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The Journal of the American Society of Maxillofacial Surgeons

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500 Cummings Center, Suite 4550 • Beverly, MA 01915 USA • www.maxface.org

ANNOUNCEMENTS

ASCFS 2016 Annual Meeting at ACPA Meeting
April 8-9, 2016
Hilton Atlanta, Georgia

ASCFS/ASMS Craniofacial Boot Camp for Fellows
August 5-6, 2016
Pheonix, Arizona

ASMS Summer Basic Course
August 19-21, 2016
Chicago, Illinois

ASMS at ASPS Pre-Conference Symposium
September 22, 2016

ASMS Day
September 25, 2016
Los Angeles, California

Do you have a meeting, event, or announcement you would like to share with your colleauges? Use this space to spread the word! Please send us your notices, upcoming meetings, and news from your institutions of interest to your colleagues.

The Journal of the American Society of Maxillofacial Surgeons

EDITORIAL BOARD

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Editor's Update

John van Aalst, MD
Cincinnati Children's Hospital

We are pleased to announce the creation of the Journal of the American Society of Maxillofacial Surgeons (JASMS).

We have selected a group of dedicated editors for sections of the journal. In the current issue, you'll find our staple articles: a Presidential address from Arun Gosain, MD, a note from our immediate Past President, Kant Lin, MD; CPT Corner, New Member Highlights, Seasoned Member Highlights; letters to the editor; and a description of the recent ASMS Basics Course in Romania.

There are three articles in the first issue: the first, an update on state-of-the-art rhinoplasty which is linked to a recent ASMS Rhinoplasty Webinar (Frank Papay, MD and Arun Gosain, MD, edited by Joe Williams, MD); the second is a description of the Guwahati Cleft Training Center (Alex Campbell, MD), and the last an appeal to consider creation of National Cleft Organizations as a new model for international cleft work (John van Aalst, MD).

We're excited that you've joined us in reading the first issue of JASMS. If you have anything to add to these sections, please contact the respective editors for inclusion in the next issue. I would like to echo Arun Gosain's statement at the end of his presidential note: "Let's make this your year in ASMS!" What better way to be a part of ASMS than contributing to the new JASMS.

Letters to the Editor

Stephen A. Chidyllo, MD, DDS, FACS

I am often asked by colleagues in private practice, "Why are you a member of ASMS?" and "What do you get from your membership dollars?" Here are my answers:

In these financially challenging times for healthcare delivery, everyone in the field of medicine is searching for ways to reduce the costs of doing business. We are all evaluating the cost-benefit ratios of each dollar we spend in practice. Where is the value we are getting in return? Where is our return on investment? Every dollar we spend has to add a benefit to our practice, return a value. If it does not, these dollars are better spent elsewhere.

Physicians across the country are reducing the amount of "practice dollars" spent on membership in societies, new "gadgets" for the office, travel and entertainment. Increasing dollars are being spent on Social Media, Internet Marketing and Search Engine Optimization. Why? Because the ROI is greater—or so we think. One dollar spent on Facebook or Google brings more value to our practices than the same dollar spent on membership in a Surgical Society. We can work in front of our computers at home, comfortably engaged in a Webinar, obtaining more educational "value," versus taking a trip to a meeting across the country. When you factor in expenses such as travel, hotels, and meals, your ROI is greater for the Webinar.

So why do I, as a Plastic Surgeon in private practice, still belong to the ASMS? Because I believe the ROI of membership in the ASMS provides value and benefit to my practice, for the modest membership dues presently required. The ASMS is changing as healthcare delivery is changing. The Executive Board has a progressive view of what the private practice surgeon wants—ROI—primarily through education (see the recent Rhinoplasty Webinar). The ASMS has become more inclusive and less exclusive. I am on an equal footing with the academic surgeons who are part of ASMS.

With the ASMS Maxillofacial News changing into the Journal of the American Society of Maxillofacial Surgeons (JASMS), we are poised to develop additional value to being a member of the ASMS. I am honored to be a part of it. I would like to develop the "Letters to the Editor" Section as more of a "blog" than a simple Q&A, where members can interchange ideas, knowledge and experiences and help other members grow. I want exchange from both first-year fellows and senior surgeons as to what we all need to do in order to increase ROI for the members of our great surgical society.

President's Message

Arun Gosain, MD
Lurie Children's Hospital

I am proud to serve as President of the ASMS for the coming year. This represents my 13th year on the ASMS Board of Directors. During my tenure with the ASMS, we have made tremendous strides to evolve into the premier organization to represent plastic surgeons involved in the treatment of head and neck deformities for both children and adults, and these strides have helped to define the specialty of maxillofacial surgery. However, there remains a void in our perceived role, and many clinicians and even ASMS members engaged in maxillofacial surgery are not actively engaged in our society.

My primary focus this year is to explore avenues by which the ASMS can better serve the clinicians and members it seeks to represent. While our mission is to represent a core element of plastic surgery, if we don't engage the breadth of individuals involved in clinical care of maxillofacial surgery, we cannot grow as a society. I believe that there is no organization that has a greater impact in representing maxillofacial surgery than the ASMS due to our close relationship with ASPS/PSF, our representation in the Maxillofacial Advisory Council to the American Board of Plastic Surgery, and the composition of our membership to include the most influential maxillofacial and pediatric plastic surgeons in the country.

Ours is one of the few specialty organizations that has a role far greater than to host an annual meeting; we produce significant value for our membership year-round through a variety of educational courses of all levels, texts and publications, newsletter updates, sponsoring visiting professors, and networking individual to enhance career opportunities and disseminate information on these opportunities through the Newsletter and through the ASMS website.

My primary goal this year is to see that the membership feels engaged in the opportunities currently provided by the ASMS, and to explore avenues by which the ASMS can be viewed as relevant by the majority of the membership, and not just to a select group of members who serve on the ASMS Board or as ASMS Committee Chairs. John vanAalst summarized the challenge to the ASMS in the final question of his recent Teleconference in our Fall Newsletter: *What is Different About Today's ASMS than 10 Years Ago?* Realizing that involvement of the membership to date has hinged on committee participation, John asked the following question: "It seems that ASMS needs a strategy to develop the group of 328 members to determine the core pool from which committees can generate the next set of committee members. How do we put the spotlight on committees for the general membership?" The key element in assuring success and value of the ASMS is engagement of its membership. To this end, we have mobilized many of our existing committees and added special task forces within these committees to help us to address the following priorities:

Let's make this YOUR year as ASMS members!

ASMS Priorities 2015-2016

1. How can we make the ASMS more relevant to its membership?
   Task forces in progress:
   - Topics to engage membership through potential Webinars
   - Digital Platforms to disseminate information
2. How can we expand membership to be representative of gender and ethnic diversity in plastic surgery?
   Task forces in progress
   - Gender and Ethnic Diversity
   - Private Practice member benefits
3. How can we engage all clinical practice patterns relevant to the ASMS?
   a. Cleft Lip/Palate
   b. Congenital Craniofacial Anomalies
   c. Maxillofacial Trauma
   d. Head and Neck Cancer Reconstruction
   e. Facial aesthetic surgery (bone/soft tissue)

   Task forces in progress
   - Development of curriculum in head and neck cancer and facial aesthetic surgery
   - Additional input from Program and Visiting Professor Committees to actively engage underrepresented segments of maxillofacial surgery
4. How can we educate members as to leadership pathways within the ASMS?
   Task force in progress (Membership Committee)
5. How can we develop ASMS members to serve as leaders within other organizations representing plastic surgery?
   - Increased participation by the ASMS Board to develop leaders in sister organizations from the ASMS membership
6. How can we enhance the value of the Annual ASMS summer board meeting?
   - Actively solicit committee chairs to participate
7. How can we expand the ASMS Newsletter to increase the quality of contributions and their impact?
   - Possible preparation for Online Journal in the future
   - Increase advertising revenues to sustain continued growth

The current column is a plea to each of you so that the ASMS leadership can begin to implement these suggestions over the course of the year. We welcome recommendations from the ASMS membership about how best to involve each of you in the activities of our organization to make the ASMS more representative of your needs. Should you feel that these issues can be addressed by setting up an interactive webinar where you as members are given the opportunity to voice the needs you feel ASMS can address, please indicate this and we will work to develop such a forum. Address all suggestions to Lorraine O'Grady: lograd y@prri.com. We will collate these responses and bring them forward to the ASMS Board. Let's make this YOUR year as ASMS members!

