INTERNATIONAL SOCIETY OF HAIR RESTORATION SURGERY

HAIR TRANSPLANT forum INTERNATIONAL

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Lateral, Dense, Mega—Is This the Future?

Jerry Wong, MD *Vancouver, BC, Canada*

See page 34 for information on booking your flights and hotel for Sydney.

The past 1–2 years have been pretty exciting for us. After seeing multiple cases of 4,000 FUs dense-packed using lateral slits, we're convinced that for patients with advanced hair loss (Norwood 5 or 6) these sessions are ideal. There has been a lot of very positive feedback from both patients and colleagues. Following is how we approach and do one of these megasessions.

As Figure 2 shows, perpendicular slits are cut perpendicular to the direction of hair flow with the blade handle slanted to match the existing hair angle. With this technique, the slits "sandwich" the grafted hair shaft to consistently maintain a much more acute angle during the healing process. The closer grafted hair matches existing hair the better it blends and thus the less detectable it becomes. The angulations and the resulting "shingling" effect will also provide improved coverage.

Figure 1. Pre-op and 8 months post-op side view of patient in mid-40s with 5,825 follicular.

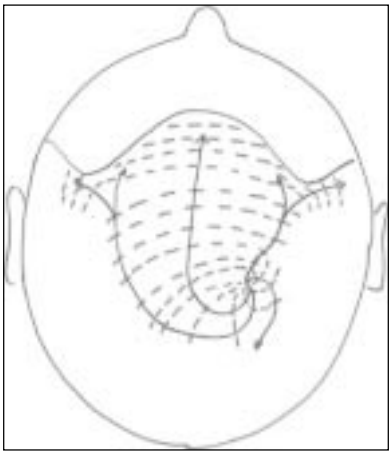

Figure 2. Figure showing hair direction and plane of incisions.

This procedure has been made possible by the following two technological advances:

1. *Dr. Limmer's microscopic slivering and graft dissections.* Since adopting this technique, our graft quality and graft count have both dramatically improved. In our clinic we have 20 cutting stations using the Mantis microscope.
2. A blade cutter making custom-sized razor recipient blades (Figure 3).

To minimize vascular and tissue damage we use only the chisel tip, and because these blades are so sharp there is no need to use the pointed tip. The chisel tip creates a more exact and shallow pocket for the grafts.

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President's Message

E. Antonio Mangubat, MD *Seattle, Washington*

"It is more important not to operate badly than it is to operate exceptionally well."

—Jack Anderson, MD

E. Antonio Mangubat, MD

The practical nature of medicine is that all physicians are not created equal; certainly in terms of knowledge, skills, and artistry. Dr. Anderson's wise words summarize the dilemma the HRS specialty faces today. There is a relatively small enclave of surgeons worldwide who epitomize artistry in HRS and continue to share their skills with all who are interested in learning. In fact, this is the old way of passing medical knowledge forward before the days of internships and residencies. Unfortunately, it is the most inefficient and unreliable way of educating physicians new to HRS.

Although the ISHRS takes physician education very seriously, we are not currently capable of turning out physicians competent in HRS. More striking is that *there is no formal and reliable way of turning out competent HRS physicians in today's medical environment*. As shocking as this may seem, consider the facts. What medical specialty has a residency capable of training a surgeon to perform HRS to the level we expect today? The sad answer is that no formal residency program exists today that can accomplish the task. This is precisely why we must consider HRS a true specialty and develop programs to fill the educational void if we are to expand our specialty and establish credibility.

Unfortