Hair Transplant Forum International
Volume 16, Number 5

Hair Transplant Forum International is published bi-monthly by the International Society of Hair Restoration Surgery, 13 South 2nd Street, Geneva, IL 60134. First class postage paid at Chicago, IL and additional mailing offices. POSTMASTER: Send address changes to *Hair Transplant Forum International,* International Society of Hair Restoration Surgery, 13 South 2nd Street, Geneva, IL 60134. Telephone: 630-262-5399, U.S. Domestic Toll Free: 800-444-2737; Fax: 630-262-1520.

President: Paul T. Rose, MD, JD
Executive Director: Victoria Ceh, MPA
Editors: Jerry E. Cooley, MD, and Robert S. Haber, MD
Managing Editor & Graphic Design: Cheryl Duckler, cduckler@yahoo.com
Advertising Sales: Cheryl Duckler, 262-643-4212; cduckler@yahoo.com

President's Message

Paul T. Rose, MD, JD *Tampa, Florida*


Paul T. Rose, MD, JD

It's hard to believe but it has been more than a year since our meeting in Australia. We are now approaching the meeting in San Diego, and I have begun to reflect on the past year serving as President of the ISHRS.

Over this past year the ISHRS has made remarkable strides. Many of the elements of the strategic plan initially put forth by Dr. Tony Mangubat and the Board of Governors have taken shape. These plans will continue to have a great impact on the ISHRS for years to come.

The training program and curriculum for physicians and assistants is well under way. Detailed protocols have been put in place for teaching physicians not only about surgical techniques but also the evaluation of hair loss, the consultation process, and the various aspects of a hair restoration practice. This year participants of the Basics Course will receive a set of CDs that cover the majority of material to be taught at the course, allowing for more in depth teaching at the course in San Diego and more time for interaction between the participants and the faculty. This foray into teaching with the use of multimedia and production of courses that can be put onto CD will allow us to provide coursework via our website as well. ISHRS members would be able to obtain CME with these courses and a possible plan may allow those interested in ABHRS certification to complete parts of the curriculum required for eligibility for the ABHRS examination.

The ability to provide CME credits is another ISHRS accomplishment. This year the ISHRS underwent the approval process for accreditation by the ACCME. As many of you know, under the direction of Dr. Paul Cotterill, the CME committee worked arduously to provide the necessary material and demonstrate the ability of the ISHRS to administer a CME program. We passed the review process and were commended for the high degree of preparation put into our material.

Our efforts to obtain greater awareness by the public and media are beginning to reap rewards. There have been multiple pieces about ISHRS doctors and the ISHRS that have been picked up by the media. A plan to put the efforts of OPERATION RESTORE and the ISHRS onto a major talk show is being pushed forward.

The creation of The Hair Foundation with the help of Procter & Gamble will also allow us greater access to the public. The foundation can help us provide important information to the public not only about hair restoration surgery but also hair loss and hair care products. As other alliances are created within The Hair Foundation, there will be increasing opportunities for the ISHRS, such as support of our meetings and the possibility of scientific research grants.

An initiative that may prove beneficial to the ISHRS is the move toward offering practice diversification. Under this plan ISHRS members can enhance their practices by learning about the use of lasers and IPL devices. Such devices can have a direct role in hair restoration. Other learning opportunities include the use of Botox, Restylane, and other fillers. By expanding the practice opportunities for the membership we also expand the opportunity for interaction with potential supporters of the ISHRS. Such cooperation can assist us in maintaining financial stability and possibly increase research funding.

Other important strides taken this year have included obtaining membership in the AMA Specialty and Service Society and opening a dialogue with ABMS regarding the possible creation of a subspecialty certification by the ABMS.

Discussions with the ABHRS continue about facilitating the means for ISHRS members to qualify to take the examination. We are also trying to define the interaction between the ISHRS and ABHRS to ideally suit the membership's needs.

As many of you know, changes have occurred in the Scientific Meeting. We have become increasingly focused on a scientific approach to the material being

continued on page 156

Co-Editors' Messages

Robert S. Haber, MD *Cleveland, Ohio*


Robert S. Haber, MD

I write this column just a few days before the anniversary of 9/11, and just a few weeks after the cessation of active conflict in the Middle East. Once again I am struck by the uniqueness of the ISHRS. An international organization with members from over 40 nations. An organization with members of every faith, of every race, and of both sexes. An organization that manages to respect everyone, and hold meetings at which Christians, Muslims, and Jews can share the podium, share ideas, share dinner, and most importantly, share friendships. Friendships that simply would not exist if not for the ISHRS providing a common focus. Friendships that I treasure above all others, with Arabs, Asians, Australians, Europeans, Israelis, North and South Americans, Persians (listed alphabetically), and some I'm not so sure about! It is nothing short of tragic that what we have is not understood and enjoyed by the rest of the world.

This is the last issue of the *Forum* before San Diego, and includes the lead article by Arthur Tykocinsky on his technique for "supermegasessions," the introduction of an automated FUE device by Pascal Boudjema, a discussion on the role of tissue expansion by Jeff Epstein, and an efficient planting method as presented by T.K Shiao and I-Sen Shiao. We also feature committee reports by Bob Leonard, Bessam Farjo, and Neil Sadick, as well as all of our usual columns, other articles, and an excellent review by Victoria Ceh of many of the recent ISHRS accomplishments.

I periodically still hear new members complain that the ISHRS is dominated by the same people. They complain that the lecturers also run the organization, sit on the committees, and make all the rules. While there is certainly some truth to that, it does not mean that the ISHRS has become dominated by an "old boy network" intended to keep power amongst a privileged few. Quite the contrary. The ISHRS was founded by individuals who strongly believed that a healthy future required actively seeking out youth and energy in the membership, then challenging them with tasks, and finally entrusting them with leadership roles. While it might not be quite as easy today to rise to the top as it was a decade ago, a newcomer today who has drive, enthusiasm, and a commitment to our field could easily find him or herself running a workshop, an aspect of the Annual Meeting itself, or even sitting on the Board of Governors in just two or three years. It helps to be able to party late into the night, particularly if there are any Australians around. Each year, those of us who have served the ISHRS since its inception ask each other "Who can we get more involved?" So if you are feeling left out, make yourself known. Submit an abstract for a presentation. Volunteer to join a committee. Challenge Russell to a drinking contest. But be careful, because once we know you can be relied upon, you will never feel left out again, and may be amazed at how much work the Society requires. Feel free to stop me anytime in San Diego and ask how you can become more involved. I have lots of ideas!

Bob Haber, MD

Jerry E. Cooley, MD *Charlotte, North Carolina*


Jerry E. Cooley, MD

Late night television talk show host David Letterman has a recurring skit called, "Is it anything?" The curtain next to his desk rises to reveal someone performing an unusual and often absurd stunt, such as a man balancing on a ladder while juggling. Following the stunt, the curtain is lowered while Letterman and his sidekick Paul Shaffer debate whether the act was "something" or "nothing."

I was reminded of the Letterman skit as I was thinking about our upcoming Annual Scientific Meeting in San Diego. There will be many presentations in rapid-fire succession for much of the four-day conference. It can be difficult after each presentation to determine, "Is it anything?"

Our history shows we often overlook important new ideas and dwell for too long on things that will later be deemed either wrong or undesirable. It is humorous to flip through the pages of meeting booklets or early editions of the *Hair Transplant Forum* from ten years ago. It is easy to criticize how things were done in the past, and that is not my intent. I'm interested in why it often takes us years to conclude an idea is "something" while other times it does not.

In the early 1990s, Dr. Bobby Limmer presented the technique of using 1- to 3-hair grafts dissected from an elliptical strip using stereomicroscopic dissection. In 1997, Dr. Jerry Wong presented the technique of using "lateral slit" incisions for better aesthetic results. In 1999, Dr. Simon Rosenbaum presented the idea of trimming the skin edge during donor harvesting so hair would actually grow through the scar, making it less noticeable.

In each case, it took many years for these important ideas to catch on. I look back at my program booklet from the 1999 meeting in San Francisco and see where I made an asterisk on Dr. Rosenbaum's abstract on the trichophytic closure even though I have no memory of his presentation whatsoever. Like many of you, I did not begin implementing the trichophytic closure until Dr. Mario Marzola began talking about it a couple of years ago. Why didn't I recognize Dr. Rosenbaum's idea was "something" at the time? I wish I knew the answer.

It may be that we have a hard time acknowledging an idea is important unless it is being presented by a well-known surgeon. It is certainly true that we resist change, especially if it involves radical shifts. But I think, most important of all, we often conclude something new is "nothing" before we

continued on page 156

President's Message

continued from page 154

presented. The use of the OASIS system has allowed us to follow a useful protocol for presentation of material and better organize the meeting. Dr. Bernard Nusbaum has put a tremendous amount of effort into constructing the San Diego meeting. The quality of speakers and range of topics is unparalleled. I urge all members to join us at what will prove to be a historic meeting.

As this is my last President's Message I would like to express my sincere gratitude to all who have contributed to the ISHRS and our many endeavors. I would like to thank the Executive Committee, the Past Presidents, as well as the BOG and the dedicated committee members, who give their time without financial reward. I think that many ISHRS members are unaware of the time and effort put into planning meetings, curriculum, and the multitude of projects we are involved in. These ISHRS members spend hours in meetings, and hours on the phone and at their computers providing ideas and exchanging viewpoints.

The ISHRS cannot function without proper administration. Many of us, including myself, would be overwhelmed without the assistance of the ISHRS staff under the direction of Victoria Ceh. I would like to thank Victoria and her staff for all of the help they provided over this past year. I also need to thank Victoria for her insight and suggestions.

It has been a privilege to serve as President of the ISHRS. I look forward to seeing you in San Diego.

Paul T. Rose, MD, JD

Cooley's Message

continued from page 155

even ask, "Is it anything?" Having an open mind, suspending judgment, and giving each new idea some thoughtful consideration are the first steps to analyzing its possible importance. I'm hoping that five years from now I won't be kicking myself for missing "something" important in San Diego!

Jerry Cooley, MD

> "The past is a guidepost, not a hitching post."
>
> —L. Thomas Holdcroft

To Submit to the Forum

Please send all submissions and author consent release forms electronically via e-mail. Remember to include all photos and figures referred to in your article as separate attachments (JPEG, Tiff, or Bitmap). Be sure to ATTACH your file(s)—*DO NOT* embed them in the e-mail itself.

An Author Consent Release Form must accompany ALL submissions.

The form can be obtained in the Members Only section of the ISHRS website, under the section "Forum Newsletter," at **http://www.ishrs.org/members/member-index.php**.

Send article AND release form to:

Robert Haber, MD

E-mail: HaberForum@aol.com

Submission deadline:
November/December, October 10

Notes from the Editor Emeritus

Michael L. Beehner, MD *Saratoga Springs, New York* (***Forum*** Editor 2002–2004)

Michael L. Beehner, MD
Saratoga Springs, New York

The Forgotten Value of the MFU Graft

I have been performing hair transplant procedures since 1989, which has allowed me to be a part of the three "graft eras" in our specialty—namely, the large 4mm plug era (combined liberally with scalp reductions); the minigrafts (with a few micros) era; and, lastly, our present follicular unit era. A number of things pop into my mind as I look back on some lessons I have learned over that span of time.

First, large numbers of very small grafts are far superior to smaller numbers of larger grafts.

Second, placing scars on the head and cutting out large swaths of skin is not a good idea. One pays for it with occasional scars that are difficult to hide, inevitable stretchback, and decreased laxity in the donor area resulting in wider donor scars.

Third, the feathering and gradation of all the peripheral borders, especially the front hairline, are terribly important and require a lot of FUs to accomplish, graduating from 1-hair FUs at the edge to 2-hair FUs, and then 3-hair FUs.

Fourth, an awful lot of potential patients in a hair surgeon's local region with hair loss will be interested in having this done—IF they are convinced they will end up with a natural appearance and the price will be affordable.

And fifth, there should be a very *comfortable fit* between what you want to accomplish in a hair transplant procedure and what your staff is capable of doing. You have to teach and inspire your staff so that they care about the final result as much as you do, and you have to continually advance their skills and make changes as you discover new, better, and different ways of doing things.

My own impression of the changes in our field is that our image has suffered immeasurably (and still does!) with all these "large-plug" patients running around, that the common perception of transplants in the minds of much of the public is this "pluggy" look. And I think that the rapid transition from the large grafts of the late 1980s to the appearance in the mid-1990s of FUs perhaps too quickly ran past the potential benefit that the "minigrafts" (MFU) had to offer. I suspect we were all very anxious—doctors and patients alike—to run as far in the other direction as we possibly could from the 4mm graft, and thus many embraced the "all-FU" approach as the only way to perform hair transplantation.

I will start out by saying that *using MFU grafts correctly is not easy* and is an art, just as using all FUs successfully is an art. I strongly believe that incorporating MFUs with FUs in hair transplantation is more difficult than using FUs alone. It calls for an acute sensitivity and judgment regarding hair characteristics and how they will translate later into actual appearance after they grow out. One has to know when to use them and when not to use them in a given patient. If someone with mediocre surgical and artistic ability wanted to quickly get started tomorrow performing transplants, I certainly would advise him or her to only use FUs, as it's much harder to get into trouble. But, performed correctly, I believe combining DFUs and TFUs (double and triple FU grafts) into the plan offers greater benefits for the surgeon, many patients, and your staff. Next is a discussion of the ***benefits and rationale for using MFUs*** in the overall transplant plan for most patients, followed by a review of what I think are the important ***factors regarding how to use MFU grafts.***

Benefits of Incorporating MFU Grafts

Although all of the following are important, I have listed them in the relative order of importance with which I appreciate their contribution:

1. MFU grafts better allow the HT surgeon to more easily create gradients of density. A typical HT case for us is filling in the entire frontal and midscalp areas with around 1,250 grafts (the equivalent of around 3,400–4,000 hairs). At a first session this would typically be around 900 FUs and 350 small MFUs (4–6 hairs each), and the number of MFUs drops at the second and third session, while the FU numbers increase proportionately. This allows us to use 1-, 2-, and 3-hair FUs at the front hairline, with rapid progression from one to the other over the front ¾ inch hairline zone. This same gradient is created at the posterior and side crease borders also.

2. MFU grafts have a predictable, excellent rate of survival near 100%. They are like "money in the bank"—you can count on them to grow every time! Nearly all studies to date, including four by myself, have shown that the hairs within MFU grafts consistently survive at close to 100%. In a study I did nearly 9 years ago with 1.8 and 2.0mm round minigrafts in the center of large sessions, and only looking at grafts placed at the *third* session, 94.6% of the hairs survived 6 months later. I believe the superior survival rate of MFUs relate to the fact that there is more tissue around the follicles, protecting them from trauma and dessication. In addition, hard-to-see telogen follicles are more likely to be present in a MFU graft than in a trimmed down FU. Each year we hear of larger and larger all-FU cases being done, but we still don't have any good studies proving that hair placed at these densities over large areas survives at a high percentage.

3. MFU grafts, properly placed, are, in my opinion, superior in predictably creating central density. They are predictable from one case to the next. The only factor that affects one patient's appearance of hair fullness relative to another's is the caliber of the hair shaft the patient possesses. In the next section, I will discuss what I feel "properly placed" entails. For

continued on page 158

Editor Emeritus

continued from page 157

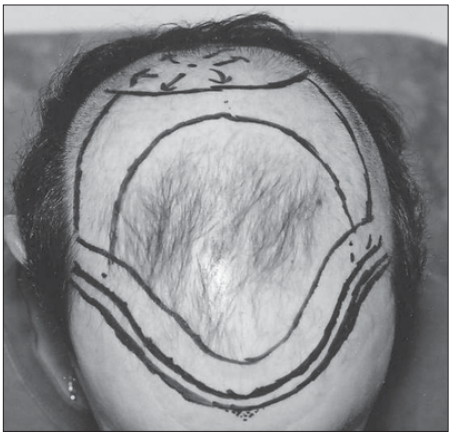

Figure 1. 35-year-old male with Norwood VII pattern of hair loss, before surgery. Note "shield"-shaped central area, which is to receive MFU grafts.

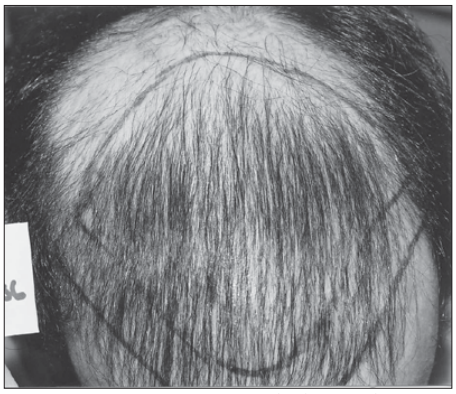

Figure 2. Same patient 13 months later with one HT session growing. Shield-shaped central area of forelock pattern received 260 × 1.3mm diameter MFU grafts.

Figure 3. Close-up of MFU grafts with acute angle and anterior/rightward direction, contrasted with FU grafts at the front hairline. (Hairline FU sites at session 2 are noted to be in place, prior to grafts being placed.)

all of our patients who have 3 sessions (and many of them who have only 2), when viewed from the top, the scalp cannot be seen through the hair in probably 95% of them. (See photos in Figures 1, 2, and 3.)

4. It is a more efficient way to move hair. Because of this, the duration of the case is not as long, the cost to the patient is less, the stress on the staff and the number of assistants necessary to perform a hair transplant procedure is less. In addition, the grafts that are transplanted are "out of the body" a shorter duration of time.

5. At subsequent surgeries it is easier to avoid damaging previously placed hair. Because of the spacing between the MFU grafts, it is easy to make the sites for the second sessions without "cutting the legs out" on the previously placed grafts.

Ideal Method for Using MFU Grafts

1. Only place them in central scalp areas that are on a relatively horizontal plane. They should not be placed too close to the front hairline edge, nor to the rear border of the transplant. I don't believe they should ever be used in the vertex (crown) or temple areas, or within the first 2cm back from the front hairline edge.

2. They must be placed at an acute angle. This allows for overlap and the creation of the illusion of density. MFUs placed anywhere close to a perpendicular angle will be terribly detectable, as this makes it impossible for hairs to naturally shingle over one another, thus giving the visual illusion of density. Most of my MFU grafts are placed at around a 30–35° angle. In the majority of patients, I *direct* the grafts on the left side of the scalp in an anterior and slightly rightward direction. Those on the right side are directed almost straight anterior. If the person is committed to a right-to-left styling pattern or if the existing hair is aligned in a predominantly right-to-left direction, then I direct the hair in a mirror image alignment to the above left-to-right pattern.

3. The MFU Grafts must be small in size, without too many hairs per graft. Our "workhorse" MFU recipient site is a 1.3mm round hole, cut with a titanium punch placed on a "depth control" holder. I insist that a MFU graft must have a minimum of 4 hairs per graft. Most have 4–7 hairs per graft, with 5 being the most common composition of an MFU. If the donor density is below average, thus making it difficult to consistently have a minimum of 4 hairs per 1.3mm site, then we go to a 1.5mm wide punch. We only use a 1.8mm punch in patients with white hair, in which we want to minimize damage to the MFU grafts during the dissection process.

4. Random pattern of distribution. I think it is important to avoid any alignment of "rows" when making MFU recipient sites, whether they are small slits or small round holes. I think this random pattern contributes to a more natural appearing result.