Disruptive Innovation in Surgical Education

Alex Campbell, MD

A growing awareness of the immense worldwide burden of surgical disease has resulted in significant public and private resources being devoted to improvement of global health. On January 26, 2015 the World Health Organization (WHO) Executive Board passed a landmark resolution on strengthening emergency and essential surgery as a component of universal health coverage. The scope and scale of need is staggering. Two billion people lack access to any surgical care, and three billion more lack access to safe and well-timed surgery. This is compounded by maldistribution of the existing workforce both within and between countries, resulting in gross inequity in access to surgery. Only 4% of an estimated 234 million surgical procedures performed each year are provided to the poorest third of the global population. The Lancet Commission on Global Surgery has estimated that more than 320 million surgical procedures are needed to address the global burden of surgical disease[1].

Skilled providers are the backbone of healthcare delivery systems, and effective training programs are central to any strategy for markedly increasing surgical services in low-income and middle-income countries. Numerous universities, charities, governmental organizations, and private corporations have committed to transferring knowledge and skills to providers internationally, with Plastic and Maxillofacial Surgeons in particular making major contributions to global surgery. For advanced surgical training, the traditional model has been for surgeons in developing countries to visit institutions in developed countries. While these are very valuable opportunities, they are severely limited, thus constraining our ability to scale up the global surgical workforce. We must look toward new strategies to better train, distribute, and support surgeon specialists in order to improve equity of access across all populations. The complexity of safe and quality surgery combined with the sheer scale of need necessitates creativity, innovation, and lasting dedication. Success requires a disruption in our current approach to surgical education, and a strategy to shift the majority of training opportunities to the low-income and middle-income countries where the expertise is ultimately required.

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In 2010 Operation Smile ushered in a new paradigm in cleft care with the Guwahati Comprehensive Cleft Care Center (GCCCC) in Assam, India. This state-of-the-art, high volume surgical specialty hospital was built through a public-private partnership between government, charity, and private enterprise. An intense focus on education and training successfully equipped a workforce of more than 70 local professionals across multiple specialties including surgery, anesthesia, nursing, dental/orthodontics, speech therapy, child psychology, patient mobilization, and administration. During its first four years of service, the GCCCC provided free surgical treatment to more than 10,000 patients with improved safety and outcomes, decreased costs, and increased investment into the local community. The volume of patients, standards of care, and density of talented mentors at the GCCCC synergized to create a unique educational environment where knowl-

(continued on next page)

Training local medical leaders in an intensive environment empowers them to achieve excellence and in turn to pass on their skills to their communities as well as visitors

edge and skills could be transferred efficiently and effectively. Advanced development of local leaders along with numerous external partnerships helped mature the GCCCC into a global teaching center, vastly expanding its impact beyond the patients treated in the region. Between 2011 and 2015, more than 220 trainees and visiting professors from 15 countries rotated to the GCCCC for education, training, and research. Additionally, the Cleft Surgery Training Program (CSTP) was established in 2013 as a structured fellowship focused on mentoring surgeons from developing regions to achieve excellence in cleft care. This program has trained numerous committed surgeons throughout India and Africa, and several CSTP graduates have assumed leadership positions at Operation Smile cleft specialty centers in their home regions. These hands-on training programs not only promote engagement and sustainability but also multicultural bonding and collaboration through exchange of ideas. At the GCCCC, this resulted in academic partnerships and research efforts that have produced more than 40 academic publications and 90 presentations at national and international conferences. The local foundation has now assumed full leadership and operations of the GCCCC, which continues to provide excellence in cleft care for the region.

Training local medical leaders in an intensive environment empowers them to achieve excellence and in turn to pass on their skills to their communities as well as visitors.

Looking forward, Operation Smile is leveraging its global infrastructure along with 34 years of experience in support of the WHO resolution for strengthening access to safe, well timed, and effective surgery. As a leader in delivering high-quality surgical care around the world, our global strategy is centered on investment toward education and training for thousands of local medical professionals across multiple specialties. In surgery, we are enhancing our portfolio of educational offerings for residents, fellows, and practicing surgeons in both developed and developing regions. We are significantly expanding the CSTP throughout multiple global centers and missions to provide a cohesive and longitudinal training platform to empower surgeons to provide world-class surgical treatment to patients within their own communities, and in turn to pass on their skills and expertise to others. Regan and Stryker Fellowships support residents and fellows and a formal partnership with the Plastic Surgery Foundation (PSF) supports participating surgeons to join Operation Smile programs. The Accreditation Council for Graduate Medical Education (ACGME) through the Plastic Surgery Residency Review Committee (RRC) and the American Board of Plastic Surgery (ABPS) now recognize and support the international rotations for residents at U.S. programs. Formal processes are in place through the RRC and ABPS for recognition of international rotations, and the first officially approved resident rotations took place at the GCCCC in 2014.

It is an exciting time for surgical education, and for progress in providing safe and effective surgery to the most marginalized of patients. By convening care providers from around the world, we know that idea exchange, problem-solving and conversation with like-minded partners will result in relevant solutions that increase access to surgical care and ensure that no child has to live with a correctable facial deformity. These principles and lessons may also be applied across the surgical landscape in order to treat other essential surgical conditions. Operation Smile heartily welcomes all colleagues willing to dedicate their time, skills, and compassion to our fellow human beings waiting for their personal miracle through safe and timely surgery.

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CPT Coding Update

Gregory Pearson, MD

On October 15, 2015, all hospitals across the United States converted to ICD-10. Although ICD-10 does not directly affect surgeons as much as Current Procedural Terminology (CPT codes) regarding reimbursement for procedures, it significantly affects hospitals, physicians, and patients with potential denial of services and procedures. Most providers realize that the new codes are much more specific related to type of encounter (initial versus subsequent versus sequalae) and laterality, but providers do not realize that many of the ICD-10 codes are age-restricted as well. For example, the ICD-9 code for hypotonia was unspecified and could designate a patient of any age. In current ICD-10 coding, the only hypotonia code is "congenital for newborns only." You may be thinking that this does this apply to me as a surgeon. However, consider this scenario: if you write a physical therapy prescription for a 6-month-old with the ICD-10 code for hypotonia, the insurance company may deny services because the code only applies to newborns. Our cleft team makes frequent physical therapy referrals for developmental assessments. If the referred patient is older than one-year-of-age and an ICD-10 code associated with prematurity has been utilized, insurance companies may deny the assessment. Denials increase the workload for coders and staff, leading to additional prescriptions, new referrals and appeals using the correct ICD-10 code.

Our coders have also experienced issues with codes related to 22q deletion syndrome and velopharyngeal dysfunction (VPD). Although most practitioners refer to the condition as 22q deletion syndrome, ICD-10 is even more specific. ICD-10 requires this syndrome to be coded as 22q11.2 deletion syndrome. Since our coders cross check physician coding, confusion has occurred as to whether these children have 22q11.2 deletion syndrome or another 22q deletion. Additionally, the term VPD does not have an associated ICD-10 code. When practitioners at our institution discuss VPD in their notes, confusion has occurred. When coders have tried to run data acquisition related to clinic volumes, this coding confusion has led to inaccurate data collection, with possible delays in reimbursement.

