vastly different treatment approaches and require different types of clinical endpoint monitoring.

Learning Objectives:

- Know the characteristics of fiber laser tissue interaction
- Know the unique aspects of 1444 nm interstitial pulsed NdYAG laser
- Know the current and emerging clinical applications of 1444 nm interstitial pulsed NdYAG laser
- Know the important concepts for safe use of lipolysis lasers within the head and neck



MI 105 Is CO2 Laser Resurfacing Still the Gold Standard?

Professors: J. Kevin Duplechain, MD; Steve H. Dayan, MD; Bradford S. Patt, MD

The art of skin rejuvenation with current modality carbon dioxide lasers requires the user to understand the many aspects of both skin variations and laser treatment parameters. With a multitude of choices in devices, the physician must understand how to take advantage of each device's unique properties. A review of the photochemistry of laser tissue ablation including a review of energy requirements as well as the advantages of frequency modulation, pulse duration, density, and total energy parameters will be included in the discussion. Treatment of various skin types including expected results and limitations will be discussed. Information on the use of CO2 resurfacing in the treatment of burns will be provided as well as post treatment protocols designed to minimize complications

Learning Objectives:

- Understand laser tissue interaction including the differences between ablation and coagulation and how each plays a role in patient results
- Provide insight into parameters available such as energy, frequency, density, and pulse duration and how each affects healing time, potential complications, and final results
- Understand how to treat a multitude of conditions including acne scars, burns, facelift and neck lift patients
- Provide for the attendee post laser treatment protocols designed to minimize complications and understand why many complications have occurred in the past

MI 106 Adding Chemical Peels to Your Practice

Professors: Stephen W. Perkins, MD; Devinder Mangat, MD

Chemical peeling has been the mainstay of resurfacing for facial photo aging for 40 or 50 years. Even with the advent of sophisticated lasers used in resurfacing, chemical peeling is still a very useful part of a facial plastic surgery practice. Two experienced surgeons will describe in detail how and why chemical peeling is used in combination with other resurfacing procedures for maximum patient benefit. A variety of strengths of chemical peels will be detailed and various laser resurfacing techniques will be demonstrated. Incorporating 2-3 modalities, including dermabrasion, on a single patient is often required for the best results with one resurfacing treatment.

Learning Objectives:

- Learn in detail about a variety of strengths of chemical peeling agents
- Learn about a variety of laser resurfacing modalities including pros and cons
- Choose the best resurfacing modality for any given patient and in any given area of the face on a single patient
- Learn how to combine multiple resurfacing techniques for maximum patient benefit in one surgical healing period

MI 107 Cancelled

MI 140 Fat Grafting for Facial Volume Enhancement

Professor: Babak Azizzadeh, MD

The course will summarize the role of volume loss in the aging process and outline treatment protocol – fat grafting. Specific technical consultations of harvesting, procuring and injecting viable fat cells will be discussed. Fat grafting techniques will also be addressed as a standard-alone as well as in combination to blepharoplasty and rhytidectomy.

Learning Objectives:

- Understand the role of volume loss in facial aging
- Understand the role of fat grafting in facial rejuvenation
- Know the technical considerations in fat grafting

MI 200 Off-label Applications of Liquid Injectable Silicone (LIS)

Professor: Eric M. Joseph, MD

When used properly, LIS is versatile, precise, safe, and permanent. LIS must be injected utilizing the microdroplet, serial puncture technique. Common conditions treated include: volume replacement, wrinkle reduction, lip enhancement, acne scarring, and correction of many nasal irregularities (“Non-Surgical Rhinoplasty”). Several treatments are typically required for complete correction of most conditions. Procedures are performed with topical anesthetic, and there is typically no downtime. Complications associated with LIS are uncommon and include visible bumps or nodules at the sites of injection. Patient satisfaction is typically very high.

Learning Objectives:

- Learn the proper microdroplet, serial puncture technique for using LIS
- Learn the many applications of LIS
- Learn about the complications associated with LIS and how to manage them

BUS 101 Getting Started in a Facial Plastic Surgery Practice

Professors: Matthew A. Kienstra, MD and Stacie D. McClane, MD

We will review methods taken by successful physicians who started their practices (both private and academic will be included) 5-8 years or so prior. Faculty will be involved with time for Q and A. Topics will include marketing, relationship development, dealing with hospitals/physician's groups, things to avoid, dealing with competitors, and the like.

Learning Objectives:

- Describe techniques for building relationships
- Describe successful marketing tools for the young physician
- Describe common pitfalls to be avoided

BUS 102 Facial Plastic Surgeons as Leaders

Professor: Jake Laban, MBA

Leadership is a critical skill set for all small business owners; including the facial plastic surgeon. This course will define leadership, specifically as it relates to facial plastic surgery, through colorful and memorable examples of leadership. In order to facilitate learning, key tenants of leadership will be illustrated through historic profiles of extraordinary leadership across in varying disciplines. Surgeons may adopt and model these tenants of leadership within their practices.

Learning Objectives:

- Learn key tenants of leadership, within the context of facial plastic surgery
- Acquire new leadership strategies which they may deploy in their own practices
- Develop their skill set for communicating these new strategies to their staff

BUS 103 Five Must Haves for a Successful Aesthetic Practice

Professor: Catherine Maley, MBA

The speaker will lay out the 5 most necessary components needed to succeed in aesthetic medicine in today's New Economy. The most strategic will survive so understanding the aesthetic patients' motives, needs and wants will help physicians better promote their services to increase closing ratios.

- Know low cost/no cost ways to increase aesthetic revenues
- Know how to increase your word-of-mouth referrals professionally
- Learn how to grow loyalty with your patients so they stay, pay and refer

BUS 104 Seven-Step Marketing Plan: The Unique Needs of Facial Plastic Surgeons

Professors: Candace Crowe; Linda Murray

This will be an hour packed with a "roll your sleeves up and get to work" approach. I will have worksheets that we will go through to help attendees determine the right mix for their practice. We will go through several exercises including: completing a creative brief and touch point map, identifying your USP (Unique Selling Proposition), writing a 30-second "who you are" commercial, identifying your target audience and creating a customer profile, deciding on a budget, writing a month-by-month plan, developing a professional image, implementation, and tracking.

Learning Objectives:

- Understand the basic foundation and outline of a usable and effective marketing plan that they can further develop and implement

BUS 105 Avoiding the Ten Most Common Marketing Blunders: How to Thrive, Not Just Survive, in Today's Hyper-Competitive World

Professors: Candace Crowe; Linda Murray

This course goes hand in hand with "Seven-Step Marketing Plan" (BUS 104). We will explore real life mistakes, discuss why that approach failed and how to avoid the mistake in the future. Some of the key mistakes we will discuss include: marketing without a specific motivator; no clear message of who you are and what makes you the practice they should call; believing that you have a service that patients will find on their own, change for change sake; marketing based on fear of not doing what your competitors are doing; advertising "special" pricing; arrogance leads to failure; believing your target audience is everyone; not knowing your patients and creating an ongoing relationship with them; not being aware of your reputation in the marketplace (perception in the marketplace is reality to the patient).

Learning Objectives:

- Enabling attendees to clearly think through the clutter of messages telling them what they need to do and sort out for themselves what is right for their individual practice

BUS 106 Internal and External Marketing

Professors: Steven Dayan, MD; Tracy Drumm

As much as we don't like to admit it marketing our practices is an absolute necessity today. From internet to patient advocates to external advertising what works best is an individual decision. But being concise, cost effective and on message are key component to getting and staying busy. There are many simple, inexpensive easy to implement ideas that are guaranteed to get you busier. Easy to remember formulas such as TOIB, WIFM, and MICE help to keep these ideas current.

Learning Objectives:

- Learn three techniques that can be implemented Monday morning to get you busier
- Learn how to evaluate different marketing tactics and strategies
- Learn formulas for running successful events

The School of Business and Computer Science is supported by Allergan Medical with a non-educational grant.



BUS 107 Internet Marketing, Social Networking, and Converting Patients Online

(non-CME)

Professor: Robert Baxter

This course will provide a comprehensive guide to Internet marketing, search engine optimization, online reputation maintenance and crisis management, social networking, and developing a conversion-oriented plastic surgery web presence. From link building and on-page optimization, to ratings, reviews, and more, the course includes real world strategies that achieve results, maximize visibility, and help surgeons acquire new patients online.

Learning Objectives:

- Better understand the role of internet marketing
- Learn how to maximize website visibility on the internet
- Understand the value of Web site optimization

BUS 110 Social Media and Networking

(non-CME)

Professor: Anne Cohen

Social Media is the biggest marketing shift since the advent of the Internet. It took 4 years for the internet to be adopted by 50 million users but only *9 months* for Facebook to gain 100 million participants, of which women 55-65 are the fastest-growing segment. If Facebook were a country, it would be the world 4th largest! Studies show journalists search the web—including social media posts—more often for experts than by reading email pitches. What does this mean to your practice?

Learning Objectives:

- Understand social media and its marketing opportunities
- Be able to create and use Twitter, Facebook and Blog posts as SEO tools
- Understand Universal Search and know how to apply it as part of an integrated marketing strategy

BUS 115 Reputation Management

(non-CME)

Professors: Tom Seery; Robert Baxter; Spencer Cochran, MD

Wikipedia defines reputation managements as the “process of tracking an entity’s actions and other entities’ opinions about those actions; reporting on those actions and opinions; and reacting to that report creating a feedback loop.” From a facial plastic surgeon’s perspective it tends to be singularly focused: how to stop bad reviews. Indeed, with the rise of social reviews sites, personal attacks have become a real threat to everyone’s reputation. This course is not designed to share insights on how to wage a legal battle against potential detractors. Instead, the focus is on what Google’s Matt Cutts recommends as the only proven way to fight back: “The answer to bad speech is more speech.” To this end, we will examine the options you have to generate more speech about you and your practice and to secure a positive reputation.

Learning Objectives:

- Recognize the common sources of personal attacks and how to track for possible defamation
- Identify what tools can be used to fight back
- Develop awareness to the options and alternatives to boosting web presence

BUS 120 Six Legal Tips

Professor: Thomas Rhodes, Esq.

If you practice long enough, you’ll run into legal challenges. You need to find ways to handle them effectively and put them behind you to get back to helping patients. A lawyer representing doctors shares six tips for doing that.

Learning Objectives:

- Learn several ways to handle legal challenges effectively in office practice, courthouse proceedings, and regulatory matters before state medical boards

BUS 130 Speaking to Capture Consumers: Tips for Turning “Doc Speak” into Lay Language

(non-CME)

Professors: Wendy Lewis; Steven J. Pearlman, MD

This course will deconstruct an ideal short presentation to be delivered to a consumer audience on a variety of hot topics of interest, from concept to preparing a good slide presentation, visuals to be included, best practices in phrasing, tone of voice, and body language. Presenters will offer suggestions for common pitfalls to avoid, how to choose terminology that resonates well with consumers and media, and presentation style. Specific examples shall be reviewed for critiques. A glossary of translated medical and surgical terms into consumer friendly explanations will be offered.

Learning Objectives:

- Moderate technical language to relate to a lay audience
- Turn a phrase from hard to soft
- Use PowerPoint and visuals to your advantage
- Learn tips for answering questions that resonate with consumers

BUS 132 So you Want to Be Famous

(non-CME)

Professors: Catherine Maley, MBA

PR is the most credible source for patients and prospective patients to learn more about you and your services. Discover how you can get mass media coverage with and without a PR agent and what you can do on your own to get on the media’s resource list so they call you when they need an expert.

Learning Objectives:

- Learn what the media needs from you
- Discover how to get known as the media resource
- How to make the PR you’ve gotten grow legs and benefit you for years to come

BUS 135 Update on Patient Coordinators: In Superior Successful Practices

Professor: Karen Zupko

Designed to show how effective patient coordinators in super successful facial plastic surgery practices make a difference. This session offers the how-to's that maximize the value of a full-time, focused, qualified patient coordinator. If you are hiring your first patient coordinator or if you are thinking about repositioning these key responsibilities in your practice you will leave with pearls to implement back home. Hear what your colleagues have to say in the lively course discussions. Our Best Practices survey benchmarks how the most successful aesthetic surgeons utilize their patient coordinator.

Learning Objectives:

- Assess the need for a patient coordinator, define the function of the job, and avoid making predictable mistakes
- Measure aptitude for hiring a patient coordinator
- Design an effective training program
- Implement effective performance measurements

BUS 140 Financial Management for the Facial Plastic Surgeon

Professors: Min Ahn, MD; Beth Brooks

This course will review the critical components of sound financial management in the facial plastic surgeon's office. This course reviews the reports that should be analyzed on a monthly basis, as well as ratios and formulas to ensure proper financial management and decision-making.

Learning Objectives:

- Learn how to generate and read financial statements, such as the balance sheet, income expense report (also known as profit/loss statement) and how that information is used for decision-making and analysis
- Know the important ratios and analyses used in the decision-making process for new treatments or capital purchases, which include profitability ratios, sensitivity analyses, return on investment calculators, and internal rate of return

BUS 150 What You Need to Know About Getting Your Surgicenter Accredited

Professors: Neil A. Gordon, MD; Andrew A. Jacono, MD

How to assess what site is appropriate to accredit; what you can do, what resources are available and what level of agency depending on your practice goal.

Learning Objectives:

- Know the accrediting agencies
- Know which agency meets your practice goals
- Learn how to get the resources so it is inexpensive

Boston "Beantown"

Welcome to Boston or "Beantown" as it is commonly called. Boston is a dynamic city, steeped in history, culture and old world charm, as well as academic and medical excellence with cosmopolitan sophistication. With 21 distinctive neighborhoods, each with its own charm and personality, Boston belongs to a diversity of people whose heritage is surrounded by the beautiful Charles River and the Atlantic Ocean.



Boston has all of the amenities of a big city with the comfort and feel of a small town. The compact layout makes it ideal to navigate on foot and has helped to define Boston as "America's Walking City." Surrounded by natural beauty, Boston's 48 square miles are encircled by a bustling harbor, tranquil coastline and a string of parks known as the Emerald Necklace. Boston has something to offer everyone.

For those interested in history, you can walk the Freedom Trail and learn about the role Boston played before and after the American Revolution. Art lovers can visit any one of the many art museums in the city to view exhibits showcasing everything from contemporary to traditional art, in the form of sculptures and paintings. Music lovers can choose from a variety of different venues that play everything from jazz to rock and roll to classical tunes.

Sports lovers can take their pick of any type of game they want to attend. Boston has both professional and college teams in every major sports arena. Or if you don't have any real desires, take a leisurely stroll along the Charles River or through the Boston Public Garden. Shoppers will be content with the variety of different stores and shops to visit. Near City Hall, you can visit historic Faneuil Hall Marketplace for your traditional Boston souvenirs, or you can bargain with the vendors in Hay Market for fresh seafood and produce. For high end shopping, you won't be disappointed in the Copley/Back Bay section of Boston. Everyone enjoys strolling along Newbury Street, Boston's version of Rodeo drive.

While in Boston, you can find restaurants to suit any taste throughout the city. In the North End, Bostonians indulge in authentic Italian cuisine. The Back Bay offers some of the best steakhouses, as well as some of the city's quaint cafés. Of course, you can always go to the place where everybody knows your name, *Cheers!*

SCI 101 Archives of Facial Plastic Surgery: The Second Decade and Beyond

Professors: John S. Rhee, MD; Wayne F. Larrabee, Jr., MD

Archives of Facial Plastic Surgery, the official journal of the AAFPRS and IFFPSS (International Federation of Facial Plastic Surgery Societies) and a proud member of the JAMA/Archives family, has entered its second decade of publication. Participants will be introduced to the latest journal developments – new manuscript categories, video capability, and website features. For potential authors, the workshop will discuss specific ways to improve chances for manuscript acceptance. Topics will include tips on manuscript construction, basic study designs, and optimization for a specific manuscript category. For potential reviewers, the workshop will discuss the importance of a fair and thorough peer review process and tips on conducting effective critiques. Finally, the synergistic relationships between the journal, academy, international societies, and media will also be highlighted.

Learning Objectives:

- Have a better understanding of the editorial review process
- Learn methods to become more skilled reviewers
- Have a better understanding of strategies to optimize chances for manuscript acceptance

SCI 102 Photography in Facial Plastic Surgery

Professors: Grant S. Hamilton, MD; Raffi DerSarkissian, MD

Standardized photography is not only part of the medico-legal record but is arguably the most important clinical research tool available to the facial plastic surgeon. Accurate depiction of the pre and post-operative states is the standard for evaluating the aesthetic results of surgery. This course will cover the basics of standardized photography including equipment, setting up a clinical studio, data storage, data organization, standardization, patient consent forms and the use of photos in marketing.

Learning Objectives:

- Understand the important components of a clinical photography studio
- Understand the techniques for data storage and organization
- Understand the importance of photographic standardization
- Understand the ethical considerations of informed photographic consent and the use of patient photos in marketing

SCI 103 Concepts of Attractiveness: The Male Facial Aesthetic

Professors: Michael J. Reilly, MD; Babak Azizzadeh, MD; Diana Ponsky, MD; Patrick J. Byrne, MD

This course will provide insight into understanding the male facial aesthetic. Background will be given based on socio-biological attractiveness studies, and these concepts will be applied to our current techniques and capabilities in facial enhancement and rejuvenation. Topics to be discussed will include: psychosocial considerations in treating male patients, the male rhinoplasty, aesthetic considerations in hair transplantation, minimally invasive treatments for men, and approaches to male facial rejuvenation.

Learning Objectives:

- Understand the social, psychological and biological science behind male attractiveness
- Assess the male face within the context of a better understanding of the male aesthetic
- Recognize the contrast in approaches to treatment of the aging male versus the aging female face
- Identify the features of an attractive male nose and the associated surgical techniques for accomplishing these ideals

SCI 104 How to use Evidence-Based Practices in Facial Plastic Surgery

Professors: Paul L. Leong, MD; Sam P. Most, MD

As patients increasingly request objective information to support facial plastic surgery treatments and third party payers migrate to pay for performance standards facial plastic surgeons must be aware of the importance of evidence-based practice. This goal of this instruction course is to describe the importance of evidence-based research in the development of facial plastic surgery and how to harness this research to deliver superior outcomes for patients. A concise background of the essential elements of evidence-based practice will be provided. Examples of existing high-quality evidence based research supporting various aspects of facial plastic surgery will be reviewed. An emphasis will be placed on techniques to critically review the literature. Future goals for improving the evidence-base supporting facial plastic surgery practice will be discussed.

Learning Objectives:

- Describe the reasons why evidence based practice standards will become more important to the development of facial plastic surgery
- Understand the essential elements of evidence-based research
- More critically interpret data/literature supplied by independent investigators or industry to make more informed decisions about treatment options
- Formulate useful research questions and understand how to coordinate with other investigators, professional societies, or industry to pursue research goals

The School of Basic Science is supported by PCA SKIN with an educational grant.



SCI 105 Skin Care in the Eyes of a Dermatologist: What Works and What Doesn't

Professor: Jennifer Linder, MD

Patients are constantly seeking recommendations for the most effective topical skin care products on the market. Physicians must be aware of ingredients and products currently available and their ability to improve the skin. Jennifer Linder, MD, will cover the most innovative and efficacious cosmeceutical ingredients for the treatment of several skin conditions. This review will enable the physician to locate and recommend the most results-oriented product formulations for their patients.

Learning Objectives:

- Review the pathology of hyperpigmentation, acne, visible aging and sensitive skin (such as rosacea)
- Become familiar with the commonly used and marketed topical ingredients to treat these common skin concerns
- Identify which topical agents have proven research backing their efficacy
- Discuss the importance of the overall product formulation to product performance

SCI 106 Cancelled

SCI 107 Scar Treatment and Prevention

Professor: Andrew Winkler, MD; Paul L. Leong, MD

Modern scar treatment involves prevention through proper soft tissue handling, procedural treatments and surgical maneuvers. Traditionally, this includes surgical scar revision, dermabrasion, and triamcinolone injection. However, of particular interest currently is the 1540 nm Erbium: Glass laser. This laser is used for incisional scars, acne scars and now has an FDA approval for striae. In this course, I will briefly review the basic science behind scar formation as well as the literature regarding various forms of scar treatment. This will include examples of each modality and their particular pros/cons.

Learning Objectives:

- Discuss the stages of wound healing and how to minimize wounding during surgery
- Describe the advantages and disadvantages of several different surgical scar revision techniques
- Discuss the benefits and mechanism of action of ancillary treatments such as dermabrasion and triamcinolone injection
- Discuss new scar treatment modalities such as the 1540 nm Erbium: Glass laser

SCI 108 Managing the Difficult Patient and Turning Anger into Appreciation

Professor: Edmund A. Pribitkin, MD; Howard D. Krein, MD

Given the proper set of circumstances, any patient can become angry and litigious. We focus on crafting an effective process for identifying the already impossible patient and the patient who is likely to be pleased only under extraordinary circumstances. We review the informed consent process and how it can help cement the bond between the provider and patient. We provide effective means of communicating complications or unforeseen results of surgery while maintaining a patient's trust. Finally, we discuss how to address a patient's disappointment, frustration and anger and redirect these feelings into satisfaction and closure.

Learning Objectives:

- Identify and avoid the difficult patient
- Describe an effective informed consent process and craft an effective informed consent document
- Disclose complications or unforeseen results of surgery
- Address and redirect patient disappointment, frustration and anger

SCI 109 How to Recognize Signs of Body Dysmorphic Disorder and other Personality Disorders

Professor: Henri P. Gaboriau, MD

The course will address signs and symptoms of body dysmorphic disorder as well as other personality disorders. Prevalence of such disorders in patients seeking cosmetic surgery will be reviewed and compare to the general population. Finally we will look at the correlation between body dysmorphic disorder/personality disorders and lawsuits in the field of facial plastic surgery.

