THE AMERICAN SOCIETY FOR RECONSTRUCTIVE MICROSURGERY

VOLUME 17, NUMBER 1
SPRING/SUMMER 2006

RECONSTRUCTIVE MICROSURGERY

Inside this issue:

What's New in Reconstructive Microsurgery

An overview of the 2006 ASRM Annual Meeting

Joseph Serletti, MD
2006 Scientific Program Chair

We had several goals for this year's ASRM scientific meeting. The first goal was to continue with the program excellence which had been clearly established over the last several years. Another goal was to include younger microsurgeons within the program so as to get our next generation involved in our meeting and to hear their cutting edge ideas. An important goal was to present a comprehensive update of established and innovative therapies within reconstructive microsurgery throughout the scientific program. Based upon the survey results and the verbal feedback during the meeting, I believe we, as a society, achieved our goals for our meeting. This was done largely by the excellence of the presentations given by our program participants in the paper sessions, panels, and instructional courses.

The scientific paper sessions were divided by subject categories and these included research, general reconstruction, hand and upper extremity, breast, head and neck, and lower extremity. The overriding theme in the research papers was composite tissue allotransplantation. Many papers looked at animal models designed to perform as well as study mechanisms of tolerance in cta. In the general reconstruction papers, several presentations gave useful modifications of established flap techniques. The economics of performing head and neck reconstruction was well discussed. An innovative technique of using the coupler for arterial anastomosis in breast reconstruction was presented. Most of the hand papers looked at peripheral nerve issues including regeneration, and the treatment of pain. The breast papers largely focused on comparing the various muscle saving or preserving techniques including the fTRAM, SIEA, and DIEP flaps. Recipient vessel selection was another common theme in the breast papers comparing not only the thoracodorsals and internal mammaries but also use of the internal mammary perforator. Head and neck papers focused on further alterations and use of the anteriorlateral thigh

continued on page 8

*** HOT OFF THE PRESS! ***

*** ASRM is launching a new campaign on Safety Awareness**

*** The Annual Meeting May Have a Special Surprise**

*** The ASRM Web site keeps members up-to-date all things microsurgical**

Check out Association News on page 7 for more on these hot topics.

Incoming President L. Scott Levin, MD (left) is greeted by outgoing President Chris Pederson, MD.

The Medicis of the Modern Age

EDITOR'S MESSAGE

Peter Neligan, MD

I recently had a resident who clearly had no interest in microsurgery. His three month rotation with me must have been hell on earth for him as my practice is almost entirely microsurgical. One day he said "Dr. Neligan, I think the stuff you do is amazing and I really admire what you do but how do you keep doing it? How do you keep up the pace of doing these difficult cases day after day?" My response was very simple... I love what I do! There are two things about loving something: one is that you tend to either be good or get good at it, the second is that no matter how difficult it is, it doesn't seem like work. I felt sorry for that resident because he obviously hadn't found something he loved to do. He's not alone. There are many trainees who look at the negative side of microsurgery, the long procedures, the intense concentration, the occasional catastrophic failure and decide it's not for them.

How then do we capture the interest of talented young people to take microsurgery to the next level? I see that as one of the roles of this society. We need to engage young people and let them share our enthusiasm from as early as we can possibly get exposure to them. One of the ways we can do that is through public education, getting the message out about what we do. This year Dr. Levin, our President plans to roll out a public awareness campaign on lawnmower injuries. This is important on so many different levels. It draws attention not only to the dangers of lawnmower injuries, it also lets the public know who we are and what we do: we are the people who deal with lawnmower injuries, among other things.

We also need to engage medical students and get them interested in what we do. We are very fortunate at the University of Toronto medical school to have easy access to 3rd and 4th year medical students. I realize that such is not the case throughout the country however we should make every effort at every opportunity to connect with medical students. Invite them to visit our OR's, show them what we do. These are the future microsurgeons.

I suggest that in the context of reconstructive surgery, industry is the present day Medici. We need to partner with them towards achieving our mutual goal.

Our trainees are looking at all aspects of the specialty. While the reality is that most will end up doing a mixture of cosmetic and reconstructive cases we need to engage them and let them see what is going on in the field of reconstructive surgery. What are the new developments, what are the latest trends? Bring them to meetings. My fellow, who is from the UK, came to the meeting in Tucson. He was enthused by the variety, the breadth and the complexity of what he saw presented. He said "All the players are here, it's fantastic" I hadn't really thought about it in that way but he was right.

So these are all good ideas but how do we put them into practice? How can we make it easier for residents to get to our meetings? How can we light the flame of enthusiasm? How can we show people what we do? I think one word summarizes what we need to do. The word is involvement. Let's not wait for someone to figure out a way of engaging medical students and residents, let's go out and do it. Let's bring them to meetings, Let's sponsor teleconferences with other institutions. Let's invite the major innovators as Visiting Professors. We can't do it alone though. We need outside help. Invariably these initiatives require money. Someone has to pay for the resident to get to the meeting, Running a teleconference costs money. The visiting professor needs to be transported and accommodated. Sure there are scholarships and bursaries available and we should avail ourselves of all that is obtainable but we also need to do more.

Several years ago I was involved in securing a large endowment from a wealthy patient. I had no idea how

RECONSTRUCTIVE MICROSURGERY

The mission of the American Society for Reconstructive Microsurgery is to promote, encourage, foster and advance the art and science of reconstructive micro-neurovascular surgery; and to establish a forum for teaching, research and free discussion of reconstructive microsurgical methods and principles among members.

President
L. Scott Levin, MD

Editor
Peter C. Neligan, MD

Executive Director
Krista A. Greco

Managing Editor
Anne B. Behrens

Reconstructive Microsurgery is published two times yearly for members of ASRM, a non-profit organization. The subscription price is included in the annual membership dues. All correspondence and address changes should be addressed to:

ASRM *Reconstructive Microsurgery*
20 N. Michigan Avenue, Suite 700
Chicago, IL 60602
312-456-9579
www.microsurg.org

to do it and felt very uncomfortable asking the patient for money. The patient was a businessman and he made it very easy for me. In the process I learned a lot. What he wanted was a costed long-term business plan. We formulated such a plan, dreaming big and putting everything in the plan that we could ever wish for. When we presented it to him he was interested. He dealt with it in exactly the same way he would deal with any business proposition. He questioned several of the proposals and made suggestions to improve them. He questioned the costing. The total price tag was enormous. We didn't expect that he would fund it all and we had no idea how much we could expect from him. Ultimately he funded three chairs and helped us raise a significant portion of the balance. I think this is a very good approach and one I have used successfully since. Not only did it secure us a large endowment but it got us thinking, got us to formulate a strategic plan and then gave us the basis to go forward. When another major donor came along a couple of years later we presented him with the same shopping list, the same plan. He chose to donate a research chair. We probably wouldn't have got that chair without the organization that was generated by drafting the initial proposal.

So who will be our benefactors, our business partners in this venture to engage the next generation of microsurgeons? Wealthy patients are wonderful but not generally plentiful and not always interested in supporting microsurgical endeavors. We must realize that we are small cogs in a very big wheel and the demands on philanthropic donations are enormous. However we should welcome the opportunity if and when it ever arises. What about industry? It would seem to me that this is our best bet. We should look at industry as our partners in this venture. Their interest in cultivating the next generation of reconstructive surgeons (a.k.a. customers) is as keen as ours. Traditionally, it has been somewhat frowned on to accept financial support from industry. Concepts such as infringement of intellectual freedom have been proposed as the basis of some of these objections. Medieval Italian art thrived under the sponsorship of families such as the Medicis. Many of these benefactors were engaged in commerce and built their family fortunes on what today we would call business and real estate. I suggest that in the context of reconstructive surgery, industry is the present day Medici. We need to partner with them towards achieving our mutual goal.

This society will be taking steps in this coming year to be more inclusive of industry. We plan to include a session during the annual meeting during which new products will be highlighted. This will be presented by the Chair of the Technical Exhibits Committee , not by the companies. So we will facilitate them getting their message to us without compromising the scientific goals of the meeting. It is important for us to be sensitive to the needs of our industrial partners just as we want them to be sensitive to ours.

Looking further ahead we need a long term strategic plan. We need to define where we want to go and we need to formulate a costed business plan. Each one of us can do that to a lesser or greater degree in our own environment. This will assure us a thriving and exciting future. RM

2006 ASRM Resident/Fellow Paper Award Winners

Best General Reconstruction
Al B. Cohn, MD
Epidermal Overgrafting Improves Coloration in Grafts and Flaps

Best Research
Chad R. Gordon, DO
A New Modified Technique for Heterotopic Femoral Heart Transplantation in Rats

Best Hand
Han Tsung Liao, MS
Poliomyelitis-like Paralysis of Upper Extremity - Surgical Strategy and Literature Review

Best Breast
Oksana Jackson, MD
Comparative Outcomes of Pedicled versus Free TRAM Flaps Following Post-Reconstruction Radiation Therapy: Is there a Difference?

Best Lower Extremity
Umar Hasan Choudry, MD
Soft Tissue Coverage and Outcome of Gustillo Grade III-b Mid-Shaft Tibial Fractures: A 15-Year Experience

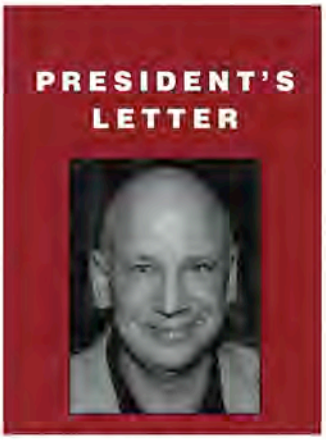
Best Head & Neck
Pierre Saadeh, MD
A Soft Tissue Approach to Treacher Collins Reconstruction

Call for Abstracts

Please visit www.microsurg.org to submit an abstract for the 2007 ASRM Annual Meeting, January 13-16.

The submission deadline is June 1, 2006. We look forward to your participation!

Going from Good to Great



L. Scott Levin, MD, FACS

Assuming the leadership of the American Society for Reconstructive Microsurgery is an honor, a privilege, and a responsibility. There is no question that I stand on the shoulders of giants, not only our founders who began this organization almost 25 years ago, but recent Presidents, including Robert Walton and Chris Pederson, who have raised awareness of reconstructive surgery and its impact, not only to our other surgical colleagues, but to our patients.

It is now our collective responsibility to fly the flag of the ASRM and to not rest on our accomplishments as a small but powerful society but to grow in stature and impact in the world of surgery. Jim Collins, a faculty member at the Stanford University Graduate School of Business, authored a book entitled *Good to Great* (2001), Harper Collins Publishers. In this book, Collins did research looking at good companies that became great companies and great companies that faded and ultimately failed. Corporate success is based not on leadership but more importantly is based on picking the right people. This is evident in General Electric under the helm of Jack Welsh. However more important than a single leader are the people who make up the organization. Collins' mantra is "if you get the right people on the bus good organizations become great." Empowering people and maintaining humility as a leader and steering the ship without micromanaging is the key to good companies becoming great. There is no question that the ASRM is on the pathway to greatness and has been for 23 years. Lessons from "good to great" will try to be incorporated into my presidency, and so I am calling on each one of you as members to "get on the bus" and make a contribution to our vibrant society. It is certainly important to encourage young members and not so much the "old guard" to participate in committees, to provide input to the direction of the society. All ideas are welcomed and encouraged and I expect them from each and every one of you. To date, several of you have written and asked, how can I get involved in the ASRM, how can I serve on a committee, how can I make a difference? As you practice in reconstructive microsurgery, whether it be as an orthopaedic surgeon or plastic surgeon, the answer is simple. Step forward and make your thoughts known to me and the council, and I assure you that we will put you to work to the greater good. It has been a little over eight weeks since we left Tucson and even during that meeting the goals of my presidency started to take form and come to life. The reconstructive council was held with Brian Kinney and Bruce Cunningham, the respective presidents of the PSEF and the ASPS. During this meeting, the needs of the ASRM were elucidated by ASRM members Charles Butler, Keith Brandt, Robert Walton, Chris Pederson and me.

It is our intent to rebalance the ASRM and include those who are interested in reconstructive surgery and reconstructive microsurgery, no matter what their discipline of origin is.

Basically, my message to the ASPS and PSEF was to "join us" because we have a certain platform. We welcome you to participate, but we will proceed with our initiatives with or without you. We were satisfied that the leadership of the ASPS and PSEF have recognized that reconstructive surgery is not only important but it is vital to the image of American and international plastic surgery.

Not to forsake my orthopaedic colleagues, I have had detailed conversations with many orthopaedic leaders, including Dr. Richard Gelberman, who will be this year's combined ASPS, ASRM, AAHS Presidential Lecturer, on how to infuse microsurgery back into orthopaedic surgery. Historically, when the ASRM was formed, there was a larger contingency of orthopaedic surgeons who were practicing reconstructive surgery doing replantation and free tissue transfer. Although the tide has shifted somewhat in North America with orthopaedics relinquishing microsurgical responsibilities to reconstructive plastic surgery, there are many orthopaedic surgeons who are not only members of this organization but have served in key leadership positions, not only in their communities, but nationally and internationally and, most importantly, in the ASRM.

Beginning with Dr. Pederson's presidency, it is our intent to rebalance the ASRM and include as many surgical factions as we can of those who are interested in reconstructive surgery and reconstructive microsurgery, no matter what their discipline of origin is. In separate conversations with Peter Neligan and Geoffrey Robb, I have initiated a potential dialogue with otolaryngology and head and neck microsurgeons

to join our society and join us on the podium and in scientific panels, because, indeed, many of them doing this work have a lot to offer us, and, as well, we to them. Lawrence Colen, who has promoted interaction with urologists particularly in Norfolk, has again been a champion in this multidisciplinary approach to microsurgery, and so that is one of the main platforms of my presidency: to pull in as many microsurgeons as we can to share knowledge of this still growing and exciting discipline.

Other initiatives have included discussion with Dr. Jim Beaty who is president-elect of the American Orthopaedic Association who will take our message of microsurgery back to orthopaedic leaderships so that we can basically be recognized by orthopaedic colleagues as vital to their specialty and patient care.