.....further investigation demonstrates that certain ICD-10 codes also have age restrictions that impact services and reimbursement.

In summary, the introduction of ICD-10 has led to greater specificity within the coding system. Initially this specificity was portrayed as improvement in encounter types and laterality; further investigation demonstrates that certain ICD-10 codes also have age restrictions that impact services and reimbursement.

Navigating the Pressures for Mergers and Acquisitions of Health Care Organizations and the Implications for Career Development of Academic Surgeons

ASMS leadership participated in a summer leadership seminar, in conjunction with the Annual Summer Board Meeting, titled "Navigating the Pressures for Mergers and Acquisitions of Health Care Organizations and the Implications for Career Development of Academic Surgeons." The seminar took place at the Lurie Children's Hospital of Chicago on the campus of the Northwestern Feinberg School of Medicine.

The seminar was developed to examine the future directions in health care, based on the frequency of mergers and the restructuring of health care systems in many large metropolitan areas. Physicians have been trained to pursue either academic or clinical careers in medicine and have joined health care organizations that support these respective goals. The seminar explored several topics of relevance to physicians in light of such mergers and acquisitions in health care.

The presentations are available for open access on the ASMS Website: www.maxface.org

Guest speakers (l to r) Michael J. Dandorph, Executive Vice-President, Chief Operating Officer, Rush University Medical Center; Edward Hughes, MD, MPH(Professor of Strategy, Kellogg School of Management, Professor of Preventive Medicine, Feinberg School of Medicine; Henry Allen, MPH, JD Senior Attorney Advocacy, American Medical Association; Ron Blaustein, Chief Financial Officer Lurie Children's Hospital.

JASMS Highlights an ASMS "Seasoned" Member: Henry Kawamoto

Stacey Francis, MD

First some facts:

Where were you born and raised?
I was born in Long Beach and raised in Los Angeles, CA.

Dental and Medical School:
University of Southern California

General Surgery Residency:
Columbia University

Plastic Surgery Residency:
New York University

What is your most memorable residency story?

When I was rotating with Dr. Converse at NYU, I assisted on a contralateral lip to commissure flap for burn reconstruction. When he asked me what I thought, I told Converse that I didn't really like the flap. Dr. Converse's advice to me as I was leaving to go work with Dr. Tessier was " I encourage you not to answer that way to him.

How did your time with Dr. Tessier change your craniofacial career?

I already had a good base for craniofacial technique from Dr. Converse, but with Dr. Tessier I learned how to think through craniofacial problems and specific operative techniques. My two sons were 3 and 5 years-of-age and went to French school and my daughter was born in France. My kids all still speak French and I met life-long friends that year so it will always hold a special place for me.

Where did you spend most of your career and how long did you practice?

Harvey Zarum, who had trained with Converse, recruited me back to the West Coast at UCLA. Harvey was influential in helping push me into publishing and giving talks. I started at UCLA in January 1975 and retired in December 2013. Yes, that is 38 years.

What is your single most memorable surgery?

Performing separation of craniopagus conjoined twins at UCLA. It was not so much the technical challenge, but having to think outside of the box and knowing that success depended on working as a team. I was not nervous until I made the first incision.

What is your favorite maxillofacial diagnosis to operate on and take care of, and why?

Crouzon's and Apert's kids because of the challenge of getting them to look normal.

What technology do we have today that changes craniofacial surgery compared to when you started your career?

Rigid fixation—which only began in 1983. Hans Luhr gave me one of the first 4 sets of rigid fixation to try. I gave Hans some ideas to change and by 1992 I was convinced and at the ASMS Chicago meeting, I gave a talk about the utility of plating. Other field changing discoveries are distraction osteogenesis and computer assisted surgical planning.

What is the biggest new challenge in our specialty that was not as much of a challenge in the beginning of your career?

Now we have governmental involvement (like Europe has always had) which requires changes in practice. I believe the private practitioner model will soon be a thing of the past.

Who do you consider your mentors?

Converse, McCarthy, Tessier, and Zarum

Any other advice for young ASMS members?

To travel and see how other surgeons do things. This will always provide you with more ways to approach surgical problems.

What do you miss most about operating?

I don't miss operating—I did it for enough years. But I do miss the interactions with families and the patients.

What do you spend your time doing now?

Kayaking on Sunday mornings. I have been kayaking for 20 years but now can do it whenever I want. I have done 4 trips to Catalina and back (30 miles each way).

Performing separation of craniopagus conjoined twins at UCLA. ..... I was not nervous until I made the first incision.

Dr. K. ocean kayaking off the Santa Monica pier with his sea lion friend on the buoy.

The Romanian ASMS Basic Course

From August 31 to September 2, 2015, the American Society of Maxillofacial Surgeons held its first international Basic Maxillofacial Principles and Techniques Course in Iasi, Romania. Supported by a generous grant from the Rotary Club of Hawaii, and hosted by the Grigore T. Popa University of Medicine and Pharmacy, an intrepid group of 6 ASMS faculty traveled to this picturesque university town, located in the northeastern corner of the country (See Map). There, thirty Romanian Plastic Surgery, Otolaryngology and Oral Surgery residents participated in the same established three-day Basics Course, including lab sessions that the ASMS puts on in the United States twice yearly. Stryker Europe provided maxillofacial instruments and KLS Martin provided the fixation equipment that contributed to the overall success of the course. At the conclusion of the formal didactic program, Dr. Joseph Gruss performed a maxillofacial reconstruction surgery on a patient with an uncorrected displaced naso-orbital-ethmoid fracture that was televised live to the group participants, illustrating how the principles that were taught in the classroom and the lab, could be applied to an actual clinical scenario.

The course was enthusiastically received by all participants and the faculty enjoyed the opportunity to learn about the state of medicine and medical education in Eastern Europe. Doctor Pieptu, the Rector of the University and a practicing Plastic Surgeon himself, commented that there was nothing "basic" about the course and that the educational experience was so comprehensive, that the participants had learned as much over the three days as they normally would in a year of their standard resident curriculum. Grant funding is currently being secured through the Rotarians to support a second ASMS Basics Course, which will be available to residents, students and practitioners throughout the whole of Romania, and should take place sometime in 2017. It is the intent of the ASMS to create lasting educational infrastructure, in partnership with local medical schools, to provide programming and expertise in the field of maxillofacial surgery, not only in the United States, but throughout the world.

Doctor Pieptu, the Rector of the University and a practicing Plastic Surgeon himself, commented that there was nothing "basic" about the course and that the educational experience was so comprehensive.....

JASMS Highlights a New Member: Jason D. Toranto

Oluwaseun Adetayo, MD

Biography

I grew up in Dallas, Texas with my parents and two siblings. My brother and sister are 5 and 7 years older than me, respectively, and they are two of the most amazing people on the planet. My family is filled with doctors on both sides, in fact, my father is a retired Plastic Surgeon who specialized in hand and cosmetic surgery. My mother was a biology teacher who retired from teaching when she had the three of us and eventually took over running my father's office.

I attended St. Mark's School of Texas and then matriculated at Stanford University. After Stanford, I had a brief stint as a marine biologist in Sarasota, Florida before I moved to Buenos Aires, Argentina for a few years, eventually returning to attend the University of Michigan Medical School.