Learning Objectives:

- Identify patients exhibiting signs of body dysmorphic disorder
- Recognize signs of other personality disorders and act accordingly
- Know which patient has a higher "chance" to sue based on his/her personality disorder

SCI 110 Contemporary Management of Melanoma

Professor: Edward D. Buckingham, MD

This course will provide a review of the pathogenesis of melanoma and staging. We will then discuss the surgical management of the primary tumor as well as the rational, indications and techniques for sentinel lymph node biopsy. Indications for adjuvant radiation and/or chemotherapy will also be discussed.

Learning Objectives:

- Understand the different types of melanoma
- Understand the staging system and workup of melanoma
- Understand the surgical management of the primary tumor and the rational and role of sentinel lymph node biopsy
- Understand the role for adjuvant therapy

SCI 111 Off Label Uses of Neurotoxins—

Botulinum Toxin in Facial Wound Healing

Visiting Professor: (Germany) Holger G. Gassner, MD

Professor: David E. Sherris, MD

Immobilization is a basic therapeutic principle to aid in the healing of various types of tissue. The activity of the facial musculature represents an important factor affecting healing of facial wounds. Wounds that are subjected to repetitive tension on the wound edges tend to heal with less favorable results. Injection of Botulinum toxin minimizes muscle activity adjacent to a wound during the critical healing phase. Research in a primate model, multiple case reports, data from a prospective trial and reports from various major centers indicate that Botulinum toxin induced immobilization of facial wounds is effective. In this course, an algorithm is presented how to best select facial wounds for Botulinum toxin treatment. The appropriate dosages and injection techniques are shown in detail. Difficult to treat wounds and strategies to minimize temporary functional deficits are discussed. This includes the admixture of lidocaine with Botulinum toxin to achieve an immediate onset of action and thus enhance control over the treatment effect. Representative clinical cases with long-term follow up are discussed in detail.

Learning Objectives:

- Understand important pharmacologic properties of Botulinum toxin
- Use Botulinum toxin to safely immobilize a range of facial lacerations and incisions
- Be able to avoid complications and better understand risks of the treatment

SCI 112 Using Extracellular Matrices (ECM's) to Camouflage Flaws, Support Sagging Tissues and Fill Defects in Facial Aesthetic Surgery

Professor: Edmund A. Pribitkin, MD; Ryan N. Heffelfinger, MD

Extracellular matrices (ECM) such as porcine small intestinal submucosa and acellular human dermis promise to direct the regeneration of host tissues to camouflage defects and provide structural support without the inconveniences associated with autologous grafts. We explore the science behind ECM's and systematically review the literature supporting their use for camouflaging defects in the nasal dorsum, filling wrinkles, and augmenting lips. We also explore their uses as static slings in facial reanimation and in facelift surgery and in the repair of nasal septal perforations. Finally we evaluate their promise in relining fullthickness mucosal/dermal defects, in skin resurfacing and in the treatment of scars and keloids.

Learning Objectives:

- Understand physiology of extracellular matrices and compare the costs and characteristics of existing commercial products
- Select and prepare recipient sites for ECM implantation
- Review evidence based indications for ECM use
- Avoid and Treat ECM Complications



RECON 101 Aesthetic Otoplasty

Professor: Shan R. Baker, MD

A one-hour course will explore the ideal dimensions and angulations of the auricle. The various methods of performing aesthetic otoplasty are explored. The Skoog technique of excisional otoplasty is discussed and demonstrated with video. Complications and their avoidance are discussed in detail.

Learning Objectives:

- Know the ideal dimensions and angles of the mature auricle
- Understand the multitude of methods used to correct lop ear deformity
- Know the advantages and disadvantages for the techniques use in aesthetic rhinoplasty

RECON 102 Reconstruction of the Protruding Ear and Acquired Ear Defects

Professors: Fred J. Stucker, MD; Sunny S. Park, MD

This course concentrates on creating the normalcy of the human ear in both cosmetic and reconstructive cases by focusing on the diagnosis of the defect, surgical technique and postoperative results. The otoplasty technique used by the senior author on over 300 patients will be presented. In addition, the wide range of reconstructive options for auricular defects caused by trauma and cutaneous cancer resections will be described, including skin and composite grafts, and local and regional flaps (e.g. advancement and perichondrial cutaneous). Specific surgical techniques for each diagnosis will be the crux of this presentation with preoperative, operative and postoperative photographs and videos collected over the course of 35 years of experience. In addition, complications are discussed with examples to illustrate prevention. This course will enable the facial plastic surgeon and/or otolaryngologist to reconstruct acquired defects and cosmetically deal with the common malpositioned auricle.

Learning Objectives:

- Learn the otoplasty technique which combines lateral conchal bowl resection with mattress suture technique
- Understand ear defects caused by trauma and cutaneous cancer resections
- Know the reconstructive techniques including grafts (skin and composite) and flaps (local and regional)

RECON 103 How to Use a Creative, Problem-based Approach to Moh's Defects

Professor: Grant S. Hamilton, MD

My experience in teaching Mohs reconstruction has been that most learners perceive local flaps to be pre-formed solutions that are copied from books and applied to the patient. Although this approach has its benefits, it is also limiting. This course emphasizes the creative application of several principles in order to arrive at a personalized and unique solution. In addition, I will describe techniques for expanding flap design into the third dimension to increase the number of options available to the surgeon.

Learning Objectives:

- Understand the ideal locations for camouflaging scars
- Understand how "breaking the rules" can provide insight to new flap designs
- Understand how thinking of flap design in three-dimensions can provide new solutions

RECON 104 Basic Cleft Lip and Palate Surgery

Professors: Tom D. Wang, MD; Christian Stallworth, MD

This course will cover the overall management of patients with cleft lip and palate. The course will present the most current surgical techniques for repairing these complex deformities. It will emphasize techniques in lip repair, palate repair, and secondary cleft rhinoplasty, aided by video segments of surgical techniques.

Learning Objectives:

- Learn the anatomic and physiologic nasal, oral, and oropharyngeal deformities in cleft lip and palate
- Understand management rationale for cleft lip and palate patients
- Understand the surgical techniques in cleft lip and palate repair

RECON 150 Secondary Cleft Lip and Nasal Repair: Strategies for Addressing Common Deformities

Professors: Travis T. Tollefson, MD; Jonathan M. Sykes, MD

The basic principles of primary cleft lip repair are often applicable to revision surgeries. The variety of surgical techniques used to repair the unilateral and bilateral cleft lip contributes to the spectrum of secondary deformities that are encountered. The cleft surgeon must decide when to perform a revision, how to identify the static and dynamic components of the irregularity, and what approaches are effective at improving lip function and appearance. The presenters will present a categorization of the typical secondary cleft lip and nasal deformities and present strategies with which each can be addressed. Cases will range from minor lip/nasal defects to complex secondary cleft surgeries encountered in international surgical missions.

Learning Objectives:

- Learn to identify and classify typical secondary unilateral and bilateral cleft lip and nasal deformities
- Learn the presenter's algorithm for lip revision including approaches, incisions, and geometric considerations
- Understand the nuisances of addressing the cleft nasal deformity in combination with lip revision to achieve optimal results

RECON 160 Facial Reanimation-Contemporary Management (The Cutting Edge)

Professors: Patrick J. Byrne, MD; Kris S. Moe, MD; Tessa A. Hadlock, MD

The current understanding of facial nerve pathology will be reviewed. Cutting edge treatment options for reanimation – including both early and delayed cases – will be taught in detail. This will include reinnervation techniques (repairs, various versions of nerve transfers), regional muscle transfers (including the minimally invasive temporalis tendon transfer) and free tissue transfer (gracilis and others). Adjunctive techniques will be described, as well as the indications for each.

Learning Objectives:

- Learn useful algorithm for which procedures to offer to which patients
- Be able to perform the lid loading and lower eyelid reconstructive techniques described
- Be able to perform the regional muscle transfer techniques
- Understand in detail the indications and technique for free tissue transfer

RECON 180 Auricular Reconstruction 2010: From Non-surgical Ear Molding, Incisionless Otoplasty to Microtia Repair

Professor: Robert O. Ruder, MD

Auricular reconstruction can be a frustrating intraoperative experience. This one-hour presentation will present templates to better evaluate and treat congenital auricular deformities. We shall discuss problems with the dysmorphic and the dysplastic auricles. New, less invasive, and reliable innovations will be discussed with case presentations.

Learning Objectives:

- Improve the facial plastic surgeon's ability to identify dysmorphic and dysplastic anomalies of the auricle
- Learn non-surgical sculpturing techniques to correct dysmorphic pinnae
- Learn new concepts of "incisionless" otoplasty
- Learn reliable innovations in microtia reconstruction

RECON 200 Microtia Reconstruction: A Multi-center Perspective on Current Options for Comprehensive Management

Professors: Travis T. Tollefson, MD; Anthony Brissett, MD; Kofi A. Boahene, MD; Craig S. Murakami, MD; Jeffrey Vrabec, MD and Tom D. Wang, MD

Reconstruction of congenital microtia deformities has been described with numerous paradigms of surgical timing, surgical stages/technique, and coordination with hearing rehabilitation. Surgical reconstruction of a natural-appearing ear remains challenging, whether a surgeon chooses costal cartilage grafting or porous polyethylene. The team of presenters will discuss a variety of options and technical pearls including rib harvest and pain control, skin flap/ graft choices, and suture fixation. The focus of the presentation will be to deliver an algorithm for improving consistent results and minimizing risks in microtia reconstruction.

Learning Objectives:

- Describe the pros and cons of microtia reconstruction with costal cartilage, porous polyethylene, or prosthetics
- Relate evidence-based outcomes to the timing of surgical intervention and technical options for addressing this difficult reconstructive challenge
- Highlight specific technical pearls for optimal aesthetic outcomes
- Describe the state of the science of combining hearing rehabilitation (atresia repair vs. bone-anchored hearing aid) with microtia reconstruction

RECON 210 Advances in Orbital Trauma Surgery: Transorbital Endoscopy and Computer-Aided Reconstruction

Professors: Kris S. Moe, MD; Chris Bergeron, MD

Visiting Professor (Germany): Holger Gassner, MD

Management of severe orbital trauma remains a significant surgical challenge. The anatomic landmarks are often destroyed by the trauma, and comparison with the contralateral side may be inaccurate due to edema. Yet failure to achieve an excellent outcome can result in severe functional and esthetic disabilities.

We will describe the latest advances in orbital reconstruction, including minimally invasive endoscopic surgery through blepharoplasty incisions, and the use of computer guidance in preoperative planning and implant placement. We have found that these techniques significantly improve the accuracy of major orbital reconstruction and reduce the incidence of re-operation, while decreasing surgical morbidity.

Learning Objectives:

- Understand the use of esthetic blepharoplasty incisions for transorbital endoscopic surgery
- Know the techniques of minimally invasive transorbital endoscopy, and the difference of these from transnasal and transmaxillary endoscopy
- Learn how to use preoperative computer planning, including virtual endoscopy, for the reconstruction of severe orbital trauma
- Know the application of mirror-image software intraoperatively to determine proper implant manufacture and placement

RECON 220 Handling Extensive Facial Fractures and Nasal Reconstruction After Total Avulsion

Professors: Phillip R. Langsdon, MD; John L. Frodel, Jr., MD and Fred G. Fedok, MD

This course will discuss cases of extensive facial trauma, from fractures to gunshot wounds. Presenters will describe methods to handle extensive fractures; from re-establishment of facial buttresses to handling palatal and other complicated unstable cases. Presenters will also discuss total nasal reconstruction occurring after gunshot injuries.

Learning Objectives:

- Understand how to reconstruct the massively fractured patient
- Understand total nasal reconstruction

Organization of Facial Plastic Surgery Assistants (OFPSA) Program

Thursday, September 23, 2010

Sheraton Backbay B/C

7:00am-8:00am Continental Breakfast

8:00am-8:15am Welcome Remarks and Introduction of OFPSA Officers
Daphne Christensen, President, OFPSA

8:15am-8:30am Introduction of AAFPRS President
Daniel E. Rouso, MD

8:30am- 9:30am Keynote Speaker
Patient Centered Care: From Concept to Execution (non-CME activity)
Glenn Morley

Patient Centered Care is a hot topic for practices seeking ways to differentiate themselves in today's busy world. Although there has been much discussion about providing a patient centered environment many practices struggle with what this really means in terms of actual service delivery. This course seeks to de-mystify the concept by dissecting all points of contact for the patient and offering real solutions which can be implemented immediately in any practice.

9:35am-10:15am Increase Revenue by Capitalizing on Relationships with your Current Patients
Brenton Koch, MD

10:15am-11:00am Break
Independence Foyer

11:00am-11:30am Facial Plastic Surgery: From a Surgical Nurse's Point of View
Melanie Rubin, RN

11:35am-12:15pm How to Boost your Bottom-line through Service Bundling and Sales
Terri Wojak, Esthetics Director/
Educator, True Skin Care Center

This seminar will give you the secrets to increasing revenues through packaging medical and esthetic services, as well as adding retail products. Through the addition of esthetic services and product sales you will gain the tools needed to retain your clientele, which is the optimal way to keep your business thriving.

12:15pm-1:15pm Lunch in the Exhibit Hall
Hynes Hall A

1:15pm-2:00pm The Winning Aesthetic Team
Jake Laban, MBA

No matter how talented, brilliant, or well-educated the surgeon is, they will not fully realize their potential without a high-performing team behind them. Through an interactive format, this section will review some of the key components of a high-performing aesthetic team. Practice administrators of all levels will pull helpful tips out of this presentation; from the practice manager thinking strategically about building a team, to the front-office employee looking to identify specific areas of development to grow professionally.

2:15pm-3:15pm Around the World in 60 minutes: A Virtual Marketing Tour of Explosive Concepts
Tracy Drumm, IF Marketing

3:15pm-4:15pm Break in the Exhibit Hall
Hynes Hall A

4:15pm-5:00pm Concepts of Beauty: How They've Changed Over Time
Steve Dayan, MD

6:00pm-7:30pm AAFPRS Welcome Reception
Hynes Hall A

Friday, September 24, 2010

Sheraton Backbay B/C

7:00am-8:00am Continental Breakfast

8:00am- 8:30am Skincare 101: Increasing Your Client Experience
Richard Linder, CEO, PCA SKIN

8:45am-10:30am Secrets of Closing the Sale
Karen Zupko

10:30-11:15am How to Become Indispensable to the Practice
Catherine Maley, MBA, Cosmetic Image Marketing

A presentation on what you personally can do to make yourself a valuable asset to a practice so your doctor can't live without you.

11:15am-Noon *AAFPRS Jack Anderson Lectureship*
Sheraton Grand Ballroom

12:15pm-1:45pm Lunch in the Exhibit Hall
Hynes Hall A

1:45pm-2:15pm An Insider's Tips for Closing the Sale--
Building Rapport
Kristi Fritz, Patient Coordinator

2:15pm-3:00pm Overview on Neurotoxins and Fillers
Charlie Finn, MD

3:00pm-3:45pm Break in the Exhibit Hall
Hynes Hall A

3:45pm-5:00pm OFPSA Business and Elections

This program is not approved for CME credits.

**The OFPSA program is supported by
Medicis Pharmaceutical Corporation with
a non-educational grant.**



Thank you!

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Laser Facial Nerve Welding in a Rabbit Model

Bloom Jason, Bleier Benjamin, Goldstein Stephen, Carniol Paul, Palmer James, Cohen Noam

Disclosure: Dr. Paul Carniol - While there is no conflict of interest, Dr. Carniol has received solely research support in the past (equipment) and no money at any time from these listed companies: Cutera, Iridex, Lumenis, Cynosure, Innotec, Arthrocare, Candela. Additionally, Iridex provided no research support or help with this study.

Learning Objectives: (1) To evaluate the feasibility of laser nerve welding (LNW) for repair of facial nerve injury; (2) To compare and contrast the novel technique of LNW for facial nerve repair with the gold standard of suture neurotomy in overcoming the obstacles which may inhibit functional nerve recovery

Objectives: The current gold standard for facial nerve repair involves microsurgical suture reanastomosis; however, these patients are at risk for serious problems with scar tissue and neuroma formation, foreign body reaction to the suture, axon escapement and functional synkinesis. The purpose of this study is to develop and evaluate an expedient and novel technique for facial nerve repair which coapts the nerve ends without injury to the nerve itself and reduces many of the aforementioned obstacles, which may inhibit functional nerve recovery.

Study Design: Prospective in vivo animal survival surgery model.

Methods: 14 rabbits were used for the study with 6 receiving a laser weld, 6 receiving a standard suture neurotomy and 2 rabbits receiving a 1cm facial nerve injury to serve as the negative control group. The laser nerve welding (LNW) was performed with an 808 +/- 1nm diode laser that was utilized to irradiate a 42% albumin solder coupled with an indocyanine green chromophore. The rabbits were evaluated at weeks 4, 8, 12 & 16 with both videography to monitor clinical facial nerve recovery and EMG for electrophysiological nerve status. 2 rabbits (1 from the laser group and 1 from the suture group) were euthanized at week 4, with the remaining rabbits being euthanized at week 16. The wounds were explored and the nerves were harvested and sent for histopathological analysis with both H&N and Masson's Trichrome staining.

Results: Videographic analysis demonstrated the LNW repair trended towards superior outcomes than suture neurotomy at all 4 time points. Electrophysiological analysis demonstrated similar or better results with statistically significant improvement at week 16 ($p < 0.05$). Histologic analysis of the repair sites demonstrated no difference in axon organization or extravasation between groups; however, the laser nerve repair did create a greater inflammatory reaction. Analysis of operative time demonstrates significantly decreased time for LNW and no learning curve was seen.

Conclusions: Laser nerve welding is an expedient, feasible and safe method for facial nerve repair in a rabbit model. It produces a nerve weld that has functional, electrophysiological and histological results that are equal to or superior to traditional suture neurotomy.

Bone Morphogenetic Protein-2 and Osteoactivin Administration by Bolus and Continuous Release: Results on Mesenchymal Cell Differentiation

Arosarena Oneida, Del Carpio-Cano Fabiola, Dela Cadena Raul, Rico Mario, Popoff Steven, Nwodim Emeka, Safadi Favez

Current osteoinductive protein therapy utilizes bolus administration of large growth factor doses, which is costly, and may not adequately replicate the normal bone healing process.

Objectives: To demonstrate that osteoactivin (OA) has similar osteoinductive effects to bone morphogenetic protein-2 (BMP-2); and to determine how continuous release of BMP-2 and OA

results in osteoblastic differentiation in mesenchymal cells as compared to bolus administration.

Methods: C3H/10T1/2 cells were treated with BMP-2 or OA, and harvested after 7, 14 and 21 days to assess osteoblastic differentiation. Based on BMP-2 and OA dose titrations, sustained release biodegradable hydrogels were designed for sustained release growth factor administration. Cells were grown on these continuous release hydrogels and positive controls were exposed to bolus administration of the growth factors. Alkaline phosphatase (ALP) staining and activity, and expression of messenger ribonucleic acids for ALP and osteocalcin were used to assess osteoblastic differentiation. Results: Treatment with OA and BMP-2 resulted in similar effects on osteoblastic marker expression. Cells grown on hydrogels demonstrated osteoblastic differentiation that was not as significant as compared to cells treated with bolus administration of the growth factors.

Conclusions: OA has similar osteoinductive effects to BMP-2. We were not able to induce significant osteoblastic differentiation in mesenchymal cells with slow, continuous release of BMP-2 or OA using gelatin hydrogels. However, the suboptimal results obtained with the use of the biodegradable gelatin polymers demonstrate the need for development of other controlled-release growth factor delivery methods.

Concurrent Structural Fat Grafting and Carbon Dioxide Laser Resurfacing for Perioral and Lower Face Rejuvenation

Ransom Evan, Antunes Marcelo, Bloom Jason, Greco Timothy

Disclosure: Dr. Greco is a consultant and on the speaker bureau for Allergan and Medicis.

Learning Objectives: The participant will be able to describe the expected results of combined structural fat grafting and laser resurfacing for perioral and lower face rejuvenation, and will be able to explain how this treatment strategy complements surgical treatments for the aging face.

Method: Retrospective review with blinded assessment of postoperative results.

Results: Statistically significant improvement in fine rhytids, deep folds, and dyschromias was noted. These results were independent of adjunctive procedures, and correlated to skin type and level of photoaging. No complications occurred; one revision was required.

Conclusions: Combined autologous structural fat grafting and carbon dioxide laser resurfacing result in significant and quantifiable improvement of perioral and lower face aesthetics with a very low rate of complications or revisions.

Objectives: To quantitatively evaluate a dual-modality treatment that combines autologous structural fat grafting and carbon dioxide laser resurfacing for perioral and lower face rejuvenation.

Methods: A retrospective review was conducted of all patients undergoing the dual-modality perioral and lower face rejuvenation by a single surgeon (TG) between 2005 and 2009. Patient demographics, skin characteristics, treatment details, adjunctive procedures, complications, and length of follow up were recorded. Standard preoperative and postoperative photographs were gathered for all patients; these were then placed in random order for quantitative assessment. A blinded expert rated the photographs on three scales, each with a range of 1 (no evidence of abnormality) to 5 (severe or obvious abnormality): 1) perioral fine rhytids; 2) deep folds (nasolabial, marionette, and pre-jowl); and 3) pigmentary abnormalities or dyschromias. Within-subject comparisons were then generated for each scale. Correlation of results with skin type (Fitzpatrick) and baseline photodamage (Glogau) was examined, and a test for the effect of adjunctive procedures on the final result was then performed.

Results: Twenty-two patients underwent the dual-modality rejuvenation procedure. Seventeen patients were included in the study (all female, mean age 61), while five patients were excluded secondary to incomplete charts or postoperative photodocumentation. In addition to carbon dioxide laser resurfacing, 14 patients (82%) received structural fat grafts to the nasolabial folds (mean 3.7cc); 17 patients (100%) received structural fat grafts to the marionette lines (mean 2.3cc); and 14 patients (82%) received structural fat grafts to the pre-jowl sulcus (mean 1.4cc). Eleven patients (65%) underwent concurrent open procedures, including eight facelifts. Average length of follow-up at the time of photography was seven months (range three to 15 months). Significant postoperative improvement was noted for perioral fine rhytids (3.1 to 1.7, $p < 0.0001$); deep folds (3.4 to 2.0, $p < 0.00001$); and pigmentary abnormalities (2.5 to 1.9, $p = 0.02$). High correlation was found between Fitzpatrick type and improvement of dyschromias ($r = -0.77$), and between Glogau score and improvement of fine rhytids ($r = 0.75$). No significant effect of adjunctive procedures was found for each of the three measures ($p = 0.09, 0.71, \text{ and } 0.44$, respectively). No intraoperative or postoperative complications occurred. Fat grafts resorbed in one patient (7%), requiring subsequent revision.

Conclusions: Combined autologous structural fat grafting and carbon dioxide laser resurfacing result in significant and quantifiable improvement of perioral and lower face aesthetics with a very low rate of complications or revisions. Improvement in these subunits is independent of adjunctive surgical procedures, and is accomplished in one operative session. Fat grafting and skin resurfacing may add a "3rd Dimension" to traditional open lifting and redraping procedures.

Long-term Analysis of Surgical Correction of the Senile Upper Lip

Holden Paul, Sufyan Ahmed, Perkins Stephen

Learning Objectives: Review surgical techniques to correct the senile upper lip. To make of immediate and long term quantification of surgical correction of the senile upper lip using lip advancement and lip lift.

Method: A retrospective review of 30 patients who underwent senile upper lip repair including lip advancement or lip lift. Digital image analysis was used to standardize each patient's preoperative and postoperative photographs for accurate objective comparison

Results: Both lip lift and lip advancement achieves significant improvement in senile upper lip ($p < 0.0001$). This improvement is sustained over many years (mean=5 y) with $p < .0001$. Using repeated measures ANOVA there was no significant difference in the operative group compared with the control when examining expected age related change.

Conclusions:

Lip advancement and lip lift can restore the upper senile lip to a more youthful and natural appearance with sustained long-term benefits

Abstract Body: A quantitative comparison of immediate and long term results of surgical correction of the senile upper lip using lip advancement and lip lift.

Mycobacterium Abscessus Outbreak After Facelifts Performed in an Outpatient Surgery Center

Agarwal Anurag, Maloney Richard

Objective(s): 9 of 27 patients who underwent rhytidectomies by the two authors during a three month period developed skin and soft tissue infections post-operatively, caused by *Mycobacterium abscessus*. The source of the outbreak was traced to a water spray bottle used to wet the hair prior to sterile prepping of the patients. By outlining the source of the infection and the post-operative course, we hope to help others prevent

this type of infection, recognize post-operative signs and symptoms that may lead to early diagnosis, and share a treatment algorithm based upon our experience with this difficult to eradicate bacterial infection.

Design: A retrospective chart review was performed of all patients who underwent rhytidectomy procedures within this three month period. Culture results were compared and clinical course until complete resolution of the infection was tracked. Cultures taken from various sources at the outpatient surgery center were also reviewed.

Results: All 9 patients who developed post-operative skin and soft tissue infections did so between 3 and 6 weeks post-operatively. They manifested as small abscesses and papules. All were treated with repeated surgical incision and drainage procedures and Clarithromycin until resolution, which took up to 5 months. Source of the infection was traced back to a single faucet in the soiled utility room at the outpatient surgery center, as well as to a spray bottle filled with tap water, which was used to wet the hair prior to surgical prepping.

Conclusions: Based upon a literature review and our own experience, *Mycobacterium abscessus* found in tap water can cause a significant soft tissue infection post-operatively in rhytidectomy patients, which can be difficult to eradicate. Tap water should not be used to wet the patient's hair immediately prior to surgery. We have switched to using sterile water exclusively to wet the hair and comb the hair pre-operatively, with no subsequent infections. If one encounters small abscesses and papules 3-6 weeks post-rhytidectomy, *Mycobacterium abscessus* should be high on the differential, and an AFB culture and smear undertaken in addition to routine culture techniques. Repeated incision and drainage or aspiration procedures, combined with directed antibiotic therapy for at least four weeks after resolution of abscesses and pustules, was the key to eradicating the infection in our patient series.

Low Hyoid and Obtuse Cervicomentale Angle: Addressing the Difficult Neck During Rhytidectomy with Hyoid Release

Bhatt Nishant, Perakis Helen, Weinberger Paul, Gourin Christine, Iverson Kenneth, Chen Achih

Learning Objectives: New techniques in the surgical armamentarium of facelift surgeons for addressing difficult necks are needed. At the conclusion of this presentation, participants should be able to (1) discuss the anatomical challenges in patients with a low hyoid and an obtuse cervicomentale angle during facelift surgery; (2) explain the reasoning for releasing the infrahyoid muscles; and (3) explain the technique of infrahyoid release with the accompanying cephalometric changes that occur during rhytidectomy.

Background: Restoration of an acute cervicomentale angle in patients with a low hyoid and an obtuse cervicomentale angle has long plagued facelift surgeons. In patients with unfavorable hyoid position, aggressive fat removal and platysma plication may be helpful; however, the hyoid position remains unchanged, hindering optimal improvement in the neck.

Hypothesis: We hypothesized that for patients with low hyoid bones and an obtuse cervicomentale angle, release of the infrahyoid muscles during rhytidectomy may allow creation of a more acute cervicomentale angle and improvement in appearance not achievable with traditional facelift techniques.

Setting: Tertiary care academic hospital and private facial plastic surgery center.

Methods: Four cadavers were used in this study. Hyoid position was measured by the distance (in millimeters) from the sternal notch to the inferior border of the hyoid bone in three conditions (1) in neutral position without intervention, (2) after superficial musculoaponeurotic system (SMAS) imbrication rhytidectomy and platysma plication and (3)

following inferior release of the hyoid-attached musculature. A paired t-test was used for statistical analysis with each cadaver serving as its own control. The surgical method described was also applied to two patients with low, anterior hyoids and resulting post-operative outcomes are described. Results: The mean distance from the sternal notch in neutral position without intervention was $92.2 \pm SD 10.6$ mm. After SMAS imbrication and platysma plication without hyoid release, there was no significant improvement with mean distance of $93.5 \pm SD 11.0$ mm ($p=0.14$ compared to control). After hyoid release, the mean distance was $98.0 \pm SD 10.8$ mm ($p=0.003$ compared to control and 0.006 compared to SMAS imbrications and platysma plication). Both patients reported excellent satisfaction with their surgical results, and have had no complications at a mean follow-up time of 12 months. Conclusion: The infrahyoid myotomy and release may represent a valuable tool for addressing the patient presenting with low hyoid position and obtuse cervicomental during rhytidectomy.

Neck Lifting: New Minimally Invasive Techniques

Keller Gregory, Punthakee Xerxes, Mashkevich Grigorie

Disclosure: The senior author is a luminary for Water Jet, though the instrument is not essential for the technique. Dr. Keller has no financial interest in the company. He has not been compensated for this study, nor has the study been underwritten by this company.

Learning Objectives: At the conclusion of this paper, the participant should understand the anatomic problems of the aging neck, the evolution of aging neck lift techniques, and a simplified method of minimally invasive neck lifting that is applicable to most patients

Method: A minimally invasive method of neck lifting with minimal incisions is described that is applicable and effective for most patients with aging necks. After closed liposuction (with, in our series, the water jet) a web of sutures is utilized to contour the neck. Use of diagnostic ultrasound, as previously described by the authors, is used to assess the technique results.

Results: Minimally invasive neck lifting techniques are as effective for most patients as more invasive techniques.

Conclusions: Closed liposuction of the neck with water jet undermining and web suturing techniques can contour most problems of the aging neck as well as more invasive methods.

Abstract Body: Many methods of treatments for the aging neck are described in the literature. The anatomic problems of excess and fallen supraplatysmal and subplatysmal fat, jowls, submaxillary gland ptosis, platysma sagging and bands, and digastric method hypertrophy are well depicted by authors such as Feldman. Invasive treatments such as corset platysmaplasty with submaxillary gland resection, digastric resection, platysma imbrication and inversion, and direct fat resection are effective, but involve significant subcutaneous undermining and recovery. Less invasive techniques with closed liposuction and posterior pull of the platysma do not address many of the anatomic problems of the aging neck. Suturing techniques, such as those employed by Giampappa, are limited in their application. Likewise, barbed sutures and absorbable ribbons are not universally accepted. Newer techniques involve closed liposuction and capture of the ligaments of the face and neck with a "web" of sutures. These techniques are effective for most of the anatomic problems of the aging neck.

Rationale and Technique for Identifying and Achieving Ideal Vectors in Mid and Lower Face and Neck Lift Surgery

Wulc Allan, Czyz Craig, Foster Jill

Learning Objectives: At the completion of this activity, the participant should be able to compare and contrast techniques of mid and lower face and neck lifts, understand the pitfalls and complications of current techniques, and gain an understanding of the rationale and techniques for surgery of the facial ligaments.

Method: Forty patients desiring surgical correction of facial tissue descent and volume loss were offered correction by a midface, lower face, and/or neck lifting procedures that reapproximate the facial ligaments. The surgical technique(s) employed varied by facial location. The goal of surgery was to reattach the ligaments with appropriate vectors and tension. Following this all patients received some type of volumetric enhancement with autologous fat transfer or synthetic fillers. Results: Initial outcomes in our series showed realistic rejuvenation that correlated well to photographs taken in youth. Complications included skin dimpling in three patients that resolved within one month. One patient experienced transient unilateral orbicularis weakness and one patient had transient frontal nerve branch weakness, both of which resolved within six weeks.

Conclusions: Septocutaneous ligamentous reattachment provides an astoundingly realistic restoration of volumetric and gravitational changes in the aging face and may become a preferred technique for facial rejuvenation. Long-term follow up is needed for a direct comparison with other techniques.

Abstract Body: We hypothesize that the septocutaneous attachments of the osseocutaneous ligaments of the face attenuate with aging. The reattachment of the septocutaneous ligaments to their osseous and periosteal origins can form the basis of an anatomically and aesthetically sound facial rejuvenation surgery. We detail how these changes can be visualized morphologically and quantified. Surgical techniques, results, and complications are discussed. Surgical procedures that are employed to elevate the face include midface lift, skin only face lift, deep plane face lift, SMAS lift, SMASectomy, and volumetric lift. While successful from an aesthetic standpoint, these techniques approximate the correction of facial tissue descent secondary to ligamentous disinsertion and gravitational factors without directly correcting it. The techniques we describe anatomically address the reattachment of the facial ligaments and results in natural vectors of lift.

In the midface, limited endoscopic dissection between the zygomatico malar ligaments and the orbitomalar retaining ligaments was performed and the tissue immediately below the ligaments was imbricated and sutured to ligamentous tissue or to tissue immediately above the ligament. Because of the technical difficulty of suture passage remotely under endoscopic visualization, a specially developed suture device was employed for engaging the midface volumes.

In the periorbital area, the orbicularis was reattached to the orbitomalar ligament and to the temporal frontomarginal orbital adhesion. In the lower face and neck, the platysma auricular ligament and the hyoid ligaments were utilized as anchor points for descended facial volumes. The platysma muscle was reattached to the platysma auricular ligament.

Initial outcomes in our series showed realistic rejuvenation that correlated well to photographs taken in youth. Complications included skin dimpling in three patients that resolved within one month. One patient experienced transient unilateral orbicularis weakness and one patient had transient frontal nerve branch weakness, both of which resolved within six weeks.

Septocutaneous ligamentous reattachment provides an astoundingly realistic restoration of the volumetric and gravitational changes in the aging face and may become a preferred technique for facial rejuvenation. Prospective, long-term follow up is needed for a direct comparison with other surgical techniques for facial rejuvenation.

Facial Structures Can Predict Behavioral Personality Traits

Perakis Helen, Johnson Michelle, Chen Achih

Learning Objectives: To obtain the ability to analyze the face and to be able to distinguish the sexually dimorphic features between the two genders. To understand how certain facial structures can predict behaviors and personality traits.

Subjects and Methods: In this prospective study, 100 undergraduate students were chosen at random and were asked to fill out the Minnesota Multiphasic Personality Inventory (MMPI) Survey. These subjects were also digitally photographed. All photos were placed into a Frankfort Horizontal plane and individually analyzed. Various facial measurements were made to access frontal bossing, mandible protrusion, mandibular angle, nasal tip projection, angle of the nasion, facial height to width ratio, interpupillary distance and others. These diverse facial measurements were then compared to personality traits as correlated with each individual's MMPI. Statistical analysis was undertaken to correlate certain facial features with certain behaviors or personality traits.

Results: A total of 100 subjects (60 female and 40 male) completed the MMPI and had their standardized digital photographs analyzed for various facial features. A variety of facial measurements were correlated with specific personality traits from the MMPI.

Conclusion: Certain facial features were correlated with specific personality traits. Cephalometric data can be used to better understand personality traits and behaviors. Facial plastic and reconstructive surgeons should have an understanding of these facial structures were assessing patients for aesthetic procedures.

Abstract Body: The face is sexually dimorphic and certain facial characteristics have been associated with masculinity. Sexual dimorphism in the face is a signal that has been shaped by natural selection. Human perceptions of attractiveness have changed over time and have often been thought to be influenced by natural selection, as they may portray clues to an individual's health status. Extrapolations have been made by many researchers to deduct that facial structure and various facial features may predict a variety of behaviors and personality traits. In this prospective study, 100 subjects were chosen to complete the Minnesota Multiphasic Personality Inventory (MMPI) Survey. Digital photographs were taken of all the subjects and a variety of facial measurements were obtained. Some of the facial characteristics that were accessed were frontal bossing, mandible protrusion, mandibular angle, nasal tip projection, angle of the nasion, facial height to width ratio, interpupillary distance and others. The various facial measurements were then compared to the answers provided on the MMPI for each individual. Certain facial features were correlated with specific personality traits and behaviors.

Lateral Approach Platysmaplasty in Facelift Surgery: Avoidance of the Submental Incision

Santos David

Disclosure: Dr. Santos works for Lifestylelift corporation which supports travel arrangements to scientific meetings.

Learning Objectives: At the completion of this activity, the participant should understand the alternative technique of lateral approach platysmaplasty and its utility in facelift

surgery, and that neck rejuvenation can be achieved without the use of a sub mental incision

Method: From February 2009 through December 2009, 50 patients who would otherwise benefit from a traditional platysmaplasty during rhytidectomy decided against submental approach and alternatively underwent a lateral approach platysmaplasty without a submental incision. This technique incorporates standard cervicomental angle platysmal band lysis, superficial and deep submentum liposculpture, and multilevel mattress suture platysmal muscle tightening. All patients had before and after photographs which were analyzed independently by blinded facial plastic surgeons. Post-operative complications were noted.

Results: 3 and 6 month post-operative photographs indicated excellent neck rejuvenation in 47 of 50 patients with improvement in all 50 patients. There were no major complications.

Conclusions: Lateral approach platysmaplasty in rhytidectomy is an excellent neck rejuvenation technique alternative that avoids the submental incision.

Abstract Body: When dealing with platysmal banding and moderate turkey gobbler deformity, submental incision approach platysmal corsets and tightening is of paramount importance for delivering effective and satisfactory neck rejuvenation. Without platysmaplasty, revision rates are higher and results are less satisfactory. In some patients due to cosmetic concerns, the submental incision is refused, and occasional submental incision wounds are visible and aesthetically unsatisfactory. In other patients, a traditional platysmaplasty and its additional cost exceeds a patients financial capabilities. A new lateral approach platysmaplasty was adopted to achieve neck rejuvenation without a submental incision. From February 2009 through December 2009, 50 patients who would otherwise benefit from a traditional platysmaplasty during rhytidectomy decided against submental approach and underwent a lateral approach platysmaplasty without a submental incision. This technique incorporates standard cervicomental angle platysmal band lysis, superficial and deep submentum liposculpture, and multilevel mattress suture platysmal muscle tightening. 3 and 6 month post-operative photographs indicate excellent neck rejuvenation in 47 of 50 patients with improvement in all 50 patients. There were no major complications. Lateral approach platysmaplasty in rhytidectomy is an excellent neck rejuvenation technique alternative that avoids the submental incision.

Safety, Efficacy and Utility of Platelet-Rich Fibrin Matrix in Facial Plastic Surgery

Sclafani Anthony

Disclosure: The author has received research support from Aesthetic Factors, Inc. and Cascade Medical Enterprises (total: \$10,000), and is a Medical Advisor for Cascade Medical Enterprises. Both companies produce technologies designed to produce platelet-rich fibrin matrix.

Learning Objectives: 1) Describe preparation of autologous platelet-rich fibrin matrix (PRFM); 2) Understand the rationale for the use of PRFM to promote wound healing; 3) Evaluate experimental evidence supporting the use of PRFM in augmenting facial volume; 4) Understand the expanded use of PRFM in facial fat grafting and open surgical procedures.

Method: The charts of 40 patients treated with PRFM for acne scarring, facial rhytids, midfacial volume deficiency, suborbital hollowing or to augment facial fat grafting or as a wound healing adjunct after surgery were reviewed. Charts and photographs were examined for clinical volumizing effects, wound healing, treatment related adverse events (TRAEs), patient experience and satisfaction and persistence of effect. **Results:** All patients completed treatment without major complications. TRAEs in patients receiving skin applications

were generally limited to mild swelling for 2-3 days, while pinpoint bruising was less common and typically resolved within 5 days. Most patients receiving skin treatments noted clinically apparent changes immediately, with modest loss of effect over the first 7-10 days, after which the clinical effects were stable for up to 2 years. Patients who were treated with PRFM as a surgical adjunct had less post-operative swelling and bruising than would have been expected in patients not treated with PRFM. No impairment of wound healing was noted.

Conclusions: Autologous PRFM appears to be a safe, effective and versatile tool to augment facial volume, treatment of acne scars and facial rhytids and as a method to enhance post-surgical wound healing.

Abstract Body: PRFM is an autologous preparation made by isolating a serum/fibrinogen and platelet suspension from peripheral blood. PRFM has been used to accelerate healing of chronic wounds of the lower extremities as well as to enhance healing of orthopaedic surgical beds. The platelets in this preparation have been shown to release a number of growth factors, including PDGF, EGF, VEGF and IGF, in physiologic proportions over a 7 day period, similar to acute wounds. The concentration of viable platelets with sustained growth factor release is thought to be responsible for the observed clinical benefits. A few anecdotal reports have described the addition of PRFM to autologous fat prior to facial injection with apparently enhanced volume persistence. PRFM is prepared by a simple, 6 minute process from 9cc of peripheral blood.

Over the past 2 years, PRFM has been used as a dermal and subdermal filler, in combination with subcision to treat depressed acne scars, as an adjunct to reduce post-operative ecchymosis in open surgical cases and to promote fat graft survival. Reviewing the post-treatment course and the photographs of 40 patients treated and followed for 6- 24 months, this treatment was seen to be safe, generally with little to no edema and ecchymosis. Patients treated for volume augmentation or for rhytids were treated without any overcorrection, and over the initial 7-10 days, some decrease in apparent correction occurred; however, beyond this initial period, no significant change in correction was noted for up to 24 months. When used in open surgical cases, post-operative ecchymosis was notable less than expected; when added to autologous fat, greater volume retention was seen, and when used for acne scarring, results were seen within 2-3 days. PRFM is a versatile, safe and useful application in multiple facets of facial plastic surgery.

Personalized Nasal Surgery Using Computational Fluid Dynamics: Emerging Technologies for Surgical Planning and Assessment of Outcomes

Rhee John, Pawar Sachin, Garcia Guilherme, Kimbell Juila
Learning Objectives: At the completion of this presentation, the participant should be able to explain basic concepts of computational fluid dynamics (CFD) and potential applications of CFD in nasal surgery.

Method: This is a preliminary in-depth analysis of a single patient within a larger 4-year prospective study. Pre- and post-surgery CT scans of a patient undergoing septoplasty and right inferior turbinate reduction were used to generate 3-dimensional computational fluid dynamics (CFD) models of the nasal airway. Using software tools, the pre-surgery model was digitally altered to generate three "virtual surgery" models for analysis: 1) septoplasty only, 2) right inferior turbinate reduction only, and 3) septoplasty with right inferior turbinate reduction. The results of the virtual surgery CFD analysis were compared with the actual post-surgery CFD results. Outcome measures calculated using CFD included: nasal resistance,

airflow allocation, pressure at walls, wall shear stress, and heat flux.

Results: Virtual septoplasty alone and right inferior turbinate reduction alone resulted in a predicted overall nasal resistance of 0.0334 Pa/(ml/s) and 0.0412 Pa/(ml/s), respectively. The combination of virtual septoplasty and right inferior turbinate reduction resulted in the lowest predicted nasal resistance of 0.0321 Pa/(ml/s). Both virtual septoplasty alone and combination septoplasty with right inferior turbinate reduction resulted in approximately equal nasal resistance between the left and right sides of 0.06 Pa/(ml/s) and an airflow distribution of 48% on the left and 52% on the right. This is in contrast to virtual right inferior turbinate reduction alone which resulted in an approximately 64% greater resistance on the left side than right and an airflow distribution of 40% on the left and 60% on the right. Post-surgery CFD analysis estimated the overall resistance to be 0.0336 Pa/(ml/s) with 30% greater resistance on the right compared to the left and a more equal airflow distribution of 46% on the left and 54% right. CFD analysis of the virtual surgery models tended to underestimate both the decrease in wall pressure and heat flux per unit area and overestimate the decrease in wall shear stress compared to the post-surgery CFD results.

Conclusions: We present an innovative approach to surgical planning and assessment of functional outcomes after virtual and actual nasal surgery using CFD techniques. This preliminary study illustrates the predictive potential of "virtual surgery." Further investigation has the potential to generate software tools that will enable surgeons to perform personalized nasal surgery using a combination of CFD and patient-reported measures.

Facial Skin Visco-elasticity Measurements After Topical Mandelic Acid

Jacobs Stanley

Background: Objective measurements of skin visco-elasticity are rarely performed in facial plastic surgery procedures or after topical agents. Mandelic acid compounds were tested in clinical trials to assess its efficacy on skin visco-elasticity. **Objectives:** Objective measurements of skin visco-elasticity were performed with the use of a Cutometer® MPA 580. The device incorporates a hand-held probe that creates a calibrated suction on the skin surface and then releases it. The data is recorded in real time onto a computer and takes less than five minutes.

Setting: Facial plastic surgery private practice in Northern California.

Main Outcome Measures: Measurements taken prior to topical Mandelic acid and weekly for four weeks.

Subjects and Intervention: Sixteen patients, ages 42 to 68, two male and remainder female, underwent topical facial application of a compounded serum and cream containing Mandelic acid twice a day for 4 weeks. No other products were applied to the face, including makeup. All subjects used Ivory soap® for a cleanser and during the washout period. Subjects' faces were measured with the Cutometer prior to treatment and weekly for four weeks. Four areas were studied: lower eyelid, mid-cheek, jowl and mid-neck. Patients were randomized for sidedness.

Results: Visco-elasticity as determined by the Ur/Ue ratio (ability of suctioned skin to snap back after it is released), showed an overall increase of 23% for eyelid skin, although all four facial areas studied showed improvement. However, when we divided the group into those with a Ur/Ue ratio less than 50% from the start (poor elasticity), elasticity increased by 51%. Yet, the greater than 50% elasticity group, did not increase in Ur/Ue. Instead, the latter group's Uf, distance the

skin can be pulled away by the probe, decreased, showing an improvement of 54%. This suggests that skin has a spectrum of visco-elastic properties: poor skin first increases its elastic properties as it improves, then its firmness or viscosity increases. Likewise, a rubber band folded on itself does not increase its elasticity, but becomes more firm.

Conclusions: Objective measurements in skin visco-elasticity are easily accomplished by a Cutometer®. It takes a few minutes, measured in real time, painless, and is accurate to 10 microns. A compound containing Mandelic acid as a serum and cream, applied twice a day for 4 weeks, increased facial skin visco-elasticity 51% for skin that had less than 50% elasticity to begin with and those with greater than 50% starting elasticity showed a firmness increase of 54%.

We recommend the use of devices such as the Cutometer® to study topical agents or surgical treatments, as a way to corroborate our photographic and histological skin assessments.

Coolskin-LSL-01-2010 - Evaluation in Anxiety and Pain Associated with Facial Injections through the Use of the Coolskin Medical Device in Rhytidectomy

Ellison Timothy, Hatfield Martha, Taghizadeh Farhan

Learning Objectives: During this discussion participants will be given an opportunity to assess the results of the Coolskin medical device in relation to reducing pain and discomfort associated with facial injections. Participants will be able to evaluate the clinical trial and review the results

Method: Coolskin medical device is specifically designed as a "pain alleviator". During this trial we used a "split face" design in which the right side of the patients face was treated prior to injections and the left side was untreated. A clinical trial was developed and 25 patients gave their consent to be enrolled in the clinical trial

Results: We were able to establish a statistical significance of $p < 0.05$ for the trial and patient surveys were conducted to measure quantitative/qualitative results as they pertain to the patients experience with the Coolskin medical device. Patients were asked to rate their anxiety and discomfort as it related to the treated side and control side. There is a sharp contrast between scores quantifying less pain and discomfort as it relates to the treated side and control side. Patients also had a higher likelihood to consider future procedures that required facial injections e.g. Botox or Dermal Filler. The majority of the patients also communicated that if given a choice they would prefer to be "treated" with the Coolskin medical device as opposed to having no treatment provided. **Conclusions:** Utilization of the Coolskin medical device prior to facial injections reduces anxiety and discomfort by more than 50% and was effective for over 68% of the patients enrolled in the trial.

Abstract Body: The pain and discomfort associated with pre-procedure facial injections can be significantly reduced with the use of the Coolskin medical device. We were able to establish a statistical significance of $p < 0.05$ for the trial and patient surveys were conducted to measure quantitative/qualitative results as they pertain to the patients experience with the Coolskin medical device. Through the process of effectively chilling the skin prior to injections, the overall patient experience can be measurably improved. The Coolskin medical device is specifically designed as a "pain alleviator" and as such was very attractive to Lifestyle Lift. We were able to review the field data supporting the efficacy of the Coolskin medical device. Upon review of the data and supporting information Lifestyle Lift decided to conduct a clinical trial involving 25 patients. During this trial we used a "split face" design in which the right side of the patients face was treated with the Coolskin medical device prior to injections. The left

side of the patients face was untreated prior to injections. All patients participated in a brief survey 24 hours post procedure and were asked to answer a series of questions and rate their level of pain and discomfort on a scale of 0-5 (zero being the least and five being the highest level of anxiety, pain or discomfort). The survey results have proven that there is a significant improvement towards decreasing anxiety, pain or discomfort. The conclusion reached through conducting this trial is that the Coolskin medical device provides the patient with a positive experience as it relates to receiving facial injections.

Cosmetic Septorhinoplasty "To Pack or not to Pack"

Ayala Carlos, Frankel Andrew

Learning Objectives: For many years the accepted dogma for surgeons post septorhinoplasty has been nasal packing. This study sets out to evaluate the need for nasal packing after cosmetic septorhinoplasty. It will also provide a comprehensive look at the advantages, disadvantages, risks and benefits of nasal packing.

Method: A prospective randomized comparison of 50 cosmetic septorhinoplasty patients with and without postoperative nasal packing was undertaken to evaluate the incidence of postoperative complications and patient comfort. Primary Rhinoplasty, Functional Rhinoplasty and Revision Rhinoplasty patients were included in the study. Pt's underwent a septorhinoplasty using either closed or open techniques and then were randomized to packing vs. no packing study groups. These patients were then evaluated on postop day 1, week 1, and week 6 post op for bleeding, pain, difficulty breathing, swelling, bruising, anxiety, and postoperative complications. Physical exam and a questionnaire were used to evaluate these patients. All surgical maneuvers used for all 50 cases were tabulated and compared. A comprehensive review of the medical literature and a meta-analysis of prior nasal packing papers was undertaken in order to add weight to our limited study and to encourage rethinking of this practice.

Results: 50 patients, Ages 18-55, 10 Primary Septorhinoplasty, 40 complex Revision rhinoplasty, 10 ear cartilage grafts, 7 rib grafts, 3 radix grafts, etc. 42 patients with osteotomies, 50 patients with work done on septum, 15 turbinate reductions, 2 turbinectomies, 25 patients with Packing, 25 without packing. Day 1 100% survey and physical exam evaluation, 1 week -98% Survey and Physical exam. 6 weeks 60% survey and physical exam evaluation. Overall 100% of patients not packed were happy. No patients preferred to be packed. Swelling and ecchymosis was increased on day 1 in nasal packing patients. Anxiety of packing removal, nighttime restlessness, and difficulty breathing were worst in nasal packing patients. No significant aesthetic differences were noted in patients. No septal hematomas and no synchia. Only complication of severe nasal bleeding post-op day 6 requiring intraoperative control was noted in a nasal packing patient. Meta-analysis demonstrated that most areas of nasal and sinus surgery have moved away from nasal packing. **Conclusions:** Cosmetic Septorhinoplasty surgery can be done safely with excellent outcomes without nasal packing. There is no significant difference in the rate of postoperative complications. Cosmetic surgery patients can comfortably undergo septorhinoplasty surgery without the need for nasal packing. There is increased safety, less expense and greater patient comfort and satisfaction when patients are not packed.

The Alar Spanning Suture: A Useful Tool in Rhinoplasty to Refine The Nasal Tip

Sufyan Ahmed, Holden Paul, Perkins Stephen

Learning Objectives: 1) Review a surgical technique to refine the nasal tip in select cases; 2) review the relative indications for use of the alar spanning suture; 3) demonstrate through photographs and video the technique of the alar spanning suture.

Method: A Description of one surgeon's (SWP) technique to address certain nasal tip characteristics in order to achieve an improved aesthetic result. Utilization of operative photos and intra-operative video to demonstrate this technique as well as the long-term and short-term postoperative results.

Results: Significant improvement in the appropriate cases with refined aesthetic appearance of the nasal tip, with utilization of the alar spanning suture in rhinoplasty.

Conclusions: The alar spanning suture is a technique that can be used in conjunction with other techniques to correct certain nasal tip deformities.

Abstract Body: A review of a surgical technique employed by a renowned rhinoplasty surgeon (SWP) was performed. Certain nasal deformities such as a bulbous tip with strong, convex lower lateral cartilages are best indicated for this technique. To refine and narrow the supra-tip, the alar spanning suture can improve lateral crural position, often without requiring extensive dissection or additional strut grafting. This technique is a useful addition to the armamentarium of any rhinoplasty surgeon.

Tongue in Groove Maneuver in Primary Endonasal Rhinoplasty: A Review of 366 Patients over a Five Year Period

Williams Edwin

Learning Objectives: Participant should understand the difference between the endonasal approach and open approach with regard to Rhinoplasty. Also attendees should be able to compare and contrast the differences in utilizing a Tongue in Groove Surgical Maneuver with the endonasal approach and the attributes of incorporating this for various anatomical variances.

Method: Retrospective review was performed over a five year period starting in 2003 of all patients undergoing primary rhinoplasty. Patient's charts were reviewed and demographics were documented. The operative data sheet schematics were reviewed and dictations of patients undergoing primary endonasal approach where a tongue in groove suture technique maneuvers were identified. Specific indications for using the Tongue in Groove suture technique were identified for each patient. Results were graded as satisfactory where the alar-columellar disharmony was corrected or unsatisfactory when the deformity was not adequately corrected.

Results: Of the 366 patients undergoing primary rhinoplasty, the Tongue in Groove suture technique was used in 49 patients with the endonasal approach (13%) for indications including correction of malpositioned or dependent intermediate crus, maintain tip support or assisting with rotation. When evaluated by the author, the desired outcome was accomplished in 42 of the 43 patients (97%) when follow up at one year was evaluated.

Conclusions: The data represents a five year period where the Tongue in Groove suture technique has been used by the author in primary endonasal rhinoplasty. This technique has been shown to be effective for the correction of alar columellar disharmony resulting from dependent intermediate crus either alone or in conjunction caudal septal excess.

Abstract Body:

The Tongue in Groove suture technique was first used by Rethi in 1934 to prevent tip droop in endonasal rhinoplasty. The

technique is classically described by advancing the intermediate and/or medial crus in a more cephalic location with suture fixation to the caudal septum. Indications for utilizing the technique include a hanging columella with or without caudal excess of the nasal septum. By advancing the intermediate and/or medial crus anteriorly several authors have also sighted further benefits of assisting in either maintaining tip support or projection when appropriate. For the first past two decades the external approach to rhinoplasty has been advocated by several authors sighting the attributes of increased exposure and more predictability. The Tongue in Groove suture technique has been highlighted using the external approach with direct visualization and fixation of the intermediate /medial crus on the caudal septum 2,3. The specific goal of this study is to review our experience using the Tongue in Groove suture technique with primary endonasal rhinoplasty over a consecutive five year period and highlight the indications, efficacy and limitations in our patient population.

Closed Techniques for the Open Rhinoplasty Generation *Sethna Anita, Godin Michael*

Learning Objectives: At the completion of this activity, participants should be able to: 1) Determine the extent of experience of AAFPRS fellows and graduating otolaryngology residents in closed rhinoplasty techniques; 2) Discuss selected closed rhinoplasty techniques that can complement, and in some cases, obviate the need for open rhinoplasty.

Method: Recent graduates of the AAFPRS fellowship program were surveyed about their comfort level with several closed rhinoplasty techniques, specifically reduction of the dorsal septum, cephalic trimming of the lateral crurae, and placement of spreader, batten, and columellar strut grafts. An instructional review of these procedures through the closed approach is presented to provide developing rhinoplasty surgeons with feasible alternatives to the more common open techniques.

Results: Twenty-eight current and recent AAFPRS fellowship graduates responded to our survey. On average, respondents had performed 12 rhinoplasties as primary surgeon during fellowship, with a range of 0 to 83, and 58 as assistant surgeon, with a range from 12 to 200. On average, respondents performed 64% of rhinoplasties through open approaches and 26% utilizing a closed or delivery approach. Only one-third of respondents felt "very comfortable" with placement of a spreader graft through a closed approach as opposed to 100% through an open approach. 33% felt "very comfortable" with placement of a columellar strut through closed approach versus 100% through an open approach. Finally, less than 50% of respondents felt "very comfortable" performing cephalic trim of the lower lateral cartilages (LLC) through a closed approach, as opposed to 100% through an open approach. Fifteen graduating Otolaryngology residents responded to our survey. On average, respondents had performed 11 rhinoplasties as primary surgeon and approximately the same as assistant throughout their residency, with 86% through open approaches and only 10% through closed or delivery approaches. Only 1% felt "very comfortable" with placement of spreader grafts through a closed approach versus 58% through an open approach; none were comfortable with placement of a columellar strut through a closed approach. Finally, 16% felt "very comfortable" with cephalic trim of the LLC through a closed approach versus 42% through an open approach.

Conclusions: The open rhinoplasty approach affords excellent visualization of nasal skeletal and cartilaginous structures, provides a critical advantage in difficult cases, and is invaluable as a teaching tool. It is also more invasive, time consuming, and can result in more swelling and recovery time than the

closed approach. It is clear that most graduates of Otolaryngology residency training programs and Facial Plastic fellowship programs feel less comfortable with closed approaches to rhinoplasty. It is our aim through this review to increase their awareness of the closed approach option, and to demonstrate several closed techniques, which they can add to their surgical arsenal in serving the best interests of their patients.

Volumetric Analysis of the Butterfly Spreader Graft

Chaiet Scott, Marcus Ben

Objective: Reconstruction of the internal nasal valve is now well understood to be a key component of improving nasal breathing. Valve reconstruction with the auricular cartilage spreader graft (also known as the butterfly graft) has been shown to provide excellent functional improvement. One concern with this technique is the possibility of the graft enlarging the nasal tip. Concerns with this have limited this techniques broad use despite its efficacy. This study will evaluate true post-operative volumetric change in patients who have undergone butterfly grafting.

Methods: After clearance from the UW-IRB a series of 50 consecutive patients was selected who had undergone butterfly spreader grafting for functional nasal improvement. Patients were excluded that had undergone any other type of tip modification. Pre-operative and 3 month post-operative photos were utilized. Photos were loaded into the Mirror software suite (Canfield). Volumetric analysis was then performed including: 1) Total tip volume 2) tip width 3) supra-tip break 4) alar width

Conclusions: We will present data to demonstrate minimal difference in all aspects of tip volume. Male and Female subjects demonstrates statistically insignificant changes in tip volume, width and overall shape when compared to their pre-op photographs. The butterfly spreader graft has been shown to be among the most powerful techniques for repair of the internal nasal valve. We propose that concern for cosmetic alteration of the nose should not deter surgeons from employing this valuable technique

Porous Polyethylene Implants for the Correction of External Nasal Valve Collapse

Lau Bedy, Dadgostar Anali, Kibblewhite Douglas J.

Learning Objectives: At the completion of this activity, the participant should be able to:

(1) Evaluate a patient for external nasal valve collapse; (2) Understand the reliability over time of a rigid porous polyethylene implant batten graft for alar wall reconstruction in the correction of external nasal valve collapse.

Background: External nasal valve collapse is an unusual cause of nasal obstruction. Predisposing conditions include prior resection of the lateral crura, incidental direct trauma to the lateral crura, cleft lip nasal deformity, and unilateral facial paralysis, among others. Common nasal surgical techniques often do not provide satisfactory results. Autologous cartilage grafting for external nasal valve reconstruction has mixed results that often deteriorate over time. Our experience shows that alar wall reconstruction with a rigid porous polyethylene implant (Porex) is a useful alternative.

Objective: To evaluate the effectiveness of a rigid porous polyethylene implant batten graft in external nasal valve reconstruction for treating nasal obstruction secondary to external nasal valve collapse.

Method: Thirty-one patients with external nasal valve collapse were retrospectively extracted from a database of 1400 functional external rhinoplasties performed by the senior author from November 1997 to March 2009. In these 31 patients, the external nasal valve was reconstructed with an implanted rigid porous polyethylene implant batten graft. The

indications, outcomes, and complications were studied. Results: Median follow-up was nine months (1 to 57 months). Ninety-three (93) % of patients had complete resolution of external nasal valve collapse. With the exception of those patients whose grafts were subsequently removed, no patient had recurrence of their symptoms over the follow-up time. The principal complication was graft extrusion or infection in 10% of patients (3 of 31), seen in the earlier patients in the series and in part due to the site of graft placement. This agrees with the generally accepted 5% infection/extrusion rate seen with non-autogenous nasal implants.

Conclusion: Implantation of a rigid porous polyethylene implant batten graft is a safe and reliable method to treat nasal obstruction secondary to external nasal valve collapse. In comparison to cartilage grafting, it has the advantage of being stable over time.

CT Imaging for Analysis of the Internal Nasal Valve

Moche Jason, Pearlman Steven

The internal nasal valve (INV) is well known to be the site of maximal nasal airway resistance. Diagnosis has traditionally been by subjective evaluation during the rhinologic exam. Our goal is to establish objective radiologic criteria for internal nasal valve narrowing. Clinical evaluation has been largely limited to anterior rhinoscopy, endoscopic evaluation, and rhinometry. The anatomic borders have been well described as the caudal aspect of the upper lateral cartilage, the anterior head of the inferior turbinate, and the nasal septum. We report the use of axial cross sectional CT scan data in the assessment of the INV. Thirty-seven consecutive patients with complaints of either sinusitis or nasal airway obstruction who had CT scans performed at the same institution were evaluated by the senior author from 5/2006 through 7/2009. Using the described anatomic boundaries, we identified eleven patients with a total of 17 narrow internal valves noted on physical exam. CT imaging demonstrated a mean INV cross sectional area of 0.28cm² (0.15-0.46cm²). The remaining 57 clinically normal nasal airways had a cross sectional INV measurement of 0.47cm² (0.23-1.18cm²). The difference in mean cross sectional area was statistically significant (P=0.04). Our results suggest that cross sectional CT scan data of the INV correlates well with physical exam and may therefore be used to support the clinical diagnosis of INV narrowing.

The Role of the NOSE Survey and Snoring Status in Screening for Obstructive Sleep Apnea

Godoy Andres, Ishii Masaru, Ishman Stacey, Gourin Christine, Ishii Lisa

Learning Objectives: At the completion of this activity the participant should be able to evaluate patients with nasal obstruction for obstructive sleep apnea using the NOSE survey.

Method: 150 consecutive patients in a facial plastic surgery practice participated in a longitudinal quality of life analysis. The NOSE survey, the Snore Outcomes Survey, and the Epworth Sleepiness Scale (ESS) were used to measure quality of life. Logistic regression was used to predict the probability of an elevated ESS score using the predictor variables NOSE score, presence of snoring, and presence of deviated septum. Elevated ESS score was considered >10, and elevated NOSE score was considered > 10

Results: The OR for elevated ESS in patients who snored was 2.98 (p-value 0.02); the OR for elevated ESS in patients with an elevated NOSE score was 5.5 (p-value 0.02); the OR for elevated ESS in patients with deviated septum was 3.3 (p-value 0.054). When the probability of ESS > 10 was plotted as a function of NOSE score by snoring and nose, there was a high

probability of ESS > 10 in patients with NOSE scores \geq 10 who snored and had a deviated septum, although the differences by group were approaching but not statistically significant. Based on these data, a receiver operating characteristic (ROC) analysis was performed using the predictors "snore", and NOSE score \geq 10, and the area under the curve was 0.72. With a probability cutoff of 0.5, the sensitivity was approximately 30%, and the specificity approximately 90%.

Conclusions: Patients with an elevated NOSE score who also reported snoring were statistically significantly more likely to have elevated ESS scores as compared to those without elevated NOSE scores and who did not report snoring. The effect of presence of deviated septum for predicting elevated ESS score approached statistical significance. The accuracy of the NOSE survey and knowledge of snoring status for distinguishing between patients with and without elevated ESS scores was good as demonstrated by the ROC curve, and the screen was highly specific. The NOSE survey and the knowledge of snoring status may be useful for screening for obstructive sleep apnea in patients with nasal obstruction.

Abstract Body: Nasal obstruction is a common complaint for patients presenting to a facial plastic surgery practice. Nasal obstruction is a risk factor for obstructive sleep apnea (OSA), which has been reported to affect 2-4% of the adult population and is thought to be even higher and increasing in prevalence. Presumably there is a large subpopulation of patients with nasal obstruction and undiagnosed OSA who will require nasal surgery. Given the peri-operative risks unique to patients with OSA, it is important to recognize the diagnosis prior to surgical intervention. Given the association between nasal obstruction, snoring, and OSA, we hypothesized that the Nasal Obstruction Symptom Evaluation (NOSE) scale and the snoring status could be used to predict the probability of an elevated Epworth Sleepiness Scale (ESS) score, an indicator for further OSA evaluation. In a logistic regression those predictors were statistically significant, and by ROC analysis the screen was good for discriminating patients with elevated ESS from those without and the screen was highly specific.

A Prospective Study Evaluating the Pre-operative Incidence of Olfactory Dysfunction in Patients Undergoing Nasal Surgery; Implications for Nasal Surgeons

Jumaily Jeff, Spiegel Jeffrey

Learning Objectives: At the conclusion of this program the attendees will be able to discuss the potential olfactory complications of nasal surgery; understand the incidence of olfactory dysfunction in pre operative patients; understand how to effectively use smell testing to mitigate claims of anosmia following nasal surgery.

Method: This is a prospective controlled cohort study of 200 adult patients (18-65) at an urban medical center. 100 patients who are undergoing any type of nasal surgery are tested using the 3 item The Pocket Smell Test™ (Sensonics Inc, Haddon Heights, NJ) and a coffee/tea differentiation test. 100 patients who are not undergoing nasal surgery are similarly tested and serve as controls. The patient is consented and given the card to scratch and smell the scent and circle the answer from a choice of 4 scents. Coffee/tea differentiation test is done with dry Folgers Classic Roast® Coffee Singles (The Folgers Coffee Company, Cincinnati, OH) and Lipton Hot Tea (Thomas J. Lipton Company, Englewood Cliffs, NJ) in Styrofoam cups. A failed test requires missing at least one item on the card or failure to report a difference between tea and coffee. Exclusion criteria are 1) preexisting smell disorder, 2) Neurological CNS disorder 3) heavy metal exposure (Chromium, lead, mercury) 4) prior nasal surgery 5) prior head trauma.

Results: In our subject population, 45% are male and 55% are female. The incidence of failed test in our study was 32% in the study group and 14% in the control group.

Conclusions: Patients who are scheduled for nasal surgery for medical or cosmetic indications are more likely to suffer from olfactory dysfunction before surgical intervention. This should be taken into consideration when counselling patients regarding possible post operative complications. Additionally this information is significant when considering how and when to test patients for smell disorders.

External nasal valve insufficiency: Grading and Management

Chau Ha, Andrews Peter

Objectives: Demonstrate our method of grading the severity of external nasal valve collapse in clinic; describe a novel technique for managing severe (Grade 3) external nasal valve collapse.; discuss the various management options and propose an algorithm for the management of external nasal valve insufficiency.

Method: Retrospective study of patients under going surgery for external nasal valve insufficiency over the past five years at The Royal National Throat Nose and Ear Hospital (London, England).

Results: 15 patients had surgery for purely external nasal valve insufficiency by Mr P Andrews over the five year period. Functional and aesthetic results were subjectively assessed by the patients in follow up clinics. The results thus far are very promising. The study is ongoing.

Conclusions: External Nasal Valve Insufficiency is easily missed unless specific attention is paid during assessment of the nose in clinic. Grading the severity of external nasal valve collapse will make pre/postoperative assessment more objective and contribute to the process of deciding on appropriate management. In this ongoing study, our results thus far are very promising.

Abstract Body: External nasal valve obstruction on its own is a relatively uncommon but important cause of nasal airway blockage. It is therefore easily missed unless specific attention is paid during assessment of the nose in clinic. Surgical correction of external nasal valve dysfunction is based on determining the epicentre of dysfunction and whether it is a static or a dynamic collapse of the valve. There are no methods described in the literature for grading the severity of external nasal valve collapse. Various surgical and non-surgical techniques for addressing the problem of nasal valve collapse have been described in the literature. The choice of technique will depend on the causative pathology, availability of graft material, surgical experience and patient preference. In this study, we demonstrate our method of grading the severity of external nasal valve collapse in clinic. We present our results for external nasal valve surgery and describe a novel technique for managing severe (Grade 3) external nasal valve collapse. We discuss the various management options and propose an algorithm for the management of external nasal valve insufficiency.

Perceptions of Aesthetic and Reconstructive Facial Surgery among Medical Students

Heckman W. Wesley, Marcus Benjamin C.

Learning Objectives: To assess the perceptions of medical students regarding the role of the facial plastic and reconstructive surgeon in performing aesthetic and reconstructive facial surgery.

Method: An online survey was distributed via email to medical students from 115 medical schools. The Survey consisted of 12 questions assessing students' perceptions of which physicians were most qualified to perform various reconstructive and aesthetic procedures of the face. Physician choices were listed as Dermatologist, Facial Plastic/ENT Surgeon (FPRS), Oculoplastic Surgeon/Ophthalmologist, Oral and Maxillofacial Surgeon (OMFS), and Plastic Surgeon (PRS). Statistical analysis was performed after responses were collected.

Results: Eighteen schools agreed to distribute the survey to their medical students. 1359 responses were included in the final analysis. For cosmetic surgery, students felt that a FPRS or a PRS were most qualified to perform a rhytidectomy, rhinoplasty, or revise an unsightly scar. An Oculoplastic surgeon was viewed as most qualified to perform a blepharoplasty. A Dermatologist was viewed as most qualified to perform less invasive procedures such as injecting botox or to use lasers for skin resurfacing. For reconstructive surgery, students viewed the FPRS as the most qualified to perform an otoplasty or reconstruct a major defect after head and neck surgery. A PRS or FPRS were viewed as most qualified to reconstruct a skin cancer defect of the cheek. An OMFS was viewed as most qualified to repair a cleft lip or palate. For trauma surgery, an OMFS was viewed as most qualified to repair a mandible fracture and an Oculoplastic surgeon was viewed as most qualified to repair an orbital floor fracture. A FPRS was viewed as the next most qualified specialist to perform these procedures.

Conclusions: This study suggests that medical students view multiple specialists as qualified to perform aesthetic and reconstructive facial surgery. Most importantly, this study suggests that the Facial

Plastic and Reconstructive Surgeon is perceived as most qualified to perform multiple aesthetic and reconstructive facial procedures when being compared to other specialists. These findings are in contrast to previous studies that have suggested that the PRS and OMFS are most qualified to perform aesthetic and reconstructive facial surgery. In order for the Facial Plastic and Reconstructive Surgeon to maintain its positive perception among medical students it is important for Otolaryngology programs to incorporate facial plastic and reconstructive surgery education into their medical student curriculum

A Demographic Analysis of the Scope of Practice of Fellowship-trained Surgeons in the Field of Facial Plastic and Reconstructive Surgery

Patel Krishna, Kulbersh Jonathan, Sykes Jonathan

Learning Objectives: A demographic analysis of the scope of practice of fellowship-trained surgeons in the field of facial plastic and reconstructive surgery.

Method: Cross-population analysis. Surveys were reviewed for fellows who completed AAFPRS fellowships over the past ten years.

Results: The purpose of the study is to provide information regarding the scope of practice of active fellowship-trained facial plastic surgeons. The analysis will also evaluate for trends and shifts in the composition of practice between the latter five years of fellows compared to the former five years of fellows.

Conclusions: This demographic analysis will provide valuable data to both the American Academy of Facial Plastic and Reconstructive Surgery and future participants in the fellowship programs regarding the activity of facial plastic surgeons
Abstract Body: Key demographic data collected include the following: what percentage of surgeons practice in an academic versus private practice settings; what percentage of surgeons in private practice are affiliated with an academic institution; what percentage of the practice is composed of facial plastic and reconstructive surgery versus other types of surgery; what percentage of the facial plastic and reconstructive surgery practice is cosmetic versus reconstructive; how many practices also employ an aesthetician and/or laser-trained staff.

Maximizing Melanogenesis Inhibition

Linder Jennifer

Disclosure: Chief Scientific Officer, PCA SKIN, Scottsdale, AZ
National Instructor, Dermik Aesthetics (Sculptra)

National Instructor, Allergan Facial Aesthetics (Botox and Juvederm)

National Instructor, Medics Pharmaceutical (Dysport, Restylane and Perlane)

Objectives: Millions of patients seek treatment for facial dyschromias including melasma, post-inflammatory hyperpigmentation and UV-induced lentigines, each year. While hydroquinone remains an industry standard, numerous ingredients have been proven to reduce current discolorations and inhibit the future production of melanin. By examining the complex process of melanogenesis, we can identify topical ingredients that disrupt the pigment production process at different stages and select comprehensive topicals containing blends of melanogenesis inhibitors to provide excellent visible results for our patients.

Methods: The etiology of pigment production will be discussed as well as the mechanisms of action of topical pigment reducing ingredients. A comprehensive review of current melanogenesis inhibitors including hydroquinone, kojic acid, arbutin, L-ascorbic acid, azelaic acid, lactic acid, retinoids, undecylenoyl phenylalanine and resorcinol derivatives will be presented.

Results: By reviewing the function of specific ingredients, the most beneficial well-rounded treatment plans can be identified. Most skin brightening agents inhibit the formation or activity of tyrosinase. It is each of their secondary and tertiary benefits that often lead to the most impressive results.

Hydroquinone has the ability to decrease the formation of melanosomes, promote the degradation of melanosomes and induces melanocyte-specific cytotoxicity. Kojic acid works by decreasing the number of melanosomes and melanocytic dendrites, while also inhibiting nuclear factor-kappa B (NF-kB) activation in keratinocytes. Arbutin is a natural ?-D-glucopyranoside derivative of HQ that allows controlled release of HQ and inhibits melanosome maturation. L-ascorbic acid is the bioavailable form of vitamin C and has been shown to prevent the binding of copper to tyrosinase and to convert dopaquinone back to L-DOPA. Azelaic acid provides melanocyte-specific anti-proliferative and cytotoxic effects while inhibiting DNA synthesis and mitochondrial activity in hyperactive and abnormal melanocytes. Lactic acid is a widely used alpha hydroxy acid (AHA) that increases exfoliation of melanin-filled keratinocytes and suppresses the formation of tyrosinase. Retinoids effectively reduce the number of melanosomes and limits melanosomal phagocytosis, Undecylenoyl phenylalanine works very early in the melanogenesis response by inhibiting the release of melanocyte-stimulating hormone (MSH). Resorcinol derivatives inhibit the conversion of tyrosinase to L-DOPA and provide antioxidant protection.

Conclusions: There are many stages in the complex process of melanin production at which we can intervene to halt the unwanted deposit of pigment, while also reducing existing skin hyperpigmentation. Because each melanogenesis inhibitor is unique, combination therapy may be the answer for faster more dramatic patient results.

A Phase I Double-Blind, Randomized, Placebo- Controlled Trial of Skin Health Experimental Product (SHEP) versus Placebo Taken Twice Daily to Support Healthy Skin

Dayan Steven, Arkins John, Sharma Vinny

Disclosure: Dr. Dayan has received research grants from Standard Process.

Background: The U.S. market for nutritional supplement is approximately a \$10 billion industry that is not regulated by the FDA in the same manner as pharmaceuticals. Unfortunately, there is an abundance of products on the market, many with promising claims and little scientific data to support it. While vitamin and mineral supplementation has been studied focusing on a variety of disease processes, there has been little randomized, double-blinded well-controlled research conducted on the effect on skin hydration, antioxidant levels, skin texture, and appearance. This study aimed at determining the effects of long-term, low dose, whole food nutrient supplementation has on skin health. SHEP is a natural, whole food nutritional supplement containing omega-3 fatty acids, ascorbic acid, beta-carotene, zinc, lutein, vitamin B, and CoQ10.

Methods: Subjects underwent a double-blind, randomized, placebo controlled trial of SHEP versus placebo, taken twice daily. Men and women greater than thirty years of age were enrolled into the nine-month study. The relationship between nutrient supplements, overall skin appearance, and health was analyzed by testing whether there were improvements in skin hydration and texture, along with an increase in carotenoids, and improvement in subject's self-image as a direct result of the SHEP Trial.

Results: Subjects on active treatment had a significant reduction in fine lines compared to the placebo-treated group. Raman spectroscopy showed that active treatment resulted in an increase of carotenoids in some measurement sites, but not for other measurement sites. Additionally significant, subjects were 3-fold more likely to respond positively to changes in their appearance in the active group versus the placebo group according to the GAIS.

Conclusion: The SHEP nutritional supplement, taken orally, was shown to cause changes in skin texture and patient perception of skin health.

Diclofenac Sodium as a Novel Scar-reducing Therapy: A Wound-healing Study on the Mouse Model

Chiang Tandy, Smith, Jr. Stephen, Wilgus Traci

Learning Objectives: To evaluate the impact of topical diclofenac sodium in the acute phase on scar formation.

Method: Under general anaesthesia, mice were given 3-cm full thickness dorsal wounds that were closed with wound clips. The study includes three cohorts of mice: mice that were treated with either 5 or 14-day course of topical diclofenac sodium gel and mice that were treated with a control water-soluble lubricant. All staples were removed on post-operative day (POD) #5 and the mice were euthanized on POD #14. Scar was then harvested and evaluated for scar width. Inflammation was assessed by measurement of myeloperoxidase levels (quantification of neutrophil activation), immunoassay for prostaglandin 2 (PGE2), and immunohistochemistry for Ly-6G (neutrophil surface marker). Fibroblast activity was assessed via immunohistochemistry for vimentin and alpha-smooth

muscle actin. Immunostaining for PCAM (CD-31) was used to assess extent of neovascularization. Scars of all three cohorts were photographed at POD #7 and 14, and were scored by a blinded board certified facial plastics reconstructive surgeon using a scar assessment tools. Significance was determined with $p < 0.05$.

Results: This is an ongoing study; preliminary results and data analysis to be completed by April 26, 2010.

Conclusions: This is an ongoing study; preliminary results and data analysis to be completed by April 26, 2010.

Abstract Body: Given their relatively low side-effect profile and cost, non-steroidal anti-inflammatory drugs (NSAIDs) have been a focus of growing interest in scar reduction. COX-2 is upregulated during acute wound healing and produces prostaglandins that induce inflammatory cell infiltration. COX-2 has also been shown to induce fibroblast proliferation and collagen production. Conversely, the absence of inflammatory mediators in the fetal wound-healing model has been correlated with scarless healing. In the acute setting, topical celecoxib has been demonstrated to significantly decrease scar formation without disrupting re-epithelialization or impacting tensile strength of the wound. This is related to the ability of topical celecoxib in decreasing inflammatory mediators (prostaglandins, TGF- β , platelet-derived growth factor) which in turn prevents neutrophil infiltration and activation. Diclofenac sodium (3% gel) is a topical non-selective COX inhibitor currently approved for the management of actinic keratoses. As topical celecoxib significantly impacts scar formation, we are examining the effect of a popular topical NSAID, topical diclofenac sodium, during acute wound healing. We hypothesize that not only does topical NSAIDs inhibit inflammation in the acute setting, but that it impacts neovascularization and recruitment of fibroblasts as well. In addition, we are employing the use of scar assessment tools to determine significance in cosmesis.

The Effect of Corticosteroids on Functional Recovery and Neuron Survival After Facial Nerve Crush Injury

Lieberman David M., Jan Taha A., Ahmad S. Omar, Most Sam P.

Learning Objectives: At the completion of this activity, the participant should be able to assess the effect of corticosteroid administration on functional recovery and cell survival in the facial motor nucleus (FMN) following crush injury in both adult and juvenile mice. The participant should also be able to evaluate how functional recovery after injury corresponds to cell survival in the FMN. This study tests the hypothesis that corticosteroid therapy causes sufficient immunosuppression to delay functional recovery in a dose-dependent manner.

Method: Prospective blinded placebo-controlled analysis of functional recovery and cell survival in the FMN after crush injury in juvenile (postnatal day 7) and adult (postnatal day 35) mice. All mice sustained a standardized unilateral facial nerve crush injury and subsequently received 7 doses of daily dexamethasone treatment. Adults received saline (n=6), low-dose steroid (1mg/kg/day, n=6) or high-dose steroid (10mg/kg/day, n=6) treatment. Juveniles received either saline (n=7) or low-dose steroid (1mg/kg/day, n=7) treatment. Whisker function and eye closure were monitored to assess functional recovery after injury. All mice were euthanized after a set interval and stereology was performed to determine neuron and glial survival in the FMN

Results: Corticosteroid treatment slowed functional recovery in adult mice in a dose-dependent manner. This corresponded with significantly greater neuron loss in the FMN in steroid treated mice, again in a dose-dependent manner. All adult mice ultimately recovered fully. Juvenile mice recovered slower than adult mice and incompletely, confirming the age depen-

dence of functional recovery after peripheral nerve crush injury. This corresponded to significantly greater neuron loss in the FMN when compared to adults. Corticosteroid treatment resulted in faster and more robust functional recovery when compared to controls in the juvenile mice.

Conclusions: Corticosteroid treatment slows functional recovery and impairs neuron survival following facial nerve crush injury in adult mice in a dose-dependent manner. The degree of motor neuron survival corresponds with functional status. In juvenile mice, crush injury results in overall poor functional recovery and profound cell loss in the FMN. Low-dose steroid treatment enhances recovery after injury in these mice.

Quantitative Modeling of Facial Osteocutaneous Ligaments Utilizing a Novel Technique to Measure Facial Laxity

Manz Ryan, Meltzer Noah

Objective: To utilize a newly described, accurate and precise method of measuring facial laxity to define the physical and functional characteristics of known osteocutaneous ligament anatomy.

Methods: Measurements were made on fresh cadavers stabilized by Mayfield Skull Clamps. A 1 cm dot matrix was placed on the cadaver's faces. A measured amount of force was applied to the skin via suture, and displacement of the skin was precisely measured with tension in the superior, inferior, medial, and lateral directions. A fixed laser aimed at the skin marked its original position before tension was applied. Relatively laxity measurements (RLU) were calculated for each point on each hemi-face. Mean laxity was calculated between all hemi-faces for each direction on all points measured. These values were color coded and applied to a 2-dimensional map of the face.

Results: Six hemi-faces on 3 fresh cadavers were measured from trichion to menton and tragus to midline. The areas with the most inferior laxity were mid brow (0.49 RLU) and the glabella (0.57 RLU). The areas of skin with the most superior laxity were over the body of the mandible (0.99 RLU) and the zygomatic cheek (0.95 RLU). The zygomatic cheek had limited inferior laxity (0.56 RLU). The areas with the most lateral and medial laxity were the midbrow (0.65 RLU) and the zygomatic cheek (0.78 RLU) respectively. The zygomatic cheek had limited lateral laxity (0.42 RLU). There was relative tethering in all directions in the areas of the lateral brow near the hairline and the pretragal area.

Conclusion: The face has defined variable amounts of laxity in different areas. These zones of relative fixation and laxity correlate to known osteocutaneous ligaments. For example, the skin near the prearcular ligament is relatively fixed. Additionally, directional dependence of laxity helps define the anatomical characteristics of these ligaments. The skin near the zygomatic retaining ligament has an upward laxity preponderance, which suggests this ligament has a relatively superior bony attachment compared to its skin insertion.

These data may help with incision planning, predicting of scar location and have implications for the aging face.

Soft Tissue Filler Combination Treatment for Tear Trough Defects

Czyz Craig, Foster Jill, Wulc Allan

Disclosure: Dr. Wulc is a consultant for Medicis - Travel expense reimbursement for speaking - Less than \$5000.00.

Learning Objectives: Discuss the goals of modification to age related changes in the tear trough and upper cheek area.

Evaluate combined treatment of the flattened cheek mound and tear trough groove for improvement of the lower eyelid and lid/midface junction contour.

Method: Combined treatment to improve the cheek projection and volume deficiency of the tissues along the inferior orbital rim is proposed as a successful intervention for the tear trough deficit in patients who also manifest flattening of cheek projection. This technique was performed in six patients who presented for cosmetic enhancement of the tear trough area.

Results: Tear trough injections were more technique sensitive than the cheek volume augmentation to achieve satisfactory results. There were no complications from cheek volume enhancement other than undercorrection. Varying degrees of ecchymosis were encountered with tear trough injections.

Cosmetic enhancement of the inferior periorbital region was achieved in all patients.

Conclusions: Combined enhancement of the cheek and infraorbital area was appropriate for those patients who displayed both deficits despite recognition of only the tear trough deficiency.

Abstract Body: Many patients who present with a concern regarding tear trough appearance also have a significant cheek volume deficit. The flattening of the cheek makes it more difficult to achieve a smooth, rounded contour of the lower eyelid and cheek complex with modification of the tear trough alone. By adding additional volume to the cheek in coordination with volume enhancement of the infraorbital rim area, a more natural shape may be achieved. Calcium hydroxylapatite microspheres (CHM) were chosen for cheek volume enhancement. This material was selected for its relatively rigid physical characteristics, duration of action, and the option of placement just above the periosteum to mimic replacement of lost bony volume. The material was placed percutaneously using a deep fanning technique. Injection was conducted with the entry point inferior and the tracks of the needle going up toward the inferior orbital rim. The distal point of the injection was along the inferior rim, and the injections were given in retrograde fashion in a fanning pattern of small aliquots. If additional malar volume was desired, a more horizontal fan was placed across the anterior face of the maxilla. Secondly, the tear trough area was filled with a hyaluronic acid (HA). HA was chosen as the filler for the tear trough area because of its malleable physical characteristics. This "softer" filler material is less likely than CHM to cause lumpiness in the lower eyelid, and if irregularities do occur, HA is amenable to modification with hyaluronidase. The injector attempted to place the material below the orbicularis muscle and above the periosteum. In some areas, serial injection with massage of the small aliquot was performed, and at some points, a retrograde linear threading technique was employed. As might be expected, the tear trough injections were more technique sensitive than the cheek volume augmentation. Other than undercorrection, no complications occurred after CHM cheek volume injection. For the HA injections into the tear trough, most patients experienced bruising, some to the extent that treatment was halted since the architecture of the trough was distorted by the ecchymosis. No Tindel effect was encountered. The addition of cheek volume enhancement was encouraged to patients who presented for tear trough treatment but also had significant cheek flattening. Successful tear trough treatment in isolation would be limited by the retrograde indentation of

the cheek below the tear trough. Recognizing and offering these patients combined treatment enhances cosmetic results and patient satisfaction.

Long Term Results of Autologous Periorbital Lipotransfer

Yeh Cory, Williams Edwin

Learning Objectives: At the completion of this activity the participant should 1) be familiar with autologous lipotransfer as an option for periorbital rejuvenation and 2) be familiar with the data supporting long term efficacy of autologous lipotransfer in the previous and present studies.

Method: A retrospective review of 114 consecutive patients over 4 years who underwent autologous periorbital lipotransfer. Ninety-nine patients who had complete photographic and medical chart records and a minimum of 6 months of follow-up were included for review. Patients were placed into groups based on their total length of post-operative follow-up (Group I = 6 months - 1 year, Group II = 1 - 2 years, Group III = 2 - 3 years, Group IV = 3 - 4 years, Group V = 4 - 5 years).