5. The grafts must be placed relatively close together. At the first session, a lot of the "infrastructure" is placed with these grafts. With the round grafts, I try and maintain a minimum distance between any two grafts of at least 1.4 disc diameters of the hole width. With slit sites, I try to maintain a 3mm distance between any two slits alongside near each other or aligned in front of or behind its neighbor. One must always be aware of preserving the scalp's blood supply and avoiding any chance of poor growth or, God forbid, necrosis.

*6. My personal preference is to use **round hole sites** when there is not much hair present and **slit sites** if there is a moderate amount of hair present.* In females, I use slit sites centrally in all patients. I also use slits in the frontal core areas of many males who have preserved a reasonable remnant density of hair there.

7. I think the best MFU grafts are cut with a stereoscopic microscope. The assistant who cuts the MFU grafts is given either a thick 11–13mm wide ellipse of scalp to work with or two 5–6mm wide strips. "Slivering" is actually done, similar

to preparation for FU dissection, only with the sliver being more of a "slab," which is cut around 2 FUs wide. With careful dissection, the boundaries of the FUs are not violated and are kept intact, thus minimizing transection.

8. It is very important to know who ***not*** *to perform MFU grafts on.* The surgeon must have the ability to picture how the various hair characteristics of a given patient will make an area of MFU grafts appear. If the hair is unusually dark against a background of very pale skin, then sometimes using all FUs is more appropriate. Also, if the patient is questionable for ever returning for a second procedure, this would be a reason to consider using all FUs. As mentioned earlier, we use FU grafts exclusively for the temples, vertex, all four borders, and for eyebrow work.

While I think there will always be a place for the "mega-graft" practitioners for those niches of patients that desire that approach, I still think that the large population of middle-class people out there with hair loss will be better served if more hair surgeons were capable of providing artistic "combination" FU/MFU grafting at a moderate price and with moderate size staffs

9. Control the depth of all MFU graft recipient sites. This is facilitated by first tumescing the upper subcutaneous layer with a saline/epinephrine solution and by using a depth-control holder for the punches or blades that are used. One wants to avoid damaging the deep subcutaneous vascular complex.

10. Try to have the graft fit the recipient site size as closely as possible. A fit without too much "wiggle room."

11. Do not use MFU grafts on more than 3 sessions. This is especially true of round graft sites. First, hardly any patients require more than 3 sessions. But if they do, I think these types of grafts may start to compromise the scalp's vascularity if used a fourth time. Speaking of the scalp's vascularity, we have a minimum of 8 months between the first two procedures, and 10 months between the second and third procedures.

12. Learn how to sharpen round punches. We use the "Companion" model from Rx Honing Co. in Indianapolis, and use two resins on separate leather surfaces to sharpen each punch. We first clean a punch that has been used and then dry heat sterilize it (avoid steam sterilization to avoid rusting). After I have next sharpened the punch, it is put into a sterilization clear plastic bag and again autoclaved. Even if one doesn't use round sites, various sizes of round punches are invaluable for doing corrective work that involves removing old large grafts.

I spent a lot of time thinking about Bill Rassman's article, "The Business of Hair Restoration: Can New Doctors Penetrate It?" a few months ago in the *Forum* (March/April 2006;16[2], p. 47) in which he lamented that it is getting almost impossible to get started in our specialty. One almost needs to be able to finance a staff of 8 people sitting around with their microscopes until their surgeon gets busy enough to have them do anything. If you don't have the large staff in place and the capability to do 3,000 grafts, then you are perceived as incapable of doing an acceptable transplant. It's a "Catch 22" situation, and it has caused a lot of good practitioners to abandon hair transplantation. While I think there will always be a place for the "mega-graft" practitioners for those niches of patients that desire that approach, I still think that the large population of middle-class people out there with hair loss will be better served if more hair surgeons were capable of providing artistic "combination" FU/MFU grafting at a moderate price and with moderate size staffs.✧