Other initiatives include collating meeting recognition of ASRM members and publicity related to patient care in our research. I am having a documentary produced on this. Discussions have been in the preliminary stages with the Discovery Channel and ABC News regarding this project. Locally, in my community and with the support of ASPS public service bureau, we are rolling out a lawnmower injury prevention program for children with the ASRM taking a lead in this. This is an important national crisis. Lawnmower injuries account for several mutilating amputations, injuries, and limb amputations in children resulting in life shattering experiences that are indeed preventable. The ASRM should get credit for initiating this program and seeing it through on a national and international level. Preliminary discussions have been made with the Safe Kids Foundation to further take this to the national scene.

Shortly after the microsurgery meeting, Randy Sherman and I attended the Extremity War Symposium in Washington DC. Several US Senators and highly ranking military surgeons attended this meeting. The highlight of this was a trip to Walter Reed to see our brave service men and women recovering from devastating injuries sustained in Afghanistan and Iraq. The courage of these young people and their determination, most of them amputees, inspired all of us who met them, to do more to outsource our services to the United States Military. Dr. Dana Covey, who is the Surgeon General of the Navy, and Dr. Mark Bagg, who was Dr. Pederson's presidential lecturer last year, is the Surgeon General of the US Army, are going to be instrumental in helping us join arms further with our military reconstructive colleagues that need to lend a hand and a micro-

continued on page 6

RECOGNITION PROGRAM

"Pathways to Leadership"

The American Society of Plastic Surgeons (ASPS) has introduced a "Pathways to Leadership "program that is based on the premise that future leaders are made, not born. The program combines elements of organizational education, skills training and mentoring/guided experiences while covering the philosophy, principles and practice of leadership, as they relate to plastic surgery, state and specialty society leaders. The goal of the program is to identify, train, encourage, and evaluate those individuals who will become future leaders in all of organized plastic surgery as well as in other fields, including academic medicine. The ASPS requested the ASRM to nominate individuals from our organization that have demonstrated a commitment, have potential for growth, and will likely serve in a leadership capacity in plastic surgery or organized medicine at the state, regional or national level.

Drs. Charles Butler and Michael Zenn have been accepted as participants in the 2006-2007 Pathways to Leadership Program developed by the ASPS. Drs. Butler and Zenn are among the 27 participants selected from more than 50 nominees. Selections were based on achievements to date and in recognition of the potential as a future leader.

ASRM
FUTURE ANNUAL MEETINGS

2007
JANUARY 13–16, 2007
Westin Rio Mar Beach Resort
Rio Grande, Puerto Rico

2008
JANUARY 12-15, 2008
Hyatt Regency Century Plaza
Los Angeles, CA

2009
JANUARY 10-13, 2009
Grand Wailea Resort
Maui, HI

2010
JANUARY 9-12, 2010
Boca Raton Resort & Spa
Boca Raton, FL

2011
JANUARY 15-18, 2011
Ritz Carlton Cancun
Cancun, Mexico

President's Letter

continued from page 5

scope to those service men and women who have specialized needs after injury. The Department of Defense is allocating $15 million dollars for research related to extremity war injuries. My participation and Dr. Sherman's participation in this program provide an opportunity for the ASRM membership to tap into these funds at the appropriate time. This is a perfect way to stimulate research and contribute to the efforts of our members with peer review funding that is slotted for the work we do.

In discussions with the PSEF, I am proud to announce that based on our initiatives at the Reconstructive Council a four-hour symposium will be held on microsurgical breast reconstruction at the upcoming Santa Fe Breast Symposium this year. This will be co-chaired by Dr. Michael Zenn and Dr. Joe Serletti who have worked hard to include our cadre of prominent breast microsurgeons for this meeting. This is a tremendous opportunity to shed light on our society and these kinds of partnerships are essential for our self esteem as well providing information to non-microsurgeons about our abilities. On the same token in 2007 the ASRM will put on a 4 hour mini symposium as part of the American Society for Surgery of the Hand. This was endorsed by Dr. Gelberman and while the ASSH is predominantly orthopaedic surgeons (roughly 70%) again this will be an opportunity to balance the score card by including the orthopaedic audience in reconstructive microsurgery.

One of the most important pleasures that I have with the ASRM is the ability to interact with our colleagues from around the world. Our international initiatives include an Operation Smile Flap Course that will be held May 13th & May 14th in Durham, where many of our members will be participating as faculty. Dr. Bill Magee is bussing down from Norfolk to Durham as part of his annual international program 25 surgeons who will attend the flap course that we hold in August each year. Of course we will hold this again in August but this will be a special course basically with zero cost to ASRM to provide a unique and highly specialized educational venue for surgeons around the world. It is essential that we in the first world contribute educational resources time and opportunities to those less fortunate than we are and many members have been on volun-teer missions through various volun-

American Society for Reconstructive Microsurgery
2006 New Members

ACTIVE

Ivica Ducic MD, PhD
Washington, DC

Gregory Dumanian, MD
Chicago, IL

Richard Kline, Jr, MD
Mt. Pleasant, SC

Babakb Mehrara, MD
New York, NY

Lee Pu, MD, PhD
Lexington, KY

Donald Roland, MD
New York, NY

Daniel Stewart, MD, FACS
Lexington, KY

Richard Winters, MD, FACS
Hachensach, NJ

CANDIDATE

Alessio Baccarani, MD
Modena, Italy

Anureet Bajaj, MD
Cincinnati, Ohio

Cesar Bravo, MD
Rochester, MN

Risal Satiaputra Djohan, MD
Cleveland, OH

Jules Feledy, MD
Washington, DC

Robert Hagan, MD
St. Louis, MO

Matthew Hanasono, MD
Houston, TX

Scott Hansen, MD
San Francisco, CA

Patrick Kelly, MD
Seattle, WA

Sami Khan, MD
Charlotte, NC

Reza Miraliakbari, MD
Hershey, PA

Brian Moore, MD
Houston, TX

Bohdan Pomahac, MD
Boston, MA

Eduardo Rodriguez, DDS, MD
Baltimore, MD

Gedge Rosson, MD
Baltimore, MD

Nassif Elias Soueid, MD
New Orleans, LA

Steven Vega, MD
Rochester, NY

Jason Williams, MD
Houston, TX

Jonathan Winograd, MD
Boston, MA

Sukru Yazar, MD
Kozyatagi, Istanbul, Turkey

CORRESPONDING

Marco Bumbasirevic, MD, PhD
Belgrade, Serbia

teer organizations and this is a formal liaison to Op Smile that we will begin this May.

I have been approached by other international microsurgical societies such as China and Italy and we are currently planning combined meetings in those countries to reach out a hand to our international partners and go to where they are rather than them coming to where we are and sharing our knowledge and experience. We are tentatively planning a trip to Italy in 2007 and a trip to China in 2008.

At the conclusion of the 2006 Meeting many members attended the Composite Tissue Allotransplanta-tion Society and I had the privilege of formally addressing the Society inviting them to participate formally in our 2007 Meeting. I am pleased to announce that Dr. Marco Lanzetta and Dr. Warren Breidenbach have agreed to do this and we have slotted one of our afternoons as dovetailing immediately into the CTA interim meeting. This society meets every other year for a formal meeting but they will have an interim meeting every year with the ASRM. We now have a formal alliance with the Composite Tissue Allotransplantation Society.

Finally no organization can function without its members. With the support and encouragement from Dr. Larry Colen, the President-Elect, we are initiating a member-to-member campaign with financial incentives to our members, to identify an individual in your community hospital or even in residency who is a potential member to the ASRM and "sign him or her up". My goal is to double our membership by 2007. Clearly this can be done if each member finds just one individual who would be willing to join and reap the benefits of this wonderful organization. I have already received letters from members of council identifying several individuals that can be candidates from orthopaedics, general surgery, otolaryngology, urology, and other surgical disciplines.

HOT OFF THE PRESS!
ASSOCIATION NEWS

Safety Awareness!!! -

The ASRM is launching a lawnmower injury prevention campaign in June. June is Safety Awareness Month—visit **www.microsurg.org** for more information. Watch your mail for details on how you can participate and make a difference.

Annual Meeting -

In the near future we hope to be announcing the details of a concert event to be held in Puerto Rico during the Annual Meeting. A portion of the proceeds from this event is designated to help the victims of hurricane Katrina. This announcement will be made via email and posted on **www.microsurg.org.** This will definitely be one not to miss!!!

Web Site -

Keep up-to-date on the associations events, campaigns and press releases by visiting the official website of the ASRM at **www.microsurg.org.** This website also houses the listing of ASRM committees and its members as well as an up-to-date membership roster.

We are changing our bylaws to open the ASRM up to those who do mainly reconstructive surgery. We feel that this clearly has merit and those surgeons should be a part of our society. Finally the financial success of an organization based on stewardship of funds and of assets. I am pleased to report that ASPS and PSEF, for their general campaign, has agreed to provide matching funds for any funds that we contribute to the PSEF. Discussions have been preliminary related to this. Also, I have written Gene Wurth, from the Orthopaedic Research Educational Foundation, to allow our members who are orthopaedists to contribute to this research fundraising tool, with a direct kickback to the ASRM Research pool. Dr. Robert Walton initiated discussions with council regarding a foundation for microsurgery, and we will continue to explore this to provide resources for the future. We will be partnering as well with corporations, to provide not only annual meeting support, but scholarships for our under privileged international colleagues, to support them attending the meeting. This promotes our sense of volunteerism and giving back to those less fortunate than we are.

As you can see my agenda is full, and many of our goals are in the process of being completed or have been completed, such as the Santa Fe Meeting, and our partnership with the American Society for Surgery of the Hand. My door is open, my pager is on and my e-mail is read several times a day. My information is as follows: office 919-684-2472, pager 919-970-5472 and my e-mail levin001@mc.duke.edu. You are important to me as a member, as a colleague, and as a friend. Best wishes for a prosperous spring and I look forward to working with each of you over the course of the next year. **RM**

2006 Annual Meeting

continued from page 1

flap, secondary reconstruction in the face of recurrent tumor, and head and neck reconstruction in the elderly or medically compromised patient. Lower extremity topics included functional muscle reconstruction as well as long term outcomes in large trauma series and modifications in foot and ankle reconstruction.

The panels were also very well received. It is clear that each panelist gave a substantial amount of thought into their assigned presentations. The educational model panel gave further insight into how to adequately train our residents in reconstructive microsurgery. The successful free tissue transfer panel included input from a surgical attending, a recent resident, an anesthesiologist, and a hematologist on the "make or break" decisions which lead to free flap success. The craniofacial/microsurgery panel looked at those special patients who require combined care from craniofacial surgery and microsurgery. Revising your reconstruction panel was given by four very experienced surgeons who provided an enormous clinical experience and time-tested advice on secondary reconstructions.

This year's instructional courses included many new courses to reflect the clinical expansion of reconstruction microsurgery. The new courses this year included management of tibial osteomyelitis, management of thrombosis, optimizing results in mandibular reconstruction, perforator flaps: getting started, sarcoma reconstruction, immunology for microsurgeons, new options for vascularized bone grafts, successful microsurgery in a community hospital, update on research in microsurgery, CPT coding for reconstructive surgery, the sural artery flap in lower extremity reconstruction, and replantation: are we making any progress. All the courses, both new and old, were very well attended with

continued on page 10

2006 Day at the Links Golf Tournament Results

First Place Team, won in scorecard playoff (66) (-6)
Joseph Disa, MD; Jeffrey Friedman, MD; Gabriel Kind, MD; and Damon Spiegel

Longest Putt #9
Michael Neumeister, MD

Closest to the Pin #3
Chad Gordon, MD

Longest Drive #18
Helga Toriello

American Socie 2006 Council an

COUNCIL

President
L. Scott Levin, MD, FACS

President-Elect
Lawrence B. Colen, MD

Vice-President
A. Lee Dellon, MD

Secretary
Peter C. Neligan, MD

Treasurer
Keith E. Brandt, MD

Treasurer-Elect
Joseph M. Serletti, MD, FACS

Immediate Past President
William C. Pederson, MD

Historian
Neil F. Jones, MD

Senior Members at Large
Gregory R. D. Evans, MD, FACS
Michael W. Neumeister, MD

Junior Member at Large
Charles E. Butler, MD
Alexander Y. Shin, MD

Program Chair
Michael R. Zenn, MD

or Reconstructive Microsurgery ommittees

COMMITTEE APPOINTMENTS

Audit
Jeffrey D. Friedman, MD, *Chair*
Elisabeth K. Beahm, MD
Michael R. Zenn, MD

ASPS Board Seat Representative
Robert L. Walton, MD, FACS

Ad-Hoc Breast
Joseph M. Serletti, MD, FACS, *Chair*
Elisabeth K. Beahm, MD
Neil A. Fine, MD, FACS
Maurice Nahabedian, MD
Geoffrey L. Robb, MD
Aldona Spiegel, MD
Michael R. Zenn, MD

Buncke Lectureship
William C. Pederson, MD, *Chair*
David W. Chang, MD
L. Scott Levin, MD, FACS
Geoffrey L. Robb, MD
G. Ian Taylor, AO, FRACS, FACS, FRCS
Michael R. Zenn, MD

ByLaws
Julian J. Pribaz, MD, *Chair*
Gregory M. Buncke, MD
Anthony A. Smith, MD

Clinical Guidelines & Outcomes
Nicholas B. Vedder, MD, *Chair*
Howard N. Langstein, MD
Peter C. Neligan, MD
Michael W. Neumeister, MD

Ad-Hoc Complex Reconstruction
Fu-Chan Wei, MD, FACS, *Chair*
Lawrence B. Colen, MD
Gunter Germann, MD
William C. Pederson, MD
Julian J. Pribaz, MD
Milan Stevanovic, MD

CPT/RUC
Keith E. Brandt, MD, *Chair*
Gregory M. Buncke, MD
Raymond M. Dunn, MD
Daniel J. Nagle, MD
Scott D. Oates, MD
William C. Pederson, MD
Michael R. Zenn, MD

Education
Howard N. Langstein, MD, *Chair*
Paul S. Cederna, MD, FACS
Neil A. Fine, MD, FACS
Maria Siemionow, MD, PhD

Electronic Communications
Charles E. Butler, MD, *Chair*
Keith E. Brandt, MD, *Ex-Officio*
William Dzwierzynski, MD
Howard N. Langstein, MD
Peter Murray, MD

Ad-Hoc Composite Tissue Allotransplantion
Robert L. Walton, Jr., MD FACS, *Chair*
A. Lee Dellon, MD
Neil F. Jones, MD
L. Scott Levin, MD, FACS
Susan E. Mackinnon, MD
Maria Siemionow, MD, PhD
Thomas Tung, MD
Fu-Chan Wei, MD, FACS