Periorbital volume augmentation was assessed by 3 independent blinded evaluators using a standard aesthetic scale from 0 to 2 (0 = no improvement, 1 = mild improvement, 2 = marked improvement). Interobserver correlation was determined by ? correlation and Mann-Whitney tests were used to assess for statistical significance comparing the same patients in each group.

Results: The 3 independent evaluators correlated well in their scores (?=0.316) and found that almost all patients (>83%) demonstrated improvement for the first three years of follow-up within Group I (44% marked improvement, 51% mild improvement, 5% no improvement), Group II (30% marked improvement, 52% mild improvement, 17% no improvement), and Group III (18% marked improvement, 68% mild improvement, 14% no improvement). However, the degree of improvement decreased each year and most patients (68%) retained only a mild improvement by the 3 year follow-up point ($p=0.05$).

Conclusions: The majority of patients who underwent autologous periorbital lipotransfer demonstrated improvement that lasted up to 3 years. Autologous periorbital lipotransfer remains a popular and effective technique for periorbital rejuvenation and demonstrates long-term potential effectiveness.

Abstract Body: Loss of volume in the periorbital area is a significant cause of aging changes in the upper third of the face. The objective of this study was to evaluate the long term aesthetic results of our patients treated with autologous periorbital lipotransfer. A retrospective review of 114 consecutive patients over 4 years who underwent periorbital lipotransfer was performed and the degree of volume augmentation was assessed by blinded evaluators using a standard aesthetic scale. Results indicated > 83% of patients demonstrated improvement for the first three years of follow-up and that the degree of improvement decreased significantly by the 3 year follow-up point ($p=0.05$). In conclusion, the majority of our patients who underwent autologous periorbital lipotransfer demonstrated long term improvement and this technique offers potential long term efficacy in rejuvenation of the periorbital complex.

Comparison of Onset of Action of Botox Cosmetic and Dysport in the Treatment of Crow's feet

Yu Kenneth, Bapna Sumit, Maas Corey

Report and discuss outcome of prospective, internally controlled, double blinded study comparing the onset of action of Botox Cosmetic vs. Dysport in the treatment of lateral orbital rhytids (Crow's feet) (Botox on one side & Dysport on con-

tralateral side)

Method: 30 consecutive subjects (27 women, 3 men) with moderate to severe lateral orbital rhytids were enrolled in a prospective, internally controlled, double-blinded randomized trial at a single clinical center. Subjects were randomized to receive Botox Cosmetic on one side and Dysport on the contralateral side in a double-blinded fashion. Investigator and subject gradings of Crow's feet at relaxation and maximal contraction were obtained using the published validated Merz Crow's feet grading scale before injection (day 0) and then 2, 4, and 6 days after injection. In addition, quantitative analyses of periorbital wrinkles at maximal contraction using the Visia complexion analysis system (Canfield, Fairfield, NJ) were recorded at each visit. Statistical analysis was applied to evaluate for any significant difference in onset between the two products.

Results: Onset of action of Botox Cosmetic in treatment of Crow's feet will be compared to onset of Dysport. Comparison using the investigators' grade of subjects' Crow's feet at maximal contraction will be the primary measure. Secondary measures will include investigator grade of Crow's feet at relaxation, patients' self grades at relaxation and maximal contraction, and Visia complexion analyses.

Conclusions: Statistical and comparative analyses of onset of action of Botox Cosmetic and Dysport in treatment of Crow's feet will be presented, along with graphical representation of results. Representative photographic documentation, as well as Visia photographic data, of Botox Cosmetic and Dysport effects at days 2, 4, and 6 will be presented. Difference in onset will be discussed.

Comparison of Efficacy of Action of Botox Cosmetic and Dysport in the Treatment of Crow's Feet

Yu Kenneth, Bapna Sumit, Maas Corey

Learning Objectives: Report and discuss outcome of a prospective, internally controlled, double blinded study comparing the efficacy of Botox cosmetic and Dysport in the treatment of lateral orbital rhytids (Crow's feet) (Botox on one side & Dysport on contralateral side).

Method: 30 consecutive subjects (27 women, 3 men) with moderate to severe lateral orbital rhytids were enrolled in a prospective, internally controlled, double-blinded randomized trial at a single clinical center. Subjects were randomized to receive Botox Cosmetic on one side and Dysport on the contralateral side in a double-blinded fashion. Investigator and subject gradings of Crow's feet were obtained using the published validated Merz Crow's feet grading scale. In addition, quantitative analyses of periorbital wrinkles at maximal contraction using the Visia complexion analysis system (Canfield, Fairfield, NJ) were recorded at each visit. Efficacy was determined as overall response to both products at 30 days. Efficacy endpoint was measured using investigator grade of Crow's feet at maximal contraction as the primary measure. Secondary endpoints included investigator grade at relaxation, patient self assessment at relaxation and maximal contraction, and Visia complexion analysis at maximal contraction. Statistical analysis was applied to evaluate for any significant difference in efficacy between the two products. **Results:** Efficacy of Botox Cosmetic will be compared to efficacy of Dysport in the treatment of Crow's feet. Comparison using the investigators' grade of subjects' Crow's feet at maximal contraction will be the primary measure. Secondary measures will include investigator grade of Crow's feet at relaxation, patients' self grades at relaxation and maximal contraction, and Visia complexion analyses.

Conclusions: Statistical and comparative analyses of efficacy of Botox Cosmetic and Dysport in treatment of Crow's feet will be presented, along with graphical representation of

results. Representative photographic documentation, as well as Visia photographic data, of Botox Cosmetic and Dysport effects before treatment and 30 days after injection will be presented. Differences in performance will be discussed.

Self Injection of "Cooking Oil" for Facial Augmentation

Kohanski Michael, Spiegel Jeffrey

Learning Objectives: At the conclusion of this presentation, attendees will understand:

That some patients inject "cooking oils" into their face and body to achieve facial augmentation

The physiology and pathology associated with the foreign body reaction from these injections

Suggested methods for management of these patients

Method: Case report and literature review on autoinjection of non-medical grade materials for facial augmentation, specifically "cooking oils"

Results: A young transgendered woman injected "gallons" of cooking oils into her face and body in an effort to achieve facial augmentation in her malar, mandibular, and other regions.

Excessive augmentation and scarring were the result. Management approaches and a review of the associated foreign body reaction are presented.

Conclusions: The desire for Facial Augmentation and body dysmorphic disorders can result in unsafe patient practices. Autoinjection of available oils (e.g. corn oil) can result in augmentation, but with a significant foreign body reaction and unpredictable results.

A Blinded Evaluation of the Effects of Hyaluronic Acid Filler Injections on First Impressions

Dayan Steven, Arkins John, Borst Selika, Gal Thomas

Disclosure: Dr. Dayan has received educational and research grants from Mediscis

Background: An individual's facial appearance has a profound influence on the first impression that he or she presents to others. This study aimed at determining the effects injections of hyaluronic acid filler into the nasolabial folds had on first impression.

Methods: Twenty-one women received injections of hyaluronic acid filler into the nasolabial folds. Photographs were taken prior to, 2 weeks after, and 3 months after injection of the full face in a relaxed pose. The photographs were randomized into three books with each subject having a different visit represented in each book. A total of 304 blinded evaluators completed a survey rating first impression on various measures of success for each photo. The surveys yielded 46,208 first impressions, which were then analyzed for significance.

Results: Preliminary analysis has demonstrated that injections of hyaluronic acid filler into the nasolabial folds has a positive change in first impression after 3 months in regards to social skills, academic performance, dating success, occupational success, attractiveness, financial success, relationship success, athletic success, and total overall first impression.

Complete statistical analysis is currently being performed.

Conclusion: Injection of hyaluronic acid filler into the nasolabial folds has the ability to have a significant positive impact on the first impression an individual projects

Secondary Free Flap Reconstruction of the Salvage Laryngectomy

Bohannon Isaac A., Carroll William R., Rosenthal Eben L.

Learning Objectives: Closure of salvage laryngectomy defects with vascularized tissue remains controversial. We evaluate outcomes in patients who required delayed repair of a fistula after primary closure of salvage laryngectomy defects and assess risk factors for persistent fistula.

Method: Retrospective cohort study. Between 2001 and 2009 there were 19 patients who developed fistulae after primary closure of a salvage laryngectomy. All patients required free flap repair for definitive fistula management.

Results: Patients presented with fistulae from one to 13 months in duration; median time to closure was less than 14 days. Radial forearm free flap was used in 86% of patients. Recipient vessels were used in the neck in 57%, compared to internal mammary vessels in 43%. Patients gained an average of 10.1 pounds after repair ($p=0.4$). The overall success of fistula closure was 84.2%, with median follow-up of three months. Only 57.9% of patients resumed a regular diet, 31.6% a liquid diet, and 10.5% remain NPO due to persistent fistula. Hypothyroidism was identified as a risk factor for persistent fistula ($p=0.01$). Gastroesophageal reflux disease ($p=0.12$) and steroid use ($p=0.08$) both trended towards significance as a risk factor. Complications included leak, carotid blowout, infection, graft loss, and late refistulization. Overall flap failure in this study was 4.8%.

Conclusions: Delayed secondary repair of pharygocutaneous fistulas after salvage laryngectomy is associated with a higher complication rate and poor success rates compared to use of vascularized tissue at the time of salvage laryngectomy. Prolonged wound healing in these patients is associated with hypothyroidism.

Reanimation of Bilateral Facial Paralysis Using Bilateral Temporalis Tendon Transfer and Fascia Lata Sling

Waters Heather, Meltzer Noah, Fritz Michael

Learning Objectives: At the conclusion of this presentation, the participants should be able to describe a technique that provides the reconstructive surgeon an effective and efficient method for bilateral facial reanimation, improved oral competence and symmetric cosmesis in patients with bilateral facial paralysis.

Method: Prospective analysis of patients with bilateral facial paralysis and dramatic oral incompetence undergoing bilateral temporalis tendon transfer (TTT) and sub-labial fascia lata sling (FLS). Postoperative results were judged by patient satisfaction of function and observer/video analysis of facial expression, symmetry and oral competence.

Results: Two patients were evaluated. Average age was 50. Male to female ratio was 1:1. Average follow up time was 9 months. There were no postoperative complications. Trismus resolved with simple exercises. Oral competence was immediate and excellent dynamic mid-face movement was seen within 2 weeks for both patients. At current follow up, both patients report good facial animation, excellent oral competence and complete dental coverage. Facial symmetry and cosmesis is excellent after minor nasolabial fold revision in 1 patient.

Conclusions: Facial reanimation for bilateral facial paralysis poses a difficult challenge for the reconstructive surgeon. Bilateral TTT combined with sub-labial FLS introduces a technique to address mid-face dynamic animation and establishment of oral competence. Although evaluation is on going, this method may provide an effective alternative to conventional muscle transfer techniques.

The Lateral Circumflex Femoral Artery Angiosome: Reconstructive Options and Construct Specific Donor Site Morbidity

Waters Heather, Revenaugh Peter, Alam Daniel, Fritz Michael, Meltzer Noah, Knott P. Daniel

Learning Objectives: At the conclusion of this presentation, the participants should be able to describe the multiple options for reconstruction offered by the lateral circumflex femoral artery and understand the post-operative donor site morbidity specific to each flap type.

Method: Five year retrospective chart review of 105 patients undergoing reconstruction of head and neck defects at an academic institution using various combinations of vascularized fat, fascia, and skin derived from the lateral circumflex femoral artery angiosome. Patient variables, donor site characteristics, post-operative complications and functional outcomes were evaluated.

Results: One hundred and five patients were evaluated. Patients were evaluated for donor site characteristics including defect size, proportion of myocutaneous inclusion, motor nerve division and closure technique. Complications evaluated included seroma, hematoma, wound dehiscence, skin graft loss and infection. Functional outcomes were examined for sensory loss, weakness, instability and return to pre-operative functional levels.

Conclusions: The changing patterns of the microvascular surgeon demonstrates an increased reliance on free tissue transfer derived from the lateral circumflex femoral artery angiosome. This vascular territory provides a versatile and reliable source of tissue for head and neck soft tissue defect reconstruction. This unique large series retrospective chart review validates the utility and low morbidity associated with this donor site.

Creation and Closure of Circular Defects with Dog Ear Excisions to Promote Tissue Conservation

Lee Thomas, Murakami Craig, Suryadevara Amar

Learning Objectives: At the completion of this presentation, the participants will be familiarized with a technique for skin lesion excision and reconstruction, which spares tissue and minimizes incision length.

Method: Using a frozen cadaver, identical 1 cm circular skin defects were created on bilateral cheek, forehead and scalp. On one side, a 3-to-1 elliptical excision and closure after wide undermining was performed. On the other side, an approximation stitch was placed at the center of the circular defect after wide undermining, and the dog ears from both ends were then excised. The following measurements were recorded: circumferential incision length after tissue excision, vertical length of the wound defect after excision, an average of the widths of wound widening after an approximation suture was placed at the halfway-point and the final incision length measured after primary closure. Using a second frozen cadaver head, identical 2 cm circular skin defects were created on bilateral cheek, forehead, and scalp. The same experimental procedures were carried out as the 1 cm defect condition.

Results: For analysis, the differences between the elliptical excision and the dog ear excisions were calculated for both the 1cm and 2 cm defect groups. The resulting percentage differences in the 1 cm and the 2 cm groups were then averaged and are reported below. For the cheek defects, circular defect closure with removal of the standing cone deformities had 34.7% reduction in circumferential incision length, 49.3% reduction in wound widening after an approximation stitch placement, and 33.8% reduction in final incision length compared to the elliptical excision side. The ratios of vertical incision length to wound defect for the cheek defects were 2.05 to 1 on the dog ear excisions side and 3.28 to 1 on the elliptical

excision side. For the forehead defects, circular defect closure with removal of the standing cone deformities had 38.1% reduction in circumferential length, 48.5% reduction in wound widening and 41.4% reduction in final incision length compared to the elliptical excision side. The ratios of vertical length to wound defect were 1.93 to 1 on the dog ear excisions side and 3.15 to 1 on the elliptical excision side. For the scalp defects, circular defect closure with removal of the standing cone deformities had 29.6% reduction in circumferential length, 62.5% reduction in wound widening and 31.5% reduction in final incision length when compared to the elliptical excision side. The ratios of vertical length to wound defect were 2.175 to 1 on the dog ear excisions side and 3.05 to 1 on the elliptical excision side. In addition, multiple photographs were taken and reviewed for each of the circular defect closures. The shape most consistently seen after dog ear excisions for the circular defects was fusiform in nature with extremely tapered ends.

Conclusions: When addressing skin lesions involving cheek, forehead or scalp, creation of a circular defect with dog ear excisions appears to conserve tissue, decrease wound widening with a single approximation suture, and shorten final incision lengths when compared to a traditional 3-to-1 elliptical excision technique. In addition, the dog ears can be excised at varying angles to accommodate relaxed skin tension lines. A circular defect creation with dog ear excisions demonstrates the ratio of vertical incision length to wound defect width of approximately 2 to 1 in cheek, forehead, and scalp.

Abstract Body: Mohs micrographic surgery often times results in circular defects. Closure of these circular defects can be accomplished by removing dog ears after wide undermining. The goal of both the excision and closure is preserving as much tissue as possible.

A similar approach can be utilized when removing most skin lesions. A circular defect around the skin lesion can be created and closed after wide undermining with excisions of standing cones at distal edges. This technique appears to minimize skin excision, wound widening, and reduce the final incision length after closure when compared to a traditional 2.5 or 3-to-1 elliptical excision technique in cosmetically sensitive areas.

Anterolateral Thigh Free Flap for Soft Tissue Head and Neck Reconstruction in a Midwest Population: Evolving Practice Patterns

Meltzer Noah, Waters Heather, Fritz Michael

Learning Objectives:

Compare and contrast the relative benefits of the anterolateral thigh free flap for head and neck reconstruction.

Method: This study was performed as a retrospective chart review case series of a single surgeon's practice at a tertiary care academic medical center.

Results: Ninety of the last 100 soft tissue free flaps used for head and neck reconstruction were the anterolateral thigh free flap (ALT). Defects reconstructed were total laryngopharyngectomy, partial and total glossectomy, parotidectomy, and various cutaneous and volume deficits. Utilizing perforator flap harvest technique, flap thinning and fascia only flaps when applicable, these were amenable to reconstruction of the vast majority of mucosal, skin and soft tissue defects without excessive bulk. All attempted ALT flaps had vessels suitable for microvascular transfer and there were no flap failures. One partial skin loss was observed, requiring subsequent split skin grafting. Additional complications included two donor site infections and four donor site seromas that were managed conservatively with suction drainage and pressure dressings.

Conclusions: The anterolateral thigh free flap has shown to have tremendous versatility as a fasciocutaneous or fascial flap for head and neck reconstruction of nearly any soft tissue

defect. Ease of simultaneous harvest is favorable. Donor site morbidity is low. Limitations of the ALT's application, in our experience, are ventral mobile tongue defects in obese patients that we continue to manage with radial forearm free flaps. In our experience, the ALT provides a reliable, versatile soft tissue flap for nearly any head and neck defect. This versatility and the favorable donor site morbidity profile are reflected in the frequency with which it is now used in our practice.

Abstract Body: Since the advent of the anterolateral thigh free flap (ALT), its versatility in soft tissue reconstruction has become increasingly apparent. In Asian populations, this flap's popularity has vastly surpassed other soft tissue reconstructive methods due to versatility and low donor site morbidity.

In Western populations however, ALT popularity has been tempered by concerns of excessive flap thickness. We report our series of the last 100 soft tissue flaps for head and neck reconstruction. Of those, the ALT comprised 90. Defects reconstructed were total laryngopharyngectomy, partial and total glossectomy, parotidectomy, and various cutaneous and volume deficits. All attempted ALT flaps had vessels suitable for microvascular transfer and there were no flap failures. One partial skin loss was observed, requiring subsequent split skin grafting. Two recipient site infections were observed. Four donor site seromas were observed, and were managed conservatively with suction drainage and pressure dressings.

Limitations of the ALT's application, in our experience, are ventral mobile tongue defects in obese patients that we continue to manage with radial forearm free flaps. In our experience, the ALT provides a reliable, versatile soft tissue flap for nearly any head and neck defect in our Midwestern patient population. This versatility and the favorable donor site morbidity profile are reflected in the frequency with which it is now used in our practice.

Facial Contour Augmentation Using the Anterolateral thigh Adipofascial flap

Seth Rahul, Revenaugh Peter, Fritz Michael

Learning Objectives: 1) Describe an effective method to maintain or restore facial contour using vascularized adipofascial flaps from the anterolateral thigh. 2) Demonstrate volume stability of reconstruction, excellent cosmesis, patient satisfaction and low morbidity of this technique.

Method: A retrospective review over 3 years was conducted for buried anterolateral thigh adipofascial free flaps utilized in reconstruction of facial contour defects. Areas reconstructed included midface, parotid bed and upper neck. All defects were secondary to tumor resection and patients with temporal bone or skin resections were excluded. Demographic information, tumor characteristics, surgical interventions, flap details, and adjunctive therapies were recorded. Postoperative cosmetic results were evaluated by patient and physician satisfaction.

Results: Twenty patients underwent buried free flap reconstruction of facial contour defects. The anterolateral thigh adipofascial flap was used in all cases. Vessel anastomosis was accomplished through access incisions used for oncologic extirpation for parotidectomy reconstructions or using a small incision at the facial notch and tunneled pedicle technique for midface contour reconstruction. All harvest attempts yielded suitable tissue for transfer and all flaps survived without complications. Those patients undergoing adjuvant radiation maintained flap contour and facial symmetry. Free flap reconstruction resulted in cosmetic patient and surgeon satisfaction, despite adjuvant radiation therapy.

Conclusions: ALT free flap reconstruction for facial contour defects provides durable, long-lasting and predictable tissue bulk despite radical resections and adjuvant radiation therapy. This technique yields cosmetically appealing vascularized soft tissue restoration of facial and neck volume deficits with minimal morbidity and ease of flap harvest.

Short Flap Rhytidectomy with Fractional Carbon Dioxide Laser Rejuvenation

Taghizadeh Farhan, Ellison Timothy, Hatfield Martha

Learning Objectives: At the completion of this paper, one should be able to discuss laser techniques, complications, and combination outcomes using the Eco2 (Lutronic, USA) Standard Fractional CO2 laser system with a High-SMAS, Short Flap Rhytidectomy.

Method: Retrospective review of 120 consecutive cases where Fractional CO2 Laser resurfacing combined with a High-SMAS, Short Flap Rhytidectomy was performed by a single provider. An evaluation was performed on laser settings for Fitzpatrick groups 1-2, and 3-4, 6 month complication, and 6 month patient satisfaction data.

Results: The High-Smas Rhytidectomy procedure along with the fractional Eco2 laser technique is reviewed in detail. All patients were treated with the 120 micron spot size, 58% Fitzpatrick 1-2, and 42% Fitzpatrick 3-4. Setting diminution averaging 31% was recorded for Fitzpatrick 1-2 group versus 3-4. Complications include 4 cases of extended post-operative edema (>7 days), 2 cases of herpetic perioral lesions, and 5 patients with extended postoperative erythema (2 weeks). No cases of hyperpigmentation or hypopigmentation was noted at 6 months. Customer satisfaction data revealed no customer refund requests at the 6 month interval.

Conclusions: Fractional Laser resurfacing using the Eco2 system is a good, safe adjunct to short flap facelifts in addressing fine lines and rhytids. The technique is safe and effective for patients from Fitzpatrick Skin 1-4.

Abstract Body: Retrospective review of 120 consecutive patients treated by a single provider with the Eco2 Standard (Lutronic USA), Fractional CO2 Laser Rejuvenation system.

Platysmectomy: A Novel Procedure for Severe Neck Synkinesis in Patients with Facial Paralysis

Henstrom Douglas, Vakharia Kalpesh, Malo Juan, Cheney Mack, Hadlock Tessa

Learning Objectives: At the completion of this presentation the participant should 1) understand the role for platysmectomy in treating patients with severe synkinesis; 2) understand the indications and technique for successful platysmectomy in the paralyzed face; and 3) be able to assess the change in quality of life as reported by patients, utilizing the FACE instrument, undergoing platysmectomy for severe synkinesis.