My fascination with Latin culture was so deeply rooted, in fact, that I returned to Buenos Aires for the last 4 months of medical school and even celebrated matching into general surgery residency at the University of Alabama at Birmingham with a few of my friends in Argentina. After UAB, I moved to Duke University for Plastic Surgery residency and finally moved to Children's Hospital Los Angeles for Craniofacial Fellowship.

What prompted your decision to pursue craniofacial surgery?

Ever since I was a child, I have been fascinated with surgery and, specifically, surgery for children. In fact, my family teases me that they have known my whole life that I was going to be a surgeon. I was fortunate enough to be exposed to craniofacial surgery as a teenager, and I was hooked from that moment. It has been my life's dream.

What gets you out of bed for work each day?

I love making a difference. What we do as craniofacial surgeons makes a difference and adds palpable value to our patients' and their families' lives. Also, working with colleagues in other specialties is a particular thrill that we, as craniofacial and plastic surgeons, get to enjoy. Watching the elegance of other surgeons and surgical subspecialties and getting to work with these colleagues is a blast.

What is your current position?

Assistant Professor of Plastic Surgery, University of California, Irvine; Director of Craniofacial Surgery, University of California, Irvine; Co-Director of Research, University of California, Irvine

What are your clinical and research interests?

Clinical - Major maxillofacial (especially bone) surgery; Neonatal distraction osteogenesis; and Areas of interface between plastic surgery and other specialties.

Research - Distraction osteogenesis; Fat grafting; and Oxygen delivery

Tell us a little about yourself and your family (spouse/partner, children, pets, etc.)

While I have yet to embark on a family of my own, I am blessed to have a very tight-knit family thanks to my parents. I have two siblings who are both happily married and each has two kids, and we attempt to spend as much time together as possible. Those four kids are amazing and serve as constant sources of joy to the whole family.

What is your favorite pastime/hobby?

Fishing! This is what my father, brother, and I have done together for as long as I can remember. Whether it's catching a fish, waiting for one to strike and just visiting, or enjoying the relaxation time before and after fishing, it is not just a sport but also our favorite way to spend quality time together.

Tell us something interesting about yourself that others might not know.

I love to cook and entertain. The precision and creativity that comes into play when cooking is similar to that which we all use every day in the operating room. This is then coupled with being able to share this experience and finished product with friends and family, which is particularly gratifying. Throughout residency, I used to have a holiday party at my house (for the whole Division) that only became bigger each year. During chief year, I was operating with my program director two days before the party and he asked me how close I was to being ready. I told him I was behind on the preparations due to all the free flaps we had been doing that week, but that I would get it all done in time. He told me we had tons of help that day and that he would personally appreciate it if I got home at a reasonable hour…as I was leaving, he reminded me that he loved brie.

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Fishing! This is what my father, brother, and I have done together for as long as I can remember.

What is the best part of your day?

When I would drive home from medical school each day, there was a soccer field that seemed like it had a pee-wee soccer game almost every day during the warmer months. I appreciated how I could have just been in the hospital with unbelievably sick patients, but here were these little kids running around and having fun without a care in the world. All of us, as surgeons, love being in the operating room. I have also enjoyed – however fleeting – that first moment when my consciousness switches to the outside world and I see how beautiful it is.

If there was anything you could change, what would it be?

As crazy as it sounds – because anyone who goes into craniofacial surgery has been in school forever – I wish I had either stayed in college an extra year and gotten a Masters in Computer Science or stayed in medical school an extra year and gotten my M.B.A. The cross-applicability of content is so critical, and I often find myself wishing I had obtained more knowledge outside the realm of standard medical education.

What is the accomplishment you are most proud of so far?

Learning to speak Spanish. Foreign languages are very difficult to learn for some people, and I am certainly one of them. Yet the ability that I now have to be able communicate in Spanish provides me with tremendous joy and satisfaction.

Is there any member you would like to see highlighted in future editions?

Michael Friel, MD

Supporting National In-Country Cleft Organizations: A Better Way to Solve Cleft and Craniofacial Care in the Developing World

John A. van Aalst, MD

Abstract: This article proposes that the current model of international cleft work by organizations that originate from the developed world armed with agendas from outside the developing world is an old and unsustainable model. The new model must emphasize in-country leaders and management that coordinate cleft care from within each country, and may best be fulfilled by National Cleft Organizations. For the purposes of this article, a National Cleft Organization (NCO) is defined as a governing body that coordinates all individuals and groups with a vested interest in providing cleft care in a particular country. The size and structure of these organizations may vary from country to country; what will not change is the need for broad support from the international community to support these in-country efforts: to set agendas and direct future philanthropic efforts in their own countries, including the relative importance of cleft care on the national surgical agenda.

Introduction

International surgical volunteer work is what attracted many of us to the surgical subspecialties we chose as our careers. Our first foray into the international arena may have come as medical students or residents,[1] and has then continued to challenge us as we move through our careers. [2,3] Many of us have partnered with large international organizations that provide the framework for volunteer surgical trips to developing countries with few services for their own children with congenital anomalies.[4,5]

Beyond partnering with large organizations, many surgeons in developed countries have created partnerships with industry in order to travel internationally, or have created their own 501-c3 organizations, to provide similar services, though on a more limited scale.[6] The number of these organizations, often centered on a single, usually charismatic individual, with a passion for a particular destination in the developing world, are too numerous to count. A significant amount of resources in time, money and donated products are spent in these endeavors, but are often not tracked well.[7,8]

In the midst of these ventures, large and small, there is no question about the international surgical need filled by this work; similarly, there is no question about the sincerity of the individuals involved in this work. There are innumerable success stories of strong cross-cultural relationships forged; multiple international practitioners from the developing world have become leaders domestically and internationally through these endeavors. Out of this work, large independent cleft-craniofacial programs (M. Samuel Noordhoff, MD; Chang Gung Cleft-Craniofacial Center;[9]) have been developed, including the more recent success of the Guwahati Cleft Center (Alex Campbell article).[4]

As this export of services has matured, there has been a growing understanding that international work must adhere to the same standards by which we are judged in our home institutions, in regards to safety,[10] educational milestones, and research endeavors.[11-13] Practitioners with international experience have studied the ethics of short-term volunteer work,[14] and have wondered about the effectiveness and cost-mapping of current models.[15,16] However, a persistent and lingering question about this global work continues to be found in absent coordination between these myriad groups and individuals. How often, when planning to serve a region, are we caught unawares that another group is working in the same area? How many times has a volunteer group working with a particular organization arrived in country and discovered that their carefully planned trip overlaps with another volunteer group? The unlucky members of the late arriving group wonder where all the patients are. At some point (sooner or later), group members discover that another group held a recent screening in the region: many of the patients the second group was planning to see have already received surgical care. In our own experience, we have arrived at a hospital only to be told that a group of physicians from Turkey had just left.

In attempts to solve these coordination problems, national Surgery organizations have developed websites to coordinate trip schedules of the more prominent organizations.[17-20] However, despite the best efforts of these groups, the task to coordinate trips is daunting, simply because of the sheer numbers of organizations, and the too-numerous-to-count trips. This problem is not limited to the United States. Countless Asian and European groups perform similar international trips. The number of teams originating from Africa and Latin America is similarly growing.

Given the very real possibility that the task to coordinate all organizations and all trips to the developing world is simply too difficult to accomplish, then another strategy may be warranted. Secondarily, given that developing countries with surgical needs do not have the resources to provide this coordination themselves, the good will and support of organizations and individuals from developed countries will be required to support the new solution.

Natural allies to help coordinate the big business of international cleft care are the Ministries of Health in each developing country. Though this sounds reasonable on the surface, any Ministry of Health that is overwhelmed with the inability to track its own unique set of problems—ranging from high infant mortality to lack of infrastructure in their hospital systems—will have a difficult time coordinating trips of well-meaning practitioners from multiple developed countries. Some of these Ministries may not even be in a position to evaluate correctly the curriculum vitaes of visiting team members. The very language of the CVs may be problematic (German, Japanese, Turkish, Spanish); those reviewing the documents may not be aware of scope-of-practice demands in the travelers' home country because these guidelines do not exist or are not enforced in the host country. Ministry of Health officials may not be clear about the level of training of the visiting "practitioners." Given these predictable misunderstandings, the host Ministry relies on individual team leaders to provide coordination. Team member roles are therefore defined by the team itself. Teams with a strict

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sense of roles to be played (for example, that medical students and residents *are not* skilled surgeons and must be supervised) do well; other groups with less stringent role definitions, play into the host country's confusion about who team members are and what they can or cannot do: nurses, medical students, and even team photographers, are respectfully, but mistakenly called "Doctor," in this setting. Do we correct them?

With the visiting team now making the rules, and following their own rules, there may be significant variation in how groups function. Some teams may perform "time out" protocols because they have recognized the value of this practice in their home countries.[10] They may enforce strict rules about what medical students do during the trip, and how residents or fellows are supervised by trip faculty. Soon, without anyone intending this to happen, the foreign team members are functioning in a bubble within the framework of the hospital they are visiting, cut off from local practitioners or organizations.

This bubble—at least on the surface—may not be all bad. Keeping control in the hands of members from the volunteer surgical group is convenient and strangely, desirable—despite what we all may say about careful interactions with locals, building local capacity, and sustainability. It is simply easier for all of us to do it our own way: more efficient, allowing for a greater number of completed cases (rather than letting the local surgeon place the sutures, and guiding her work, we finish the case ourselves). Doing this may be safer (because of our established high quality protocols). But is this retained control—in any form—sustainable? The more disconnected visiting groups are from decision-making by local organizations (like the Ministry of Health) or local practitioners (whose hospitals we are visiting), simply means that this scenario will likely be repeated on the next trip, and well into the future. As visiting practitioners, we get confused about the meaning of sustainability; instead of correctly identifying it as local-centric, we make the mistake of thinking that sustainability is what allows trip members to do more and to do it better. Our own efficiency becomes the metric for what we refer to as sustainable.

At this point, we are faced with a dilemma. Do we want to control the international work (which is not sustainable) or do we want sustainability (which can only mean giving up control to local practitioners and organizations)? Considering that sustainability depends on local partners who can provide comprehensive cleft care, then our energy should be spent on nothing other than training them. These local professionals must become the cornerstones for the development of increased local capacity to work side-by-side with the in-country Ministry of Health, to help coordinate cleft care in that country, leading eventually to national cleft organizations.

The Potential Role of National Cleft Organizations (NCOs)

The role of an NCO would be to coordinate all in-country cleft care. The structure of the organization will necessarily vary from country to country, and may involve a single individual, or multiple individuals working in tandem, depending on the country's size. The scope of work for this organization would include the following: mobilizing and coordinating local professionals to deliver cleft care, forming regional cleft teams; distributing resources, and improving access to care for the poorest patients.[21, 22] This organization would also be responsible for coordinating all international teams and organizations working in-country. As part of this coordination effort, this organization would identify all in-country practitioners who are available and interested in being trained as cleft practitioners (surgeons who will work with visiting team; Speech and Language Pathologists who desire further cleft-specific training). These pre-identified professionals would work on a rotating basis with foreign teams working in-country. The NCO would also assist in creating and prioritizing lists of patients who need care.

These NCOs will depend on the support of foreign groups working in-country. This is the moment of truth for all of us who clamor for sustainability. If foreign groups choose not to assist these in-country NCOs, then the rhetoric of building sustainably, may be only that—rhetoric—only a clever way to hide self-interest under the guise of serving underdeveloped nations.

Strategy to Develop NCOs

The first step in developing an NCO is to find a single local professional interested in cleft care that has the vision to develop a country-wide organization. This person will require a salary—likely through money donated by international organizations. The choice of this individual can be made by the Ministry of Health. Early on, the person's responsibility will be to study the status of cleft care in-country: Who are the local cleft practitioners? What is the volume of work they do? What needs are unmet by local practitioners? Who are the external organizations and individuals that perform cleft care in-country? What is the gap in cleft care filled by these visitors? How do we eliminate this gap in cleft care with increasing reliance on local practitioners? What is a realistic timeframe to do this? What is the eventual exit strategy for foreign cleft teams? And finally, how do we measure success for each step of this process?

After the initial information-gathering period, this individual (who may by now have a group working with him) would call a national meeting of in-country professionals who have an interest in cleft care. This meeting would occur in coordination with the Ministry of Health, and with representatives of international cleft organizations, who would be present as supporters—but not drivers—of the process. At this national meeting, the following decisions would be made: what roles will in-country practitioners play in the NCO? The list of questions to be addressed will be similar to what the driving individual previously asked: what can we do and where are the gaps in cleft care? What are the external resources we can depend on to drive this process? When will we be self-sufficient in providing cleft care for our country?

The third step for the group will be to establish a formal cleft team in a central location of the country based on in-country needs. From within the NCO, these individuals would then start coordinating specialty-specific care throughout the country. These positions would also require stipends, and be paid through the Ministry of Health through funds donated by international organizations.

A final step would be regular meetings of the NCO to identify individuals to lead cleft care efforts in regional locations. All foreign visiting teams would by this point need to route their trips, agendas, and team members through the NCO—relieving the developing world of this responsibility. Members of the national organization would be re-

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sponsible to route visiting teams to hospitals with the greatest needs; to confirm who team members are and what their scope of practice should be: in effect, managing the trips, and not allowing foreign practitioners to work in a separate bubble.

The Future

In order for NCOs to become a reality, international cleft groups and volunteers from the developed world must be supportive; the latter are the ones with money, organizational expertise, and logistical infrastructure to help maintain these NCOs. Supporting these national efforts is a more sustainable means of providing care for patients with clefts in the developing world. Rather than managing the enterprise of cleft care from the diaspora, (23) these efforts would be concentrated within country, allowing NCOs to manage the enterprise from their own doorsteps.

Continued support of current models of international cleft care that emphasize organizations from the developed world will only relegate the developing world to on-going dependence—a position that no one is in favor of pursuing.

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· [1]Program in Infectious Disease and Social Change, Department of Social Medicine, Harvard Medical School, 641 Huntington Avenue, Boston, Massachusetts 02115 USA
· [2]Division of Social Medicine and Health Inequalities, Department of Medicine, Brigham and Women's Hospital, 651 Huntington Avenue, Boston, Massachusetts 02115 USA
· [3]Partners In Health, 641 Huntington Avenue, Boston, Massachusetts 02115 USA
· [4]Department of Social Medicine, Harvard Medical School, 641 Huntington Avenue, Boston, Massachusetts 02115 USA
· [5]François-Xavier Bagnoud Center for Health and Human Rights, Harvard School of Public Health, 677 Huntington Avenue, Boston, Massachusetts 02115 USA
Paul E. Farmer, Email:

Historian's Corner: Kant Lin, MD

Kant Lin, M.D. served as President of the ASMS from 2014-2015. The following is his perspective on the year following his Presidency.

Kant Y. K. Lin, MD

Forty years ago—in 1976—I graduated from the Community High School in Tehran, Iran where I lived from 1972 to 1976. My father was a civil engineer working for an American firm with international connections. With funding from the World Bank, his company partnered with local engineers in developing countries, such as Iran, to build in-country infrastructure such as highways, dams, ports and bridges. Aside from the actual steel and concrete, my father's work figuratively built bridges linking American technical know-how with Third World countries. Through living abroad, I learned life lessons about our obligation and the necessity to disseminate knowledge to improve the human condition. I carry these lessons with me to this day.