Endowment
Robert L. Walton, Jr., MD FACS, *Chair*
Keith E. Brandt, MD
Joseph James Disa, MD
William A. Zamboni, MD

Finance
Lawrence B. Colen, MD, *Chair*
Keith E. Brandt, MD, *Ex-Officio*
Frederick J. Duffy, Jr., MD
Joseph M. Serletti, MD, FACS

Advisory Committee on Genitourinary Reconstruction
Lawrence B. Colen, MD, *Chair*
Charles E. Butler, MD
David W. Chang, MD

Godina Fellowship Selection
Lawrence B. Colen, MD, *Chair*
Zoran M. Arnez, MD, PhD
David W. Chang, MD
L. Scott Levin, MD, FACS
Peter C. Neligan, MD

Ad-Hoc Head & Neck Subspecialty
Peter G. Cordeiro, MD, *Chair*
Lawrence J. Gottlieb, MD
Michael J. Miller, MD
Julian J. Pribaz, MD

Ad-Hoc Journal
Berish Strauch, MD, *Chair*
William Lineaweaver, MD
Alexander Y. Shin, MD

Ad-Hoc Lower Extremity Subspecialty
L. Scott Levin, MD, FACS, *Chair*
Christopher Attinger, MD
Marko Bumbasirevic, MD
Raymond M. Dunn, MD

Ad-Hoc Media Relations
L. Scott Levin, MD, FACS, *Chair*
Maria Siemionow, MD, Ph.D.
Allen L. Van Beek, MD

Ad-Hoc Mentorship
Ronald M. Zuker, MD, FRCSC, *Chair*
Allen T. Bishop, MD
Geoffrey L. Robb, MD
Berish Strauch, MD

Membership
Lawrence B. Colen, MD, *Chair*
Elisabeth K. Beahm, MD
A. Lee Dellon, MD Ex-Officio
Gabriel M. Kind, MD
Peter Murray, MD
Milan Stevanovic, MD

Ad-Hoc Microsurgical Research
Maria Siemionow, MD, PhD, *Chair*
A. Lee Dellon, MD
Neil F. Jones, MD
Peter C. Neligan, MD
Michael W. Neumeister, MD

Nominating
William C. Pederson, MD, *Chair*
Allen T. Bishop, MD
David W. Chang, MD
Gunter Germann, MD
Robert C. Russell, MD

Ad-Hoc Outreach
Randy Sherman, MD, *Chair*
Gunter Germann, MD
L. Scott Levin, MD, FACS
Robert C. Russell, MD
Fu-Chan Wei, MD, FACS

Program
Michael R. Zenn, MD, *Chair*
Joseph Serletti, MD, FACS, *Ex-Officio*
Elisabeth K. Beahm, MD
Allen T. Bishop, MD
Gunter Germann, MD
Gabriel M. Kind, MD
Alexander Y. Shin, MD
Milan Stevanovic, MD
Joseph Upton, MD

Resident & Fellows Program
Elisabeth K. Beahm, MD, *Chair*

Technical Exhibits
Peter C. Neligan, MD, *Chair*
L. Scott Levin, MD, FACS
William Lineaweaver, MD

Time & Place
William C. Pederson, MD, *Chair*
Robert L. Walton, Jr., MD, FACS
Ronald M. Zuker, MD, FRCSC

Ad-Hoc Upper Extremity Subspecialty Advisory
Nicholas B. Vedder, MD, *Chair*
Warren Breidenbach, MD
Gunter Germann, MD
Jonathan Isaacs, MD
Neil F. Jones, MD

2006 Annual Meeting

continued from page 8

many of them having standing room only.

Each year, we award the best presentations given by a resident or fellow. This year, awards were given for the best paper in research, general reconstruction, breast, head and neck, hand, and lower extremity. For research, the best paper award was given to Chad R. Gordon, DO for "A New Modified Technique for Heterotopic Femoral Heart Transplantation in Rats." For general reconstruction, the best paper award was given to Al B. Cohn, MD for "Epidermal Overgrafting Improves Coloration in Grafts and Flaps." Oksana Jackson, MD won the best breast paper award for "Comparative Outcomes of Pedicled versus Free TRAM Flaps Following Post-Reconstruction Radiation Therapy: Is there a Difference?" Pierre Saadeh, MD won the best head & neck paper award for "A Soft Tissue Approach to Treacher Collins Reconstruction." The best hand paper award was given to Han Tsung Liao, MS for "Poliomyelitis-like Paralysis of Upper Extremity - Surgical Strategy and Literature Review," and the best lower extremity paper was awarded to Umar Hasan Choudry, MD for "Soft Tissue Coverage and Outcome of Gustillo Grade III-b Mid-Shaft Tibial Fractures: A 15-Year Experience."

I want to again thank Chris Pederson for both the opportunity and guidance he provided to me and my role as Program Chairman. I also want to thank the program committee and most importantly, all the presenters, moderators, panelists, and course instructors who really made this scientific program so successful. **RM**

The ASRM Council and the 2006 Program Committee would like to thank the following companies for their support and participation:

Allergan, Inc.
American Society of Hand Therapists
Aptis Medical, LLC
Arch Surgical
Ascension Orthopedics, Inc
ASPS
ASSI- Accurate Surgical
*** Proud sponsor of the ASRM Welcome Reception*
Baxter
Collagen Matrix, Inc.
Cook Medical Inc.
Creative Medical Designs, Inc.
DVO Extremity Solutions
EBI
Fluoroscan Imaging Systems
Gorge Medical
Guatemala Healing Hands Foundation
Hand Innovations LLC
Hand Surgery Endowment
IFSSH
Integra
Jan Marini Skin Research
KCI
KMI
Lippincott Williams & Wilkins
Medartis, Inc.
*** Proud sponsor of the badge lanyards*
Medlink USA
Micrins Surgical Inc.
MicroAire Surgical Instruments LLC
Microsurgery Instruments
ONI Medical Systems, Inc
Orthofix Inc.
OrthoScan, Inc.
Prescott's Inc
Saunders/Mosby (Elsevier)
SilverGlide Surgical Technologies
Small Bone Innovations, INC
*** Proud sponsor of the guest room key cards*
Springer
Stryker
Synovis Micro Companies Alliance, inc.
Synthes
TriMed
Vioptix

A picture gallery from the ASRM Annual Meeting in Tucson

David Green, MD (left), the President's Invited Speaker, with Chris Pederson, MD

Godina Lecturer David Chang, MD, FACS

Past President Ron Zuker, MD (right) enjoys some down time with a friend.

Buncke Lecturer Fu-Chan Wei, MD, FACS (holding plaque) with colleagues at the annual meeting.

A few members of the Johns Hopkins crew: Julie Park, MD, Eduardo Rodriguez, MD, A. Lee Dellon, MD, Gedge Rosson, MD, and Rachel Bluebond-Langner, MD

Julia K. Terzis, MD, PhD (far left) and Berish Strauch, MD (far right) enjoy some time off at the meeting.