Methods: Prospective Study

Results: Fifteen patients underwent unilateral platysmectomy to treat severe synkinesis affecting their neck. Pre and post procedure FACE surveys were administered to measure self reported change in quality of life. FACE scores showed a statistically significant (< 0.05) improvement in quality of life. Specific evaluation of tension, pain or spasm in the neck showed a statistically insignificant improvement in the patients. There were no surgical or postoperative complications. One patient required revision surgery for incomplete division of the platysma. SMILE technique evaluation showed an improvement in the position of the corner of the mouth. **Conclusion:** Platysmectomy is a safe procedure for treating severe synkinesis in facial paralysis. Patients undergoing this procedure report an improvement in the degree of facial pain/tension, and their overall quality of life improves as measured by the FACE instrument.

Abstract Body: Erroneous rewiring of facial nerve branches following paralysis leads to the improper innervation of facial muscles. This results in the undesired and uncoordinated muscle movement called synkinesis. Common forms of synkinesis include: eye closure with the use of mouth muscles, midfacial movements with volitional eye closure, and neck

tightness (Platysmal contraction) with smiling or eye closure. Synkinesis is an often overlooked but disturbing sequelae of facial paralysis, and can be debilitating in some patients. This severe synkinesis in the neck can lead to tension, pain, and increased asymmetry. Anatomically it is often manifested by significant platysmal banding and even hypertrophy of the platysmal muscle. Current treatment strategies for severe synkinesis include physical therapy and botox. We sought to identify a novel surgical treatment for severe synkinesis affecting the lower face and neck.

The FACE survey is a quantitative instrument used by clinicians to evaluate quality of life following facial nerve injury. Our objective was to measure the change in quality of life in a series of consecutive patients with facial paralysis undergoing platysmectomy for the treatment of severe synkinesis. Other outcome measures include change in position of corner of mouth as measured by the SMILE technique.

Placement of Platinum Eyelid Weight Improves Quality of Life in Patients with Facial Paralysis

Henstrom Douglas, Vakharia Kalpesh, Lindsay Robin, Knox Chris, Cheney Mack, Hadlock Tessa

Learning Objectives: 1) To discuss the indications for platinum eyelid weight placement in the paralyzed face; 2) To assess the change in self-reported quality of life after the placement of a platinum eyelid weight in facial paralysis patients; 3) After the completion of this activity the participant should have a better understanding of the reasons, technique, and outcomes of platinum eyelid weight in the paralyzed eye.

Method: This is a prospective clinical trial. Beginning in April 2009, 80 patients presenting to the Facial Nerve Center with paralytic lagophthalmos requiring intervention were treated with thin-profile platinum eyelid weights. Thirty five of the patients (44%) completed before and after FACE surveys following surgery. Ninety percent of cases were performed under local anesthesia in the office setting.

Results: Overall Quality of life, measured by the FACE instrument, significantly improved following platinum eyelid weight placement. Average scores increased from 44 to 53, and 80% of patients reported some improvement in overall score. Patients also reported a statistically significant decrease in the amount of time their eye felt dry, irritated or scratchy. The reported change in wetness or tearful eyes was not significant. Median follow-up was 3 months. In 35 weights placed, there have been no serious complications.

Conclusions: We report the first large series of postoperative quality of life evaluation following platinum eyelid weight placement for paralytic lagophthalmos. This is a safe procedure that can easily be performed in the clinic. Patients report a significant improvement in overall quality of life following platinum eyelid weight placement in the paralyzed eye.

Abstract Body: A devastating sequela of facial paralysis is the inability to close the eye. The resulting loss of corneal protection can lead to exposure keratitis, corneal ulceration, and potentially permanent vision loss. Eyelid weights are frequently placed in the superior eyelid to protect against these potential complications. Many have reported the subjective improvement in various measurements of palpebral width, but no one has ascertained the change in patients' perception. We sought to measure and report the change in quality of life after placement of platinum eyelid weights as reported by the FACE instrument.

Clinical Features and Treatment of Pediatric Facial Dog Bites

Chen Henry, Neumeier Anna, Durairaj Vikram

Learning Objectives: To describe the clinical features and management of pediatric facial dog bites.

Method: A retrospective review of all children younger than 18 years who sought medical attention after a dog bite to the face between January 1, 2003 and December 31, 2008 was performed at a large tertiary pediatric hospital. All demographic, patient, and injury details were collected.

Results: A total of 536 children aged 6 months to 17 years were identified. The average age was 4.6 years with a slight male predilection (52%). The vast majority (80%) of injuries occurred in the central portion of the face (cheeks, eyelid/eyebrow complex, nose, and lips). The most commonly injured areas included the cheeks (44%), eyelid/eyebrow complex (17%), and lips (13%). Each patient suffered an average of 1.6 injuries (lacerations, abrasions, or punctures) comprising 1.4 zones of the head and neck. Twelve (2%) children suffered an associated facial fracture and 4 (0.7%) had associated injuries outside of the head and neck. Repair in the operating room was required in 65 (12%) patients while the rest were managed in the emergency department (ED). Of the patients treated in the ED, 166 (31%) did not require suture closure, 284 (53%) required a single layer simple closure, and 86 (16%) required a complex multilayered closure. The most commonly used suture for single layer closure was polypropylene while polyglactin 910 was used most commonly for reapproximation of the deep layers in multilayered closure. Antibiotics (oral or topical) were prescribed in 466 (87%) patients. Amoxicillin/clavulanic acid was overwhelmingly preferred (82%), followed by clindamycin (5%), and sulfamethoxazole/trimethoprim (2%). Wound infections occurred in 68 (13%) patients, of which 16 (24%) of these did not receive antibiotics. Of the 46 (68%) patients whose wounds were cultured, the most common isolates were *Pasteurella* species (46%), *Staphylococci* species (20%), and *Streptococci* species (11%). A total of 45 complications occurred in 38 patients (7%). The most common complications included hypertrophic scarring in 22 (58%), lid ptosis in 6 (16%), and epiphora in 3 (8%). A secondary procedure to correct complications was required in 18 children (50%).

Conclusions: We report the clinical features and management on the largest series of pediatric dog facial dog bites. The typical child that sustains a facial dog bite injury is a boy just under 5 years old. The central face is most commonly targeted while other associated injuries in the rest of the body are rare, as are associated facial fractures. The majority of injuries are able to be managed in the ED, often using single layer nonabsorbable suture closure. Despite the fact that antibiotics are almost always given, wound infections still occur. Complications were relatively infrequent, but when they occurred, a revision procedure was often needed to correct them.

Safety of Simultaneous Full-face Carbon Dioxide Fractional Laser Resurfacing and Rhytidectomy: A Case Series of 21 Patients

Diaz Gustavo

Disclosure: Dr. Diaz - Lumenis, Inc. In the past received teaching honoraria and speaker honoraria for Lumenis aesthetic lasers.

Learning Objectives: At the completion of this activity, the participant should be able to compare the safety of different methods of full face laser resurfacing when performed of simultaneously with rhytidectomy. We will also discuss the difference between fractional CO2 resurfacing and standard resurfacing and why fractional resurfacing is safer when performed with rhytidectomy.

Method: A retrospective study of a single operating surgeon experience of 21 consecutive patients that underwent concurrent rhytidectomy and full face fractionated carbon dioxide laser resurfacing was performed. Patients were evaluated for complications over the areas of simultaneous surgery and laser resurfacing. Complications were divided into several categories; infection, flap necrosis, delayed reepithelization, hyperpigmentation, hypopigmentation, scarring, and persistent erythema

Results: Of the 21 cases, only two patients developed small tragal incision infections that resolved with oral antibiotics and local care of the area involved. No cases of flap necrosis, delayed reepithelization, hyperpigmentation, hypopigmentation, scarring, or persistent erythema were observed.

Conclusions: Simultaneous full-face fractional carbon dioxide laser resurfacing and rhytidectomy offers the safety and an aesthetic advantage for dramatic facial rejuvenation by combining two procedures previously thought to be dangerous when performed at the same time.

Abstract Body: The use of concurrent laser resurfacing and cervicofacial rhytidectomy, theoretically, could provide the best aesthetic rejuvenation of the face and neck. Previous studies have demonstrated the risks of facelift and traditional CO2 laser resurfacing performed at the same time. This study will help determine the safety of simultaneous full-face fractionated CO2 laser resurfacing and rhytidectomy. A retrospective study of a single operating surgeon experience of 21 consecutive patients that underwent concurrent rhytidectomy and full face fractionated carbon dioxide laser resurfacing was performed. Patients were evaluated for complications over the areas of simultaneous surgery and laser resurfacing. Complications were divided into several categories; infection, flap necrosis, delayed reepithelization, hyperpigmentation, hypopigmentation, scarring, and persistent erythema. Of the 21 cases, only two patients developed small tragal incision infections that resolved with oral antibiotics and local care of the area involved. No cases of flap necrosis, delayed reepithelization, hyperpigmentation, hypopigmentation, scarring, or persistent erythema were observed. Simultaneous full-face fractional carbon dioxide laser resurfacing and rhytidectomy offers the safety and an aesthetic advantage for dramatic facial rejuvenation by combining two procedures previously thought to be dangerous when performed at the same time.

The Benefits of Superficial Blended Chemical Peels

Linder Jennifer

Disclosure: Chief Scientific Officer, PCA SKIN, Scottsdale, AZ National Instructor, Dermik Aesthetics (Sculptra) National Instructor, Allergan Facial Aesthetics (Botox and Juvederm)

National Instructor, Medicis Pharmaceutical (Dysport, Restylane and Perlane)

Objectives: Chemical peeling has been used for centuries and remains one of the most effective methods for clearing multiple skin conditions. The use of superficial blended acid chemical peeling solutions can be an important component in a physician's repertoire, as they offer numerous benefits without the downtime and complications associated with deeper chemical peels and laser treatments.

Methods: Discussing the currently available data regarding the chemo-exfoliating agents that effectively improve the health and appearance of the skin will assist in the identification of beneficial peeling blends. Alpha hydroxy acids (AHA), trichloroacetic acid (TCA), salicylic acid, retinoids, and the Jessner's solution will be reviewed. Melanogenesis inhibitors and skin strengthening agents will also be discussed as potential additions to these traditionally used acids.

Results: Because each acid interacts differently with the skin, added benefits can be achieved when they are used in conjunction. AHA are thought to encourage exfoliation by dissolving the intracellular desmosomal bonds. TCA induces protein coagulation while salicylic acid has demonstrated keratolytic properties. Retinoids stimulate healthy cell turnover and proliferation as well as other anti-aging and anti-acne benefits. The Jessner's solution was the original blended chemical peel and now additional options are available. Clinical assessments have shown that the addition of melanogenesis inhibitors such as hydroquinone and kojic acid to chemical peeling agents decreases skin dyschromias and reduces the potential of post-inflammatory hyperpigmentation. Further, the use of anti-inflammatory components containing essential fatty acids may also contribute to overall skin health and decrease peel-related side effects.

Conclusions: While the benefits of chemical peeling are indisputable, the patient and the physician are constantly seeking innovative methods for improving the health and appearance of the skin. Using superficial peels formulated with blends of multiple acids with additional scientifically proven ingredients offers impressive, visible results and allows patients to return to most daily activities immediately following the procedure.

Disclosures: Disclosures of commercial support are noted immediately following the authors' names. If no disclosure is included, then the author(s) has no relevant relationships to disclose.

POSTERS

003 Quantifying the Sharpness of Osteotomes for Dorsal Hump Reduction

Bloom Jason, Ransom Evan, Antunes Marcelo, Becker Daniel
 Abstract Title: Quantifying the Sharpness of Osteotomes for Dorsal Hump Reduction

Learning Objectives: 1) To establish a quantitative model for testing rhinoplasty osteotome sharpness that will allow for instrument sharpening and maintenance guidelines; 2) To evaluate quantitative data that measures the sharpness of rhinoplasty osteotomes after repeated uses, maintenance and sharpening methods

Method: This is a prospective study to quantify the relative sharpness of 3 identical osteotomes and the change in sharpness that occurs after 3, 6 and 9 uses. Additionally, we evaluate the change in osteotome sharpness after hand sharpening the instruments with a sharpening stone and also after those sent out for professional sharpening. The difference in sharpness between instruments maintained in our hospitals' central supply and those maintained privately will also be examined. The Instron Universal Tester with a sensitive 100 Newton (N) load cell and a specifically developed holder for the osteotome and number 2 Prolene monofilament polypropylene suture is utilized for the testing. We are using a 10mm double-guarded Cinelli osteotome that the senior author uses for dorsal hump reduction. The Instron Universal Tester develops a force versus displacement curve, so that the osteotome which cuts the suture with the least amount of force will be the sharpest.

Results: For osteotome #1, the testing showed significant dullness after 9 uses (4.836lbs; difference from baseline value ($p < 0.001$) and after 6 uses ($p < 0.05$)). For osteotome #2, significant dullness was seen after 6 uses (4.431lbs; difference from baseline value ($p < 0.005$) and after 3 uses ($p < 0.008$)). For osteotome #3, significant dullness was seen after only 3 uses (4.093lbs; difference from baseline value ($p < 0.02$)). For all 3 osteotomes, the significant change corresponded to subjective dullness noted by the senior author. Osteotome #1 was professionally sharpened after the 9th use and retested (3.156 lbs, $p = 0.69$). This was not statistically different from baseline, but was only as sharp as if the osteotome had been used between 3 and 6 times (3.04 and 3.160 lbs). Return of osteotome #1 for additional resharping, resulted in a significantly poorer performance (7.737lbs; difference from baseline value ($p < 0.0001$) and after 9 uses ($p < 0.0005$)). Osteotome #3 was hand sharpened by the authors following 6 uses and then retested (7.750lbs; difference from baseline value ($p < 0.0001$)). A Cinelli osteotome from an affiliated hospital (10.616lbs) and a Ruben osteotome from our outpatient surgery center (8.955lbs) required nearly twice the force to cut the suture, relative to the values of the senior author's osteotomes that were already significantly dull. Osteotome deformity was digitally photographed.

0012 Use of an Extended Dorsal Shield Graft in Binder's Syndrome

Narasimhan Kailash, Zuliani Giancarlo

Learning Objectives: At the completion of this activity, the participant should be able to evaluate and discuss the use of an extended dorsal shield graft to provide structure and shape in reconstructive rhinoplasty.

Method: Case report with literature review

Results: Our patient with Binder's syndrome achieved appropriate augmentation, rotation, and projection after using our single, onlay, extended shield graft. Significant fibrosis and

warping did not occur post-operatively. Breathing and nasal function improved as well.

Conclusions: The extended dorsal shield graft provides excellent dorsal augmentation and projection. Such combination grafts circumvent the possibility of scarring and cartilage warping that can occur with multiple individual grafts. No additional sutures are needed, and the graft can be carved from a single block. Ours the first report of such a combination graft used in reconstructive rhinoplasty in this population. Abstract Body: Our patient suffered from the typical flat nose, soft tissue deficiency of the columella, and under-rotated tip that occurs with Binder's syndrome. Instead of using the traditional, time-consuming method of using numerous grafts, we instead carved a single extended dorsal shield graft, which acted as a dorsal onlay and shield graft. Midline support was achieved through a caudal septal extension graft and premaxillary augmentation graft, also carved from rib cartilage. Our technique is described with photographs discussed.

0015 Incidental Finding of Diffuse Large B-Cell Lymphoma on Routine Septoplasty Specimen: A Case Report and Literature Review

Armin Bob, Nabili Vishad, Kedeshian Paul

Learning Objectives: 1) At the conclusion of this presentation, the participants should be able to recognize the typical and atypical presentations of nasal cavity lymphomas. 2) The participants should also understand the value of submitting routine surgical specimens for pathological evaluation.

Method: A case report with histopathologic and radiological details is described from a tertiary hospital. Background, incidence, disease course, and treatment options are presented through a literature review.

Results: We present the case of a 46 year old female with a long history of nasal airway obstruction, headaches, and symptomatic sinus pressure, who on exam was noted to have a nasal septal deviation to the left. On preoperative CT scan, mild septal deviation was appreciated. During her septoplasty, the submucosal tissue was noted to be adherent to the bony and cartilaginous septum. The septal content was sent for gross pathological evaluation, and the final diagnosis was consistent with a diffuse large B-cell lymphoma. Postoperative PET/CT scan, MRI of the neck, and bone marrow biopsy were all normal. She was started on chemotherapy with a plan to start radiation therapy following completion of her chemotherapy.

Conclusions: Lymphomas of the sinonasal tract are rare in the United States. Diffuse large B-cell lymphomas (DLBCL) followed by NK/T-cell lymphomas are the most common lymphomas involving the sinonasal region. DLBCL predominantly involve the sinuses without nasal involvement, whereas NK/T-cell lymphomas are more likely to involve the nasal cavity without sinus involvement. We present a case of DLBCL limited to the nasal septum which was incidentally noted on routine pathological evaluation. Both pre- and post-operative clinical and radiological evaluations were not indicative of a possible malignancy. Our practice is to send all septoplasty specimens for gross pathological evaluation. Our pathologist astutely noted gross irregularities in the septal cartilage tissue and proceeded with microscopic evaluation which confirmed the diagnosis of DLBCL. This case demonstrates the importance of routinely sending surgical specimens, even in generally "benign" cases such as septoplasties, for at least gross pathological evaluation.

0019 Beginner's Training in Microvascular Surgery: From Simple Suturing Exercises to Practicing Microvascular Anastomosis in the Rat

Gordin Eli, Daniero James, Heffelfinger Ryan

Learning Objectives: The reader should gain an appreciation for simple techniques that are helpful in the training of junior residents in microvascular surgery.

Method: A group of residents in their first and second year of post-graduate training were assessed in their performance of microvascular anastomosis in the living rat using the femoral vessels. A second group was first exposed to a series of suturing exercises utilizing synthetic materials and 10-0 nylon suture. Their performance in each of these tasks was assessed. After this initial training, they then performed a series of microvascular anastomoses in the rat, and the speed and effectiveness of the two groups was compared.

Results: While the group only performing anastomoses in the rat demonstrated improvement in their efficiency conducting the procedure, a significant gain in ability was conferred by first practicing by suturing synthetic materials.

Conclusions: The utilization of synthetic materials for suturing exercises provides trainees with a familiarity in microsurgical instrumentation and can be utilized, in conjunction with animal models, to improve resident training in microvascular surgery while minimizing cost, and unnecessary use of animals.

Abstract Body: The advent of microvascular free tissue transfer has provided an invaluable tool in the armamentarium of facial reconstructive surgeons. As this technique becomes more prevalent, there is increased need for resident exposure to and training in microvascular anastomosis. We describe the establishment of a training protocol for microsurgery within our institution utilizing synthetic materials, including practice with suturing surgical gloves and vessel loops with 10-0 nylon, as well performing femoral vessel anastomoses in the living rat. Additionally, we provide a literature review of what constitutes a successful training model for learning microvascular anastomosis.

0020 Quality of Life, Patient Assessment of Scar, and Surgeon Assessment of Color Match in Patients Undergoing Nasal Reconstruction After Resection of Cutaneous Malignancy

Pepper Jon-Paul, Asaria Jamil, Kim Jennifer, Moyer Jeffrey, Baker Shan

Learning Objectives: At the completion of this activity, participants should be able to measure the impact of nasal reconstruction on patient quality of life and to identify factors associated with quality of life changes. Second, participants will be able to compare and contrast the assessment of surgical outcome made by the patient and the surgical team at multiple time points.

Method: The Derriford Appearance Scale (DAS-24) is a valid measure of quality of life as it relates to facial aesthetic and reconstructive surgery. The Patient and Observer Scar Assessment Scale (POSAS) is an effective subjective evaluation tool that has good demonstrated efficacy for the evaluation of linear surgical scars. Following resection of nasal cutaneous malignancy, these surveys will be completed at the following intervals: pre-operatively, early post-operatively (one-week), intermediate post-operatively (two to four months), and late post-operatively (one year).

Results: Postoperative quality of life differs significantly depending upon the following independent variables: type of reconstruction, gender, age, and time elapsed since reconstruction. Assessments of quality of life and scar outcomes will be made at multiple time points. The long term follow-up data and large volume of nasal reconstructions allows unique detail

regarding changes in quality of life that occur over time following nasal reconstruction. Final patient scar outcome is predicted to be independent of reconstructive technique when statistically controlled for size of defect.

Conclusions: Reconstruction of nasal defects has a variable impact on patient quality of life depending on a variety of patient factors. However, properly chosen reconstructive techniques will normalize disturbances in quality of life over time, and the surgical outcome is similar when controlled for size of defect.

Abstract Body: Nasal reconstruction after resection of cutaneous malignancy has an incompletely described effect on patient quality of life. A prospective assessment of quality of life would be an extremely useful adjunct for surgeons as they assist patients in selecting the best reconstructive technique for their anticipated surgical defect. Specifically, the first goal of this study is to employ a pre-validated survey to assess the impact of reconstruction on patient quality of life at predetermined time intervals after reconstruction. The second goal of this study is to administer a brief survey that measures patient and surgeon opinion of the surgical outcome. Both surveys, the DAS-24 and the POSAS, will be administered pre-operatively, one week, two to four months, and one year following surgery. This will provide long-term data regarding changes in patient quality of life in addition to assessment of scar. Such data will greatly enhance our ability to assess surgical outcomes after reconstruction of this anatomically critical region, and to provide more informed counsel to patients prior to surgery.

0022 A Personal Modified External Rhinoplasty Without Columellar Incision

Barcelo Xavier, Mirapeix Rosa

Learning Objectives: My perspective of rhinoplasty has changed many times and will undoubtedly continue to change. With this approach I try to do a more precise, logical and predictable primary operation that virtually eliminates the secondary procedures.