This year, I have been invited to be one of the keynote speakers at the 14th International Conference of the Iranian Society of Oral and Maxillofacial Surgeons, which will take place in Tehran from Feb 16 to 19, 2016. It will be my first opportunity to return to the country that I left to attend university in the United States. I plan to give two lectures, one on computer modeling of the palate and how that can influence surgical correction of cleft palates and the other, an update on indications for the use of distraction osteogenesis in the craniomaxillofacial skeleton.

With recent geopolitical developments, it appears that the United States and Iran are poised to enter a new era of cooperation. I would propose that this should also be true of the medical field. This is a wonderful opportunity for me and for our society, the ASMS, to participate in and foster new relationships and in a very personal way for me, to return to my roots as a "bridge-builder."

I have been invited to be one of the keynote speakers at the 14th International Conference of the Iranian Society of Oral and Maxillofacial Surgeons, which will take place in Tehran from Feb 16 to 19, 2016.

ASMS WEBINAR: NASAL RECONSTRUCTION

Valves, Septa and Turbinates in Nasal Airflow
(Author: Frank Papay, MD)

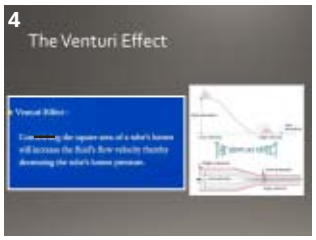
This article is an abbreviated version of a recent Webinar hosted by the ASMS. The webinar can be located at the follow: https://www.youtube.com/watch?v=I9O0f0SMQdM. The green numbers in the text indicated the slide referenced. For optimal use, this article should be utilized in parallel with the webinar.

The function of the nose is not limited to airflow but also includes heat exchange, humidification, filtration and nasal resistance. Resistance is a very important component that maintains positive airway pressure and keeps lung alveoli open. Other functions of the nose include nasal fluid and ciliary function, nasal neurovascular reflexes, and voice modification. 2

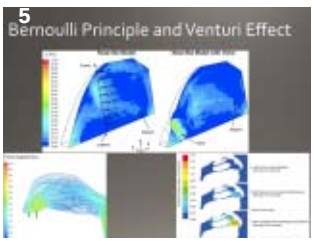
The dynamics of airflow in the nasal passages can be understood through several Physics principles.

1. **Bernoulli's Principle** states that an increase in the speed of a fluid or flow produces a decrease in pressure in the sidewalls of a tube or—in this case—the nose.3

2. The **Venturi Effect** states that constricting the square area of the tube's lumen increases the fluid's flow velocity thereby decreasing the tube's luminal pressure. 4



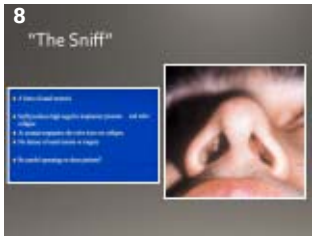
3. As these principles relate to the nasal passage, any area of constriction or obstruction, whether located at the internal nasal valve, a septal deviation, or at the level of the turbinates, will increase flow velocity and further decrease the pressure on the side walls. The Catch 22 in this situation is that any nasal obstruction causes increased collapse in the areas of weakness of nasal structure, causing further increase in flow and further collapse. This is why the internal nasal valve is such a crucial element in airway surgery; it both maintains patency and structural competence. The internal nasal valve is between 12 and 14 degrees and is the second most constricted area in our airway—the first most constricted area is our vocal cords during speech. 5



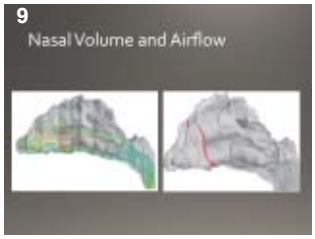
4. The **Starling Resistor** is the pressure difference between the nasopharynx and the outside atmosphere. This causes nasal airway pressure to decrease towards the nasal pharynx and induces negative lateral intraluminal pressures. 6,7

External and Internal Valve Function

If both the internal and external nasal valves collapse, one may get "the sniff" patient (a form of nasal neurosis). 8



Understanding the elements of Bernoulli's Principle and the Venturi Effect, one can understand why a constant sniff will cause an increase in negative inspiratory pressures and significant collapse despite a normal appearance when relaxed. 9



It is also important to understand the importance of the external nasal valve. Problems with the external value are often seen with over-resection of the lower lateral cartilage and/or over-resection of the dorsum. These maneuvers cause collapse of the nasal tip and notching of the nostril rim. The muscles of facial animation may also affect the external nasal valve. These muscles are contiguous with the SMAS. Certain disorders, like Bell's palsy, acoustic neuromas, and facial paralysis can cause restriction of the external valve opening or collapse of the valve altogether.10

The internal valve is very restricted and demonstrates ethnic variety—Caucasians have the most restrictive valves. These valves can be less than 12 degrees (normally 12 to 14 degrees). 11

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Shaving down the nasal dorsum by only 1 to 2 mm can destroy the internal valve. Restriction of the internal nasal valve requires reconstruction using a variety of tools that will be discussed momentarily.12, 13


12

13

Preventive Measures

Cephalic trimming should be the last resort and performed only after structural support of the nose is considered. 14

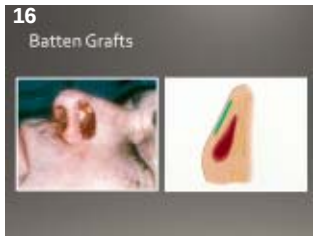
A variety of intra- and inter-domal stitches can be used to provide support in order to reposition the lower lateral cartilages (LLC) as well as to recontour the nasal tip. Cephalic trimming should always leave at least 8 mm of cartilage and leave a tag of cartilage at the end of the lateral portion of the LLC to prevent elevation of the lateral aspect of the lateral crura and notching of the rim. 15

14

15

Reconstructive Grafts

1. **Batten grafts:** Batten grafts are used for support. To function as support struts—battens—these grafts need one portion to be attached to an element of the existing nasal structure with extension over the weak area of the cartilage. This graft is very helpful with areas of double contour and work by stiffening areas of weakness, especially in the area of the LLC. 16



16

2. **Intra-columellar strut graft**: The intra-columellar strut graft is the pedestal on which to reconstruct the lower lateral crura. 17 One should always try to use septal hyaline cartilage or rib cartilage, which is stronger. Ear elastic cartilage is often too weak and fragile, cracking very easily, especially in secondary and tertiary nasal reconstruction. Rib graft can be harvested in females in the inframammary fold; in males the incision is usually more lateral. The cartilage can be shaved off without taking the entire rib.

17

3. **Shield grafts:** The shield graft can be used as support of the lateral-medial crural junction. It can be used in the soft triangle and domal areas to be used for LLC attachments as well as with trans-domal stitches creating tip contour. 18

18

4. **Splay grafts:** Splay grafts are placed underneath the ULC and across the area of the quadrangular cartilage.19 Conchal graft is often used for this purpose. However, this graft can be fragile and may break when bent across the septal cartilage. It is also difficult to dissect the underlying mucosa away from the ULC. The placement of this graft takes finesse, but is very effective in expanding the mid-nasal vault.

19

5. **Park's flaring mattress sutures:** This specific suturing technique is also a very powerful tool to expand the area of the mid-nasal vault.20 As the ULC is attached under the nasal bones and distally underneath the LLC, it is important to place this stitch more distally. These are either horizontal or vertical mattress stitches. One can use 4-0 or 5-0 PDS or nylon sutures. This technique can be used with Sheen or Fulcrum spreader grafts to further enhance the mid-nasal valve.