Invitation to Attend

The annual meeting of the ASRM in 2007 promises to be one of our best yet. Our meeting venue returns us to beautiful Puerto Rico and the incomparable Westin Rio Mar resort. Both Scott Levin and I are committed to continue the longstanding tradition of presenting cutting edge topics in microsurgery, panel discussions, and instructional courses applicable to the clinician as well as the researcher. In addition, the interim meeting of the Composite Tissue Allotransplantation Society will be meeting, as well as the Narakas Society.

We have listened to your suggestions to improve the ASRM meeting. One often noted complaint was not enough family and free time during the day to enjoy the venue and camaraderie outside the meeting. We have responded to this complaint by restructuring the meeting. Similar to other meetings where activities, such as skiing, are featured without interference from the meeting, this year's meeting will have significant free time each afternoon and plenty of activities to fill them with. Over 20 hours of free afternoon time have been programmed in! While we have chosen to make this prime time available for your enjoyment, our goal has been to maintain the high level of educational content and not reduce the CME available for the meeting. We have done this in a number of significant ways. While the number of presentations will remain constant, the time for presentation has been curtailed. This has been partially offset by a necessary increase in discussion time for each paper. Evening panels have been added. Self-study computer modules will also be available throughout the meeting for additional and valuable patient safety CME.

Other members have asked for more presentation and discussion of complications and their management. Others still would like a forum to present interesting and unique individual cases, which would be of interest to us as microsurgeons. These single cases do not often warrant formal presentation on the podium. Both of these interests will be served in evening sessions. First, we will be presenting an award for the "Best Microsurgical Save" of the year. Submitted cases will be judged by an expert panel that will score cases based on degree of complication, originality of the microsurgical salvage, humor, theatrical ability of the presenter, and the response of the audience. No formal attire is required and yes, the bar will be open. The second award will be for the "Best Microsurgical Case" of the year. We all do great cases throughout the year. Here's your chance to share one with your colleagues and have bragging rights for a year by winning. Solicitations for these awards will be forthcoming.

Our Puerto Rican venue offers plenty of activities for our indulgence. Beautiful beaches, lush rain forests, daytrips to San Juan, golf, and poolside lounging are only a few of the attractions that await us. While others will be entrenched in work and the mid-winter blues, come enjoy yourself with your friends and family at the ASRM 2007 meeting, January 13–16th. You don't want to miss this one.

See you there.

Mike Zenn, MD, FACS

2007 ASRM Scientific Program Chair

INNOVATIVE MICROSURGERY

Interesting Scenarios in Perforator Flap Breast Reconstruction: The Bullet Proof Flap, Contralateral IMA, Adding the SIEV, and 3D CT Scans

Gedge D. Rosson, MD and Navin K. Singh, MD

Bullet Proof Flap

Our utilization of both deep inferior epigastric artery perforator (DIEAP) pedicles to supply one large abdominal flap stems from 1) the work of Dr. Elizabeth Beam on bilateral lower abdominal flaps to reconstruct one breast, and 2) the old concept of the Bilateral Inferior Epigastric Flap (BIEF) as shown in Dr. Buncke's classic book *Microsurgery: Transplantation - Replantation: An Atlas Text*. We identify that there is no overwhelming reason to divide the abdomen into two flaps. They can be left connected and harvested in continuity. This assures maximal perfusion to watershed zones.

Furthermore, if one of the anastomoses fails, there is likely to be only minimal partial flap loss because the other anastomosis may be able to compensate for additional venous drainage, or provide arterial flow via opening of collaterals and choke vessels. Certainly, we have seen very large flaps supplied by a single DIEAP pedicle, and our technique does add more time to the case, but it adds a significant amount of security in terms of both arterial inflow and venous outflow (not to mention decreasing the surgeon's stress level). Occasionally, there is very poor venous and/ or arterial collateralization across midline, necessitating this technique of using two independent pedicles.

Indeed, intraoperatively, once the first set of anastomoses are performed, the opposite artery and vein are noted to have a trickle. The opposite deep inferior epigastric artery demonstrates collateralized flow with bright red blood—albeit at low pressure—certainly more of a trickle rather than pulsatile flow. Similarly, the contralateral deep inferior epigastric vein shows venous drainage.

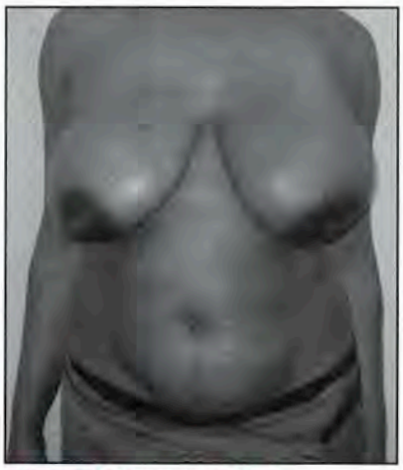


Figure 1: Pre-operative photograph

Our illustrative patient is a 42 year old woman who wears a DD cup brazier and wanted a reconstruction to approximately match her pre-operative volume (Figure 1). She seemed to have adequate infraumbilical adipose tissue, but the reconstruction required the entire lower abdominal flap. A single pedicle DIEAP flap generally will not supply Zone 4, and thus this patient's reconstruction required bilateral pedicles. When deciding between splitting the flap into two hemi-abdominal flaps versus using the intact BIEF, we opted for the BIEF for the reasons above (Figure 2). The first set of anastomoses was to the thoracodorsal vessels, and the second was to the internal mammary vessels. Post-operatively, she was happy with the volume, and required a mastopexy on the contra-lateral side for symmetry (Figure 3).

We feel that the advantages of the double-pedicle DIEAP free flap will be useful for the novice and seasoned breast reconstruction surgeon alike. In the handful of patients we

continued on page 14

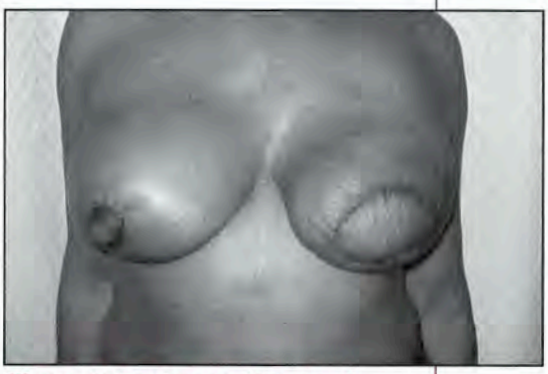


Figure 3: Post-operative result after contra-lateral mastopexy.

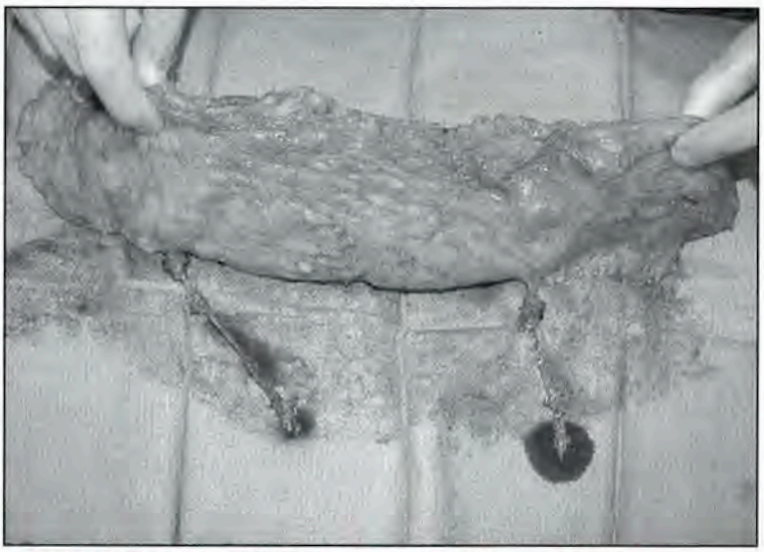


Figure 2: Intra-operative view showing bilateral DIEAP pedicles.

continued from page 13

have addressed with this methodology, we feel that thoracodorsal anastomoses should be performed first because exposure and set-up is more encumbering in the axilla, leaving the relatively easier IM anastomoses for the finale. Occasionally, we anastomose the second pedicle to the internal mammary perforators, thus abrogating the need for partial rib resection.