This new approach is a modification of open rhinoplasty conceived to avoid columellar incision. Our aim was to evaluate the usefulness and side-effects.

Methods: From January 2008 to June 2009 42 patients (24 women and 18 men) were treated with this new approach in a community and private hospital. The age range was 18-52 years with an average of 34 years. I made in all patients a nose endoscopy and a complete photographic set. I underwent a infracartilaginous bilateral incisions and continue to the caudal border of medial and middle crura and inversely to the open rhinoplasty I made a skeletonization of the medial crura below to columellar skin and connect by other side

Results: I improved my results in all patients but especially when the most important problem was in nasal tip.

Conclusions: The surgical approach is as easy, reliable and fast as the classic open rhinoplasty. We can do the same surgical techniques that open rhinoplasty and we don't need to replace the skin to check the surgical maneuvers consequences. Columellar incision morbidity is avoided.

It is more easy to understand the different anatomy of the medial, middle and lateral crura without distortion and related this with the aesthetic defects.

0031 Nasal Vestibular and External Auditory Canal Stenosis

Younger Ritchie, Lau Bedy

Learning Objectives: To understand surgical approaches to the repair of Soft Tissue Stenosis of the External Auditory Canal and the Nasal Vestibule

Method: 20 patients with Stenosis of the Nasal Vestibule and 15 patients with Soft Tissue Stenosis of the External Auditory Canal were treated, and successful techniques for repair were developed

Results: 90 % of the Nasal Vestibule Stenosis and 93% of the External Auditory Canal Stenosis group were improved with surgical approaches outlined in this paper

Conclusions: Principles of repair of Nasal Vestibule Stenosis and External Auditory Canal Stenosis are similar. Successful repair requires resection of scar tissue, development of local flaps, and careful meticulous skin grafting to insure success. **Abstract Body:** Soft Tissue Stenosis of the Nasal Vestibule and External Auditory Canal are difficult surgical repairs at best. The literature abounds with vague descriptions of surgical repair, but this paper provides detailed illustrations indicating approaches and methods for a successful outcome. Basic principles involve conservative scar resection, some form of Z plasty multiple transposition flaps, and full thickness skin grafts to complete the surgical repair. What we call Expansile stenting is a simple post operative maneuver to maximize an enhanced and successful outcome for the patient.

0034 Mandible Fracture Repair Using Intermaxillary Fixation Screws

Iverson Kenneth, Prosser J. Drew, Bhatt Nishant, Chen Achih

Learning Objectives: At the completion of this activity, the participant should be able to: assess closed reduction with intermaxillary fixation (IMF) screws as a viable means of mandible fracture repair and; compare and contrast the results to closed reduction with standard interdental fixation and open reduction with internal fixation.

Method: A retrospective chart review was performed at a tertiary referral, academic center, where patients undergoing mandible fracture repair with closed reduction and fixation using IMF screws were identified.

Results: Thirty-seven patients who underwent closed reduction with IMF screws were identified in a 3 year period. Thirty-five patients had sufficient follow up data and 63 fractures were found (33% angle, 25% symphysis, 19% condyle, 16% body, and 6% ramus). Total surgical times averaged 38 minutes which included those necessitating removal of hardware under anesthesia. Average intermaxillary fixation was 5.1 weeks, and patients were followed up for an average of 2.4 months. Nonunion resulted in 3 (8.6%) patients, two of whom were not compliant with fixation wire maintenance. Malunion resulted in 1 (2.8%) patient who was not compliant, and infection occurred in 2 (5.7%) patients.

Conclusions: Closed reduction and IMF screw fixation is a viable method of mandible fracture repair with comparable complication rates to standard methods of repair in appropriately selected individuals and potentially preferable from an economic standpoint.

Abstract Body: Mandible fractures are a common occurrence in tertiary referral and academic health care centers and can carry a significant economic burden. Costs of closed reduction techniques and open reduction of mandible fractures are reported on an average of \$10,927 and \$34,636, respectively. The economic impact is amplified by the fact that a significant proportion of these individuals are either uninsured or underinsured. Hospital reimbursement rates have been reported at 15% with professional reimbursement rates of 27% for the treatment of maxillofacial trauma at a major

medical center. Costs are directly affected by operative times which have been reported at 147.1 minutes and 171.5 minutes for the traditional arch bar interdental fixation and open reduction with internal fixation, respectively. Traditional closed reduction with fixation demonstrates nonunion or malunion rates of 2.6% to 14% with infection rates of 7%. Open reduction and rigid fixation methods have demonstrated malunion or nonunion rates of 5.3% to 8.1% with infection rates of 6.3% to as high as 30%. If comparable or improved complication rates in conjunction with streamlined operative times can be demonstrated with closed reduction and IMF screw fixation, this method could be preferable for appropriately selected patients.

0035 Simultaneous Anterolateral Thigh Flap and Temporalis Tendon Transfer to Optimize Facial Form and Function after Radical Parotidectomy

Revenaugh Peter, Fritz Michael

Learning Objectives: At the completion of this activity, the participant should be able to discuss: 1) The role of ALT in the reconstruction of facial contour defects. 2) The options for concurrent facial reanimation and reinnervation using of orthodromic temporalis tendon transfer and cable grafting with branches of the motor nerve to the vastus lateralis.

Method: Retrospective review of immediate reconstruction/reanimation of radical parotidectomy defects in 4 patients with the use of anterolateral thigh (ALT) fat/fascia flaps for facial contouring, orthodromic temporalis tendon transfer (TTT), and cable grafting of the facial nerve when applicable. **Results:** Four patients with mean age 65.5 (range 49-83) underwent extirpation of malignant tumors with facial nerve sacrifice resulting in large soft tissue deficits. All patients had ALT free tissue transfer to correct facial contour defects, with 2 patients receiving fat/fascia buried flaps and two patients with skin/fascia reconstructions. Concurrent TTT was performed in all patients and 3 patients underwent cable grafting of facial nerve branches. Branches of the motor nerve to the vastus lateralis harvested from the ALT surgical site were utilized for cable nerve grafting in 2 patients. Fascia lata from the same ALT harvest site was also used for lower lip suspension to the TTT in 2 patients. Hospital length of stay ranged from 3 to 9 days and there were no perioperative complications. All patients were ambulating without difficulty by post-operative day 3 and underwent post-operative radiation therapy without complication.

Conclusions: Tumor clearance, symmetric facial appearance, as well as dynamic facial rehabilitation was accomplished in a single stage procedure using this method. The ALT free flap provides versatile options for soft tissue defects while also providing access to motor nerves optimal for grafting without additional morbidity. Patients undergoing extirpation of malignancies requiring facial nerve sacrifice can undergo immediate free tissue contour reconstruction and facial reanimation procedures with no additional morbidity.

Abstract Body: Extirpation of aggressive parotid or facial tumors often involves facial nerve sacrifice and the creation of a large soft tissue defect. Reconstructive surgeons are presented with the challenge of restoring facial contour and function without delaying additional treatment such and radiation therapy. We performed a retrospective review of immediate reconstruction/reanimation of radical parotidectomy defects in 4 patients with the use of anterolateral thigh (ALT) fat/fascia flaps for facial contouring, orthodromic temporalis tendon transfer (TTT), and cable grafting of the facial nerve when applicable. Four patients with mean age 65.5 (range 49-83) underwent extirpation of malignant tumors with facial nerve sacrifice resulting in large soft tissue deficits. All patients had ALT free tissue transfer to correct facial

contour defects, with 2 patients receiving fat/fascia buried flaps and two patients with skin/fascia reconstructions. Concurrent TTT was performed in all patients and 3 patients underwent cable grafting of facial nerve branches. Branches of the motor nerve to the vastus lateralis harvested from the ALT surgical site were utilized for cable nerve grafting in 2 patients. Fascia lata from the same ALT harvest site was also used for lower lip suspension to the TTT in 2 patients. Hospital length of stay ranged from 3 to 9 days and there were no perioperative complications. All patients were ambulating without difficulty by post-operative day 3 and underwent post-operative radiation therapy without complication. Tumor clearance, symmetric facial appearance, as well as dynamic facial rehabilitation was accomplished in a single stage procedure using this method. The ALT free flap provides versatile options for soft tissue defects while also providing access to motor nerves optimal for grafting without additional morbidity. Patients undergoing extirpation of malignancies requiring facial nerve sacrifice can undergo immediate free tissue contour reconstruction and facial reanimation procedures with no additional morbidity.

0039 Cosmeceuticals: Topical Therapies for Treating the Aging Face

Linder Jennifer

Chief Scientific Officer, PCA SKIN, Scottsdale, AZ

National Instructor, Dermik Aesthetics (Sculptra)

National Instructor, Allergan Facial Aesthetics (Botox and Juvederm)

National Instructor, Medicis Pharmaceutical (Dysport, Restylane and Perlane)

Objectives: Patients frequently seek recommendations for the most effective skin care products for minimizing the visible signs of aging. As physicians our patients expect us to be aware of topical ingredients currently available and their actual ability to improve the skin.

Methods: Review currently available clinical data to identify topical ingredients which correct current and prevent future dermal and epidermal damage. Well-rounded age control regimens should be comprehensive but tailored to the individual patient. They typically include retinoids, ascorbic acid, melanogenesis inhibitors, peptides and antioxidants.

Results: The specific mechanisms of action of many different cosmeceutical ingredients will be discussed. Retinoids are able to reduce corneocyte cohesion, regulate collagenase activity, reduce melanosomal phagocytosis and encourage the synthesis of collagen, elastin, glycosaminoglycan and fibronectin. L-ascorbic acid offers fibroblast-stimulating properties to produce collagen, reduction of matrix metalloproteinase production, tyrosinase inhibition and anti-inflammatory capabilities. Peptides are at the forefront of topical anti-aging treatments and, while several types are available, the collagen-building and neurotransmission-inhibiting benefits are the most compelling and substantiated. Antioxidants are also imperative to the improvement of visible aging and, by identifying the individual characteristics of ingredients such as resveratrol, vitamin E, epigallocatechin gallate and silymarin, beneficial blends can be selected for optimal patient outcomes.

Conclusions: Topical therapies allow the physician to correct superficial imperfections and enhance the results of more invasive procedures. The identification of multi-faceted and beneficial ingredients that are supported by science will assist the physician and the patient in determining the efficacy of currently available skin care products. Confidently recommending products that contain ingredients that provide consistent results will deepen the physician-patient relationship, and your practice's bottom line.

0043 Cosmetic Chemistry for the Physician

Linder Jennifer, Veljkovic Ivana

Disclosure: Dr. Linder, Chief Scientific Officer, PCA SKIN, Scottsdale, AZ

National Instructor, Dermik Aesthetics (Sculptra)

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National Instructor, Medicis Pharmaceutical (Dysport, Restylane and Perlane)

Dr. Veljkovic:

Research and Development Manager, PCA SKIN

Objectives: There is no shortage of skin care products making lofty claims of the results that they can provide our patients. Although proven active ingredients are available through many cosmeceutical brands, the physician can make more educated product recommendations by looking beyond the actives to the formulation as a whole. A review of cosmetic chemistry and how to identify the most effective formulations will be addressed. This will allow the physician to make the best product choices for their practice.

Methods: A review of cosmetic chemistry will clearly elucidate the need for physicians to assess a skin care products entire formula for efficacy, not just the active ingredients.

Results: While patients are typically most impressed by a product's active ingredients, it is the formulation as a whole that will ultimately determine product efficacy. Many commonly used active ingredients appear in numerous cosmeceutical skin care products, with varying degrees of efficacy.

Appropriate stabilization methods, bases and delivery systems must be employed to achieve an ingredient's stated benefits. Solubility, percutaneous penetration, cosmetic vehicles, encapsulation and esterification all play integral roles in the ultimate efficacy of any cosmeceutical. Additionally, understanding the structure and function of many commonly used classes of active ingredients helps the dermatologist identify stable and effective topicals for their patients.

Conclusion: Hundreds of topical products are available and unfortunately, not all deliver the results they promise to the disappointment of our patients. The use of both validated traditional and breakthrough formulating techniques can lead to positive outcomes for patients. A deeper understanding of cosmeceutical ingredients and formulations will assist in the identification of reliable products that physicians can feel confident recommending.

0045 Soft and Firm Implants in Rhinoplasty: A Review of 311 Cases

Tournas Athanasios, Fanous Nabil

Learning Objectives: At the completion of this activity, the participant should be able to appreciate the indications and usefulness of soft (Dacron mesh and fabric) and firm (Silicone rubber) alloplastic implants in rhinoplastic surgery.

Method: A retrospective analysis of rhinoplasties performed using soft (Dacron mesh or fabric), and firm (L-shaped silicone rubber) alloplastic implants was carried out. The choice of implant, its thickness, shape, placement, complications and follow-up were all calculated.

Results: Alloplasts were used in a series of 311 rhinoplasties. At total of 269 soft (Dacron mesh or fabric), and 42 firm (L-shaped silicone rubber) implants were used. The Dacron implants were placed in the tip or lateral wall. The rate of infection in the soft implant group was 6.6%. There were no infections in the implant group.

Conclusions: We have shown through our very large series of patients, possibly the largest such combined study in the literature, that soft (Dacron mesh and fabric) and firm (L-shaped silicone rubber) implants may be safe alternatives to autograft materials in certain rhinoplastic cases.

Background: There are many types of autograft or alloplast materials available for augmentation rhinoplasty. Alloplasts such as Dacron mesh and fabric or silicone rubber may have the advantage over autografts for being readily available, easily fashioned, and without donor site morbidity, or subsequent resorption or curling. Their disadvantages lie in the possibility of infection, extrusion or migration.

Objective: To review the value, applicability, and complications of soft and firm implants when used in rhinoplasty.

Methods: A retrospective analysis of rhinoplasties performed using soft (Dacron mesh or fabric), and firm (L-shaped silicone rubber) alloplastic implants was carried out. The choice of implant, its thickness, shape, placement, complications and follow-up were all calculated.

Results: Alloplasts were used in a series of 311 rhinoplasties.

At total of 269 soft (Dacron mesh or fabric), and 42 firm (L-shaped silicone rubber) implants were used. The Dacron implants were placed in the tip or lateral wall. The rate of infection in the soft implant group was 6.6%. There were no infections in the implant group.

Conclusion: We have shown through our very large series of patients, possibly the largest such combined study in the literature, that soft (Dacron mesh and fabric) and firm (L-shaped silicone rubber) implants may be safe alternatives to autograft materials in certain rhinoplastic cases.

0061 Endonasal Composite Grafts Repair for Internal Nasal Valve Compromise

Vartanian John, Arkins John, Dayan Steven

We describe an endonasal technique using an auricular composite graft to directly expand the internal nasal valve. Previous research has demonstrated a history of efficacy in addressing alar retractions and alar sidewall reconstruction. Realizing the utility of composite grafting, we sought to evaluate the graft's use in widening internal nasal valve areas using an endonasal approach. This method has been shown to be valuable in both primary valve compromise and iatrogenic valve collapse.

0062 The Endonasal Lateral Crural Sandwich Grafts

Dayan Steven, Arkins John

From laparoscopic access to endovenous stent placement, as surgical medicine has evolved to achieve equivalent if not superior outcomes but be less invasive in its approaches, plastic surgery must take notice. The trend seems to be toward mini facelifts, endoscopic brow lifting, and injectables. Likewise, our approach to rhinoplasty is now following suit. By adopting the grafting techniques learned from the external approach into the endonasal approach, we describe a technically straightforward technique to narrow the bulbous tip through an endonasal non-delivery approach that reinforces the nasal airway while at the same time preventing alar notching, lateral crus recurvature, and bossa formation. The lower lateral crural sandwich graft is an adjunct, further enhancing and expanding the possible outcomes achieved with the endonasal approach. Additionally, it appears to equal the predictability and stability benefits identified to the external approach, but with less edema, less operative time, and less surgical dissection, thereby allowing us to better meet our patients' demands.

0063 The Bow Tie Mattress Suture for the Correction of Nasal Cartilage Convexities and Concavities

Miller Philip, Dayan Steven

We describe a modification of the mattress suture that has been shown to be a highly valuable tool for straightening a convexity, and also a reliable mechanism for strengthening the cartilage. It has been previously shown that mattress sutures increase cartilage stiffness, and it has been our experience that the bow tie mattress suture is a valuable tool for supporting the tip, middle vault, and nasal valves.

0065 Has the Pendulum Swung Too Far? Trends in the Teaching of Endonasal Rhinoplasty

Dayan Steven, Kanodia Raj

Medicine, and surgery in particular, is trending toward less invasive procedures, reduced morbidities, and quicker recovery times. As simpler, less invasive, more effective treatments have been developed, many procedures that were once common no longer exist. For better or worse, the patients of today expect minimally invasive procedures. This trend is not limited to general surgery but also exists in aesthetic medicine. We evaluate the teaching methods in rhinoplasty and how the practices of the graduates have changed over the last decade.

Methods: A survey was sent to 356 recent graduates of American Academy of Facial Plastic Surgery (AAFPRS) approved Fellowship programs. Questions included: 1. What percentage of the rhinoplasties that you perform are done through the open approach and what percentage are done through a closed approach? 2. How has this trend changed since finishing fellowship/residency? 3. What percentage of the rhinoplasties you observed in your fellowship/and or residency training were done through and open approach and what percentage through a closed approach? 4. In what year did you finish your fellowship/ or residency?

Results: One hundred thirty-three surveys were completed, which revealed that during fellowship training the majority of respondents (57.6%) observed external rhinoplasty more than 75% of the time, with 83.3% observing it more than 50% of the time. Once in practice, 72% of the graduates performed external rhinoplasty 75% to 100% of the time and 15.9% performed it 50% to 75% of the time. The vast majority, 87.9%, performed external rhinoplasty as their primary approach.

Conclusion: While the external approach to rhinoplasty is by far the most commonly taught method, many primary rhinoplasty patients may be treated as well or better through endonasal access. Perhaps the benefits of this approach deserve equal attention during residency and fellowship training.

0067 The Caudal Lateral Crural Extension Grafts

Dayan Steven, Arkins John

We describe a surgical technique to treat the cephalically oriented lower lateral cartilages through an endonasal non-delivery approach that reinforces the nasal airway, while at the same time, preventing alar notching, lateral crus recurvature, and bossa formation. The lateral crural extension graft is an adjunct further enhancing and expanding the possible outcomes achieved with the endonasal approach. Additionally, it appears to equal the predictability and stability benefits identified to the external approach, but with less edema, operative time, and surgical dissection, allowing us to meet our patients' demands

Disclosures: Disclosures of commercial support are noted immediately following the authors' names. If no disclosure is included, then the author(s) has no relevant relationships to disclose.

New and Upgrade Members

Congratulations to the new and upgraded members (June 2009 to May 2010)

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Rajesh K Chopra, MD
Kent G. Davis, MD
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Joseph Hegleh, MD
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Awards and Grants

Congratulations to the following AAFPRS members who will be recognized on Thursday, September 23, 2010 at 9:05am for their outstanding research in facial plastic surgery and their contributions to the field and service to the Academy.

AAFPRS Leslie Bernstein Grant
Elizabeth Whiting Chance, MD
Tissue Engineered, 3D Dermal Implant Prefabrication Using Nanofiber Scaffolds

AAFPRS Leslie Bernstein Resident Research Grant
Melynda Barnes, MD
The Neuroprotective Effects of Copaxone After Facial Nerve Injury

AAFPRS Leslie Bernstein Resident Research Grant
Joshua Weissman, MD
Evaluation of Radiofrequency Therapy for Lateral Nasal Wall Collapse

John Orlando Roe Award
Jason M. Guillot, MD
Forehead and Scalp Sensation after Brow Lifting: A Comparison between "Open" and Endoscopic Techniques

Sir Harold Delf Gillies Award
Eugene A. Chu, MD
Mid-Infrared Laser Orbital Septal Tightening: Ex-Vivo Dosimetry Study and Pilot Clinical Study

Resident Travel Award
Sachin Pawar, MD
Personalized Nasal Surgery Using Computational Fluid Dynamics: Emerging Technologies for Surgical Planning and Assessment of Outcomes

Resident Travel Award
William Heckman, MD
Perceptions of Aesthetic and Reconstructive Facial Surgery Among Medical Students

Community Service Award
Minas Constantinides, MD

F. Mark Rafaty Award
Russell W.H. Kridel, MD

William K. Wright Award
Gary Burget, MD

John T. Dickinson Memorial Award
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The Awards Program is generously sponsored by PCA SKIN.

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The majority of AAFPRS members and fellows are certified by the American Board of Otolaryngology-Head and Neck Surgery, which includes examination in facial plastic and reconstructive surgery procedures, and the American Board of Facial Plastic and Reconstructive Surgery. Other AAFPRS members are surgeons certified in ophthalmology, plastic surgery, and dermatology.



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In 1974, the Educational and Research Foundation for the American Academy of Facial Plastic and Reconstructive Surgery (AAFPRS Foundation) was created to address the medical and scientific issues and challenges which confront facial plastic surgeons. The AAFPRS Foundation established a proactive research program and educational resources for leaders in facial plastic surgery. Through courses, workshops, and other scientific presentations, as well as a highly respected fellowship training program, the AAFPRS Foundation has consistently provided quality educational programs for the dissemination of knowledge and information among facial plastic surgeons.

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January 19-23, 2011

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May 4-7, 2011

Chicago, IL

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- New to practice doctors – up to 50% credit for 2-3 years.
- Part-time doctors – up to 50% credit.
- Claim-free (including indemnity payments less than \$15,000) – up to 30% credit.

Coverage

- Claims-made, Occurrence and **Convertible Claims-Made** Policy forms available in selected states.
- **Consent to Settle***
- Made available to **training fellows** and locum tenens.

Free Tail/Reporting Endorsement

Physicians may receive their free tail upon retirement at any age with just one year of coverage at a mature rate with Medical Protective.

All products are underwritten by either The Medical Protective Company® or National Fire and Marine Insurance Company®, members of the Berkshire Hathaway group of businesses.
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