20

6. **Sheen spreader grafts:** These spreader grafts are the workhorse of ULC reconstruction of the internal valve.21 Matchstick shaped cartilage grafts (usually hyaline grafts or rib cartilage) are placed—more anteriorly than posteriorly—with direct attachment to the ULC. This causes a widening and blunting of the internal valve angle. There is a direct attachment of the ULC, spreader graft, septal cartilage, spreader graft and ULC. It is very important that the stitching be placed to capture all of these units so that there are no loose components or stitches in the construct. Not capturing all of these components results in a weak area with subsequent collapse.

21

7. **Fulcrum spreader grafts:** Fulcrum spreader grafts can be used effectively without concern for incorporating all of the cartilage components as with the Sheen spreader grafts.22 One uses the same matchstick type grafts in the same position, but the ULC are then placed over the grafts and sewn together, with the spreader grafts serving as a fulcrum. By placing Parks mattress stitches as well, this maneuver creates a powerful expansion of the mid-nasal vault and as well as

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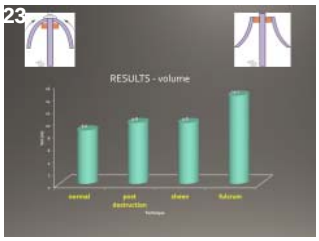
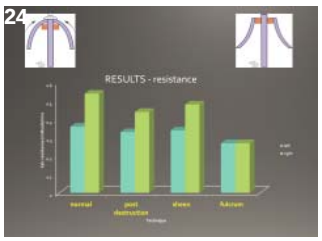
expansion of the internal valve. Compared to all other spreader grafts in studies using acoustic rhinometry, the Fulcrum spreader grafts create the most effective increase in intranasal volume.23 When adding resistance to this model, the Fulcrum grafts performed better compared to other grafts. 24

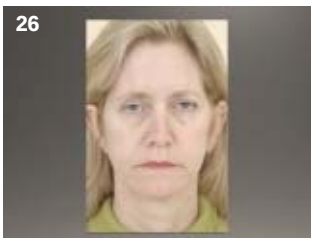




8. **Support grafts:** Support grafts can be used in areas of weakness across the domal regions especially in the area of the medial and lateral crura. 25

CASE PRESENTATIONS

Patient 1:

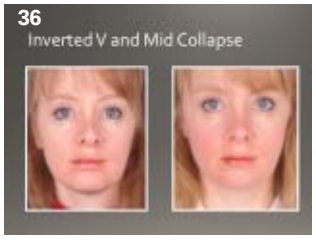


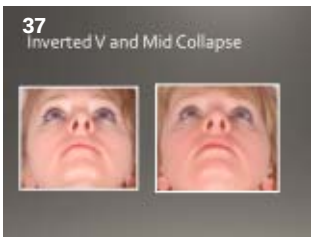
26, 27 This patient has had three previous nasal surgeries, with subsequent internal and external valve collapse, with notching of the rim indicating previous crural resection. The patient refused to use rib graft.

On exam, findings included overlap of the LLC (indicating a previous crural resection) 28, separation of the ULC and septum, and destruction of much of the structural support of the nose.29 Available grafts included a conchal graft and a remnant septal graft.

Treatment included a pedestal graft using septum, Sheen spreader grafts with Parks mattress sutures (limited septal cartilage)30, an Umbrella graft over the LLC (conchal graft)31, followed by a Shield graft for structural support of the nasal tip.32 Reconstruction of the nasal dorsum was performed with cartilage chips wrapped in alloderm—referred to as "American delight"—which is an especially powerful technique in patients with thin skin. 33,34,35

Patient 2:





36,37 This patient has an inverted V or mid-nasal collapse with notching of the LLC from previous over-resection of the LLC.

Treatment involved the following techniques: a Fulcrum spreader graft, lateral alar strut grafts, a nasal tip graft with columellar strut graft and placement of alloderm.

Turbinates

The region of the inferior turbinates (IT) is a key area for nasal airflow, and therefore, a very dynamic region. The surgeon should always visualize the turbinates before introducing any constrictive agent. 38 It is also mandatory to re-

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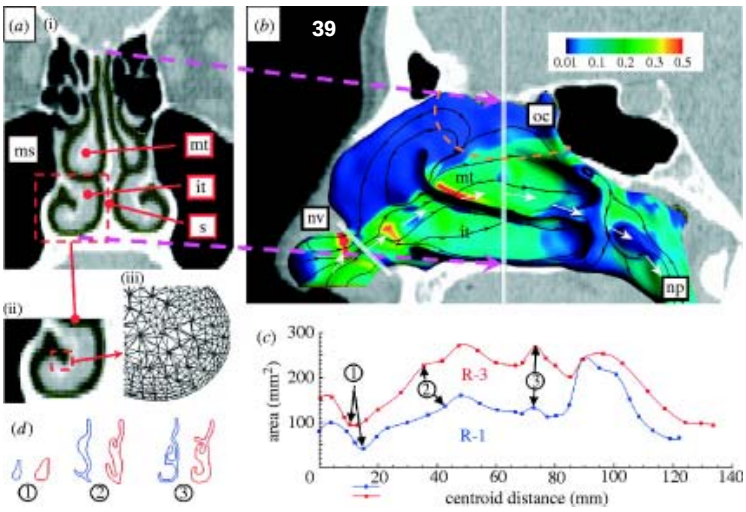
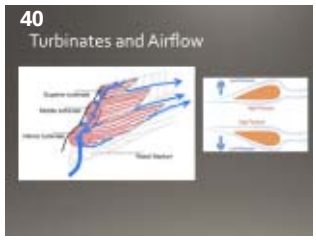
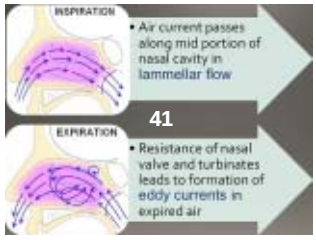
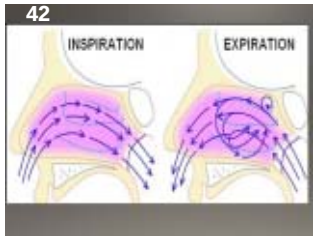


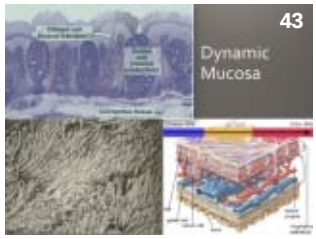
examine the turbinates after constriction using Neo-Synephrine, Afrin or 4% Cocaine. This approach allows the surgeon to understand the true effect of the turbinates on airway obstruction in the nasal passage. The IT is the most important of the three turbinates for airflow.39 Airflow pressure is higher above the turbinates and lower below them, causing a negative pressure which helps to enhance the opening of the ostias of the sinus. Under the IT is the lacrimal duct. This area can tolerate a more aggressive dissection. 40



Inspiration produces lamellar flow across the IT. However expiration causes eddy currents that create back pressure which in-turn help to maintain the opening of the space. The surfaces of the turbinates are quite dynamic and very important to the proper function of the nose.41,42 The mucosa of the turbinates consist of 1) goblet cells that produce mucous, 2) ciliary cells that cause movement of mucous and micro particles, as well as filtration, and most importantly 3) the underlying vascularity.43 Submucosal tissue can create vasocongestion and is related to migraines and cluster headaches (part of the sympathetic and parasympathetic response in the vascular layers).