No Internal Mammary Vein!

Although absence of the internal mammary vein is rare, the DIEAP flap surgeon who routinely utilizes the IMA and IMV as recipient vessels will encounter this frustrating scenario from time to time. The most common alternative recipient vessels in a case of absent or atretic internal mammary vessels should be the thoracodorsals. However, in a patient with prior axillary lymph node dissection and/ or radiation, the dissection of the thoracodorsal vessels can be extremely difficult and can even add to the risk of lymphedema. For these reasons, we often avoid the thoracodorsal vessels when choosing our recipient vessels.

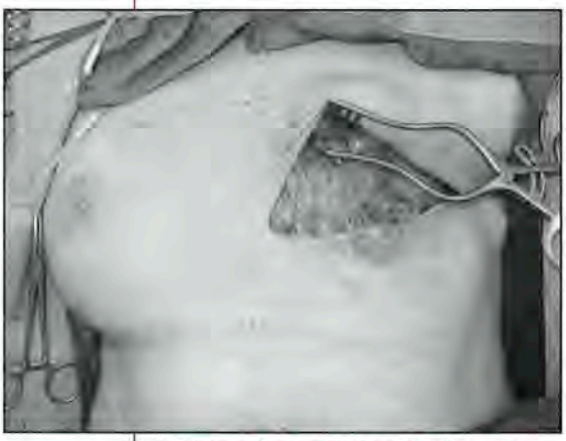


Figure 4: Ipsi-lateral internal mammary vessels, without vein.

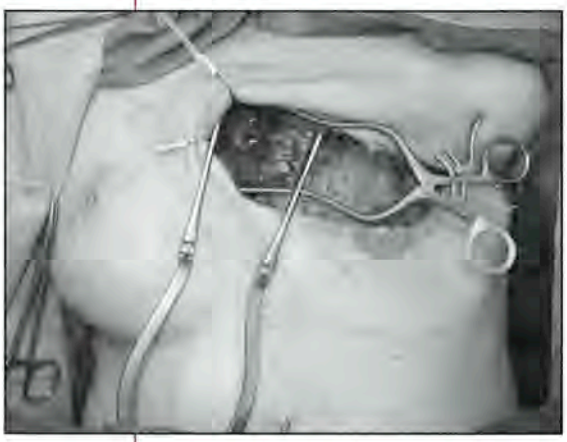


Figure 5: Dissection of the contra-lateral internal mammary vessels without lengthening the incision.

Recently, we utilized the contralateral internal mammary artery and vein as recipient vessels for two cases in which the patients did not have a usable ipsilateral internal mammary vein and the axilla was not accessible.

The first patient is a 46 year old woman with left breast cancer. She originally had a left mastectomy with implant-based reconstruction. Unfortunately, she required postoperative radiation therapy and ultimately developed capsular contracture. She wished to have her implant removed and replaced with autologous tissue from her abdomen. We harvested a DIEAP flap and planned to anastomose it to the internal mammary vessels. After resection of the cartilaginous portion of the left third rib, careful dissection of the vessels revealed a firm, scarred internal mammary artery, and only a diminutive internal mammary vein (Figure 4). We felt that she either had a congenitally atretic left internal mammary vein, or, more likely, she had significant radiation damage. In either case, we did not feel it was optimal for microsurgical anastomosis, and following it proximally did not result in a significantly larger vein. We therefore undermined the presternal tissues, resected the contra-lateral rib cartilage (Figure 5), and performed the anastomoses to the contra-lateral internal mammary vessels.

The second patient is a 55 year old woman with right-sided breast cancer who required a right modified radical mastectomy and a prophylactic left-sided simple mastectomy. Bilateral DIEAP flaps were raised, the cartilaginous portions of the third ribs removed, and the internal mammary vessels dissected. Once again, there was only an atretic vein! This right internal mammary vein was not adequate for anastomosis, despite topical vasodilators. This patient did not have radiation, and a congenitally absent or split vein is more common on the left. Post-operative questioning found that she had been the passenger in a significant motor vehicle collision five years prior to surgery in which she suffered a mild pulmonary contusion and remembers ecchymosis from the seatbelt. We hypothesize that she may have thrombosed her right internal mammary vein. Examination of the right thoracodorsal vessels found clips near the vein with adventitial evidence of stretching of the vein. We felt it would be safer to use the contra-lateral internal mammary vessels for the right breast reconstruction, rather than risk a venous anastomosis in or near a zone of injury. The left flap was later anastomosed to the left thoracodorsal vessels.

These cases point out the incredible versatility of the long pedicle of the DIEAP flap. Neither of our two patients (almost a series!) developed symmastia, and compression across the tunnel did not manifest.

Flap Venous Drainage in an African-American Patient:

Assessment of venous drainage in flaps in dark-skinned patients is inherently difficult. Capillary refill is exceedingly arduous to observe, let alone quantify. We find it useful to dissect the superficial inferior epigastric artery (SIEA) pedicle for a few centimeters when it is readily identified, even if it seems too small to support the flap on its own. In these cases, we save it to use for a second anastomosis if the venous drainage of the DIEAP could be inadequate. We think this is particularly helpful in the African-American patient when capillary refill is difficult to

assess—and this additional drainage is done to provide "insurance" even when no intra-op congestion is noted.

Our patient is a 62 year old woman with right-sided breast cancer requiring a right modified radical mastectomy. She requested autologous tissue reconstruction rather than a tissue expander and implant. A DIEAP flap was raised and anastomosed to the thoracodorsal vessels. During flap elevation, the SIE vessels were spared and dissected for several centimeters. It was nearly impossible to assess capillary refill in this patient, and the superficial inferior epigastric artery (SIEA) was moderately dilated. Therefore, the SIE vessels were anastomosed to the internal mammary artery and vein perforators, and rib resection thereby avoided. The vessel sizes matched well: the veins were anastomosed with a 1.5 mm microvascular coupler while the arteries, which measured one millimeter, were anastomosed with interrupted 10-0 nylon (Figure 6).

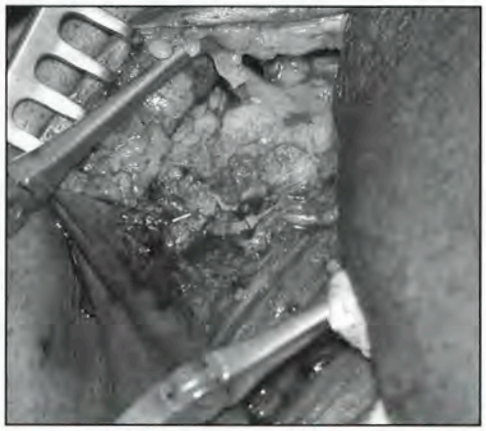


Figure 6: Anastomoses of the SIEA and SIEV to the internal mammary perforators in the 3rd costal interspace.

3D CT Scan

In addition to using the SIEV for additional venous drainage in the African-American patient, we will also pre-operatively plan to use the SIEV when it is seen to be clearly large on a pre-operative 64-slice multi-detector 3D CT scan angiogram to map the abdominal perforators (Figures 7 and 8). We have found the pre-operative CT mapping to aid in decision making and increase reliability of these lower abdominal flaps.

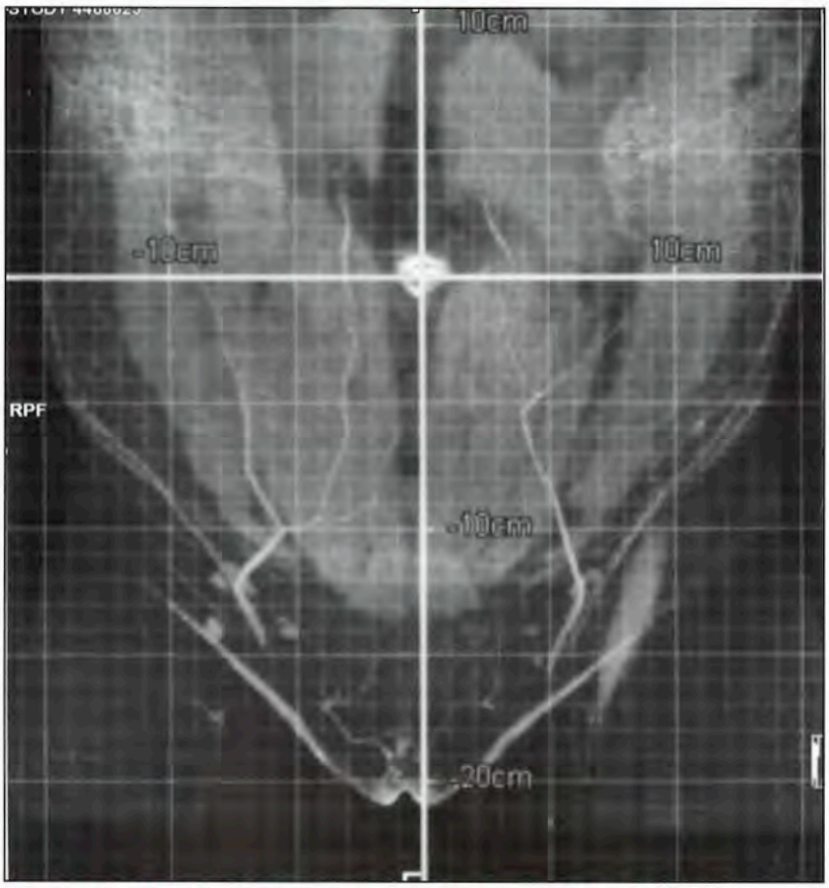


Figure 7: AP view of 3D CT scan showing superficial inferior epigastric vein.

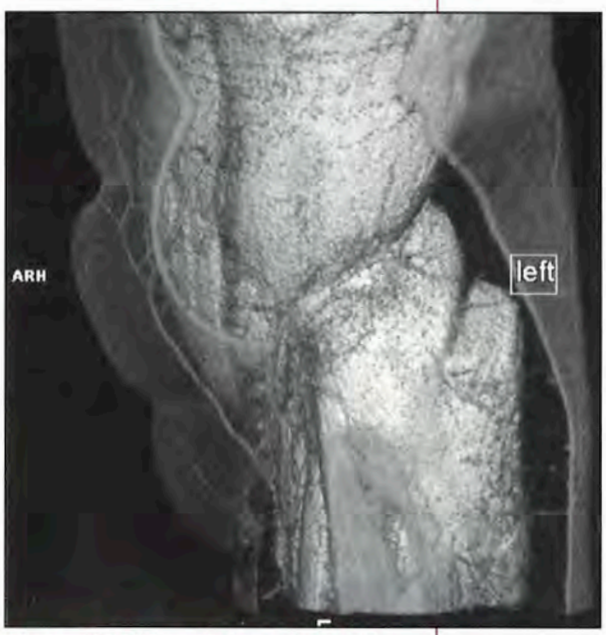


Figure 8: Oblique view of 3D CT scan showing superficial inferior epigastric vein.

These scenarios illustrate that even in a high-volume center where perforator flap breast reconstruction is routine, opportunities to creatively solve challenges do present. If you are ever going to see Elvis, you have to be looking for Elvis. RM

Article written by Gedge D. Rosson, MD and Navin K. Singh, MD, Johns Hopkins University School of Medicine, Division of Plastic, Reconstructive, and Maxillofacial Surgery.

"If you can't see it, don't do it."

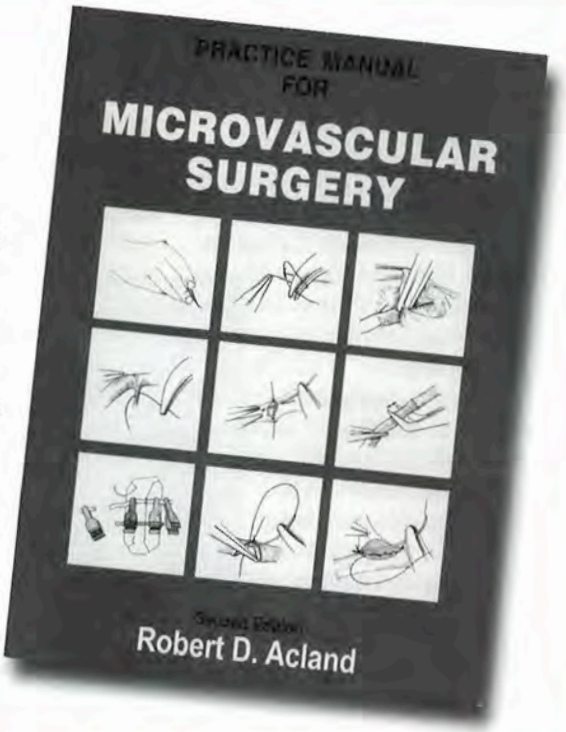
Bob Acland's classic *Practice Manual for Microvascular Surgery*, the foundation of training for a generation of microsurgeons, is available again, having being out of print for several years.

In response to continuing demand in developing countries Dr. Acland has given the copyright of the Manual to the Indian Society for Surgery of the Hand. Through Dr. Raja Sabapathy's good offices, the book has been reprinted in its original form. All proceeds of sale will go to the ISSH, to fund a traveling fellowship for Indian trainees.

Copies are available from:

Anatopica Inc.
2020 Winston Avenue
Louisville, KY 40205

The price is $20, (plus $2.50 for shipping in the U.S., $7.50 to Canada), payable by check.



RECONSTRUCTIVE MICROSURGERY

20 N. Michigan Avenue, Ste. 700
Chicago, IL 60602
www.microsurg.org

PRSRT STD
U.S. Postage
PAID
Documation