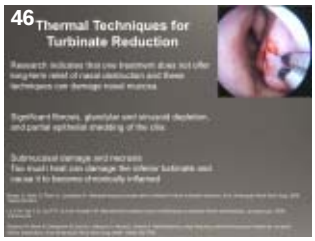


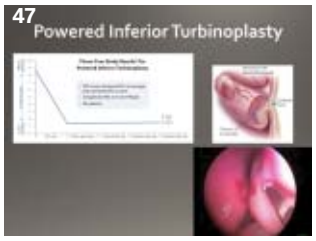


Treatment for the ITs begins with the goal of maintaining normal physiology: providing airway heating, moisturizing, immune defense and daily phases of turbinate volume change. Other goals are to eliminate obstruction, to maintain laminar flow with low perioperative morbidity and to avoid long term morbidity such as atrophic rhinitis or empty nasal syndrome. Surgical treatment can include extramucosal versus submucosal resection, partial turbinectomy, lateral outfracturing and ablation with an energy source such as electrocautery, LASER, chemocautery, or cryotherapy. 44

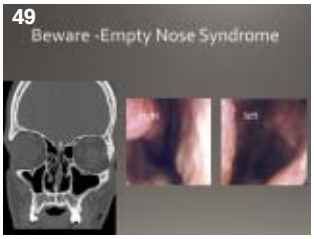
Medical treatment includes Ipratropium Bromide spray, (0.03%), infra-turbinate injection of botulinum toxin, steroid sprays, topical Cromolyn Sodium, antihistamines and nasal decongestants.45 If the patient is using Neo-Synephrine or Afrin chronically, there can be a rebound effect. Preparation for surgery includes stopping these treatments 3 to 4 months before surgery with replacement steroid sprays. All topical treatments are then stopped one month prior to surgery.

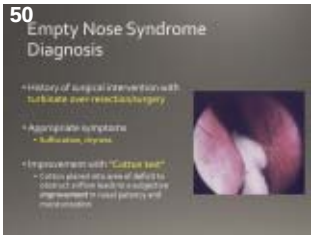
Thermal treatments can cause fibrosis, chronic inflammation and significant reduction in normal function of the turbinates. These treatments should be avoided.46 Powered inferior turbinoplasty appears to be the best way to address hypertrophic turbinates. These instruments can remove submucosal tissue with an intra-tubular approach and provide better function of the turbinate mucosa.47,48





Empty nose syndrome is very difficult to correct and can occur after aggressive resection of the turbinates. 49 A cotton test can be used by placing a moist cotton ball into the nose. By producing temporary obstruction, the patient will experience improvement in nasal patency and moisture sensation, supporting the diagnosis of the empty nose syndrome.50





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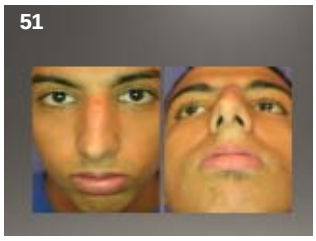
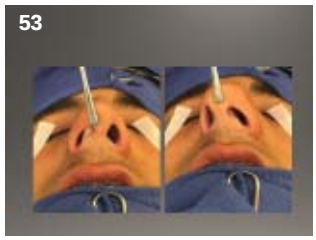
Case Studies: Arun Gosain, MD

Patient 1:

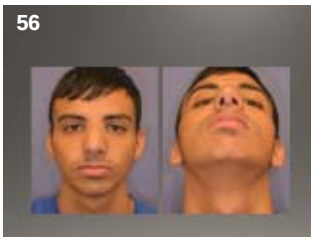


51,52 This is a 17-year-old patient with previous nasal trauma and difficulty breathing. The patient has concerns about nasal appearance, and reports that the dorsum of the nose is worse since the accident.

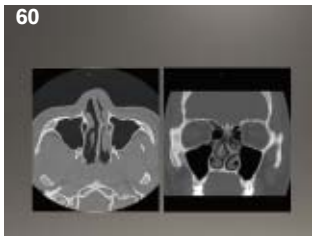
Findings include a restricted nasal valve area, a dorsal hump, and caudal septal deviation to the right. 53



Treatment involved open rhinoplasty with evaluation and harvest of the septum, centralization of the caudal septum; Sheen spreader grafts using septal graft and nasal osteotomies. 54,55,56,57,58

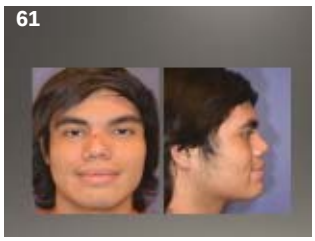


Patient 2:



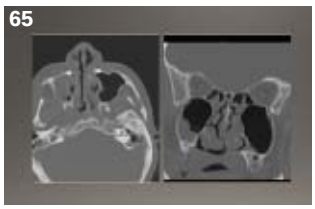
This is an 18-year-old with no previous history of nasal trauma, but with breathing difficulty. 59,60

On exam, the patient has a bifid nasal tip, a shallow dorsum, a lack of nasal tip support, and deviation of the septum to the right, noted on CT scan. Treatment involved harvest of rib graft for dorsal support, a columellar strut graft using rib cartilage, and a left inferior turbinectomy.61,62



Patient 3:

63,64This patient has a bilateral cleft nasal deformity with previous septal resection. The patient has breathing difficulties with external valve restriction. Nasal appearance is demonstrated in this picture; there is lack of hair on the lip scar. 65



Treatment involved open rhinoplasty. The vestibule was addressed with bilateral z-plasties. A columellar strut consisting of a resorbable plate was placed. Scars were incorporated for extension of columellar soft tissue.66,67,68,69

Questions during the Webinar

Question 1: How do you address an exposed cartilage graft in the dorsum of the nose?

Gosain: In all likelihood it would probably need to be removed in order to allow secondary healing if chronically exposed or infected.

Papay: I have had exposed cartilage in the columellar strut and usually can advance tissue to cover it. Also in the lateral crura, I have advanced and covered the cartilage. If it is chronically exposed and infected, I think it must be removed. It depends on how long has it been exposed and where it is.

Question 2: How Long do you leave intranasal stents post op?

Gosain: At least 3 months if addressing an external nasal valve collapse, especially in cleft patients. I will use a spacer after that and introduce it several times a day into the vestibule to prevent contracture.

Papay: It depends on what is meant by the question. If one is talking about septal splinting, I will leave in 1 to 2 weeks. If I am reconstructing the composite graft for vestibular stenosis, I will leave the stents in for 2 to 3 months—the longer the better and I will suture them in position in children. My opinion is that if you do a good job with support and structure you don't need a stent for too long. If you are worried about contracture and maintaining contour of the external valve, I will use stenting for several months.

Question 3: Please comment on the use of antibiotics when using resorbable plates.

Gosain: I will use antibiotics for 48 hours. If no exposed plates, it will probably not make a difference. If exposure is present, regardless of whether it is cartilage graft or resorbable plate, one can usually can get soft tissue coverage.

Papay: I do not use resorbable plates. I always go for autogenous reconstruction.

Question 4: Do you ever perform extra-corporeal septoplasty for severe deviation?

Papay: I have done close to 3,000 noses. Most have some type of septoplasty performed. I have probably done extra-corporeal septoplasty three times.

Gosain: I would agree

Papay: It is a good technique if you have a really severe "s" shaped deviation. Then you have to take the septum out and reconstruct with internal stenting grafts but it must be pretty severe.

Question 5: Are butterfly grafts ever used to improve the internal nasal valve? Do they work as well as spreader grafts?

Papay: Spreaders grafts are the workhorse. Butterfly grafts can work—anything can work if you can bolster it to something that does not move. I use the Fulcrum spreader graft and Park mattress stitches routinely, especially when I take down the dorsum. For the LLC I will use the umbrella graft or the kidney-shaped graft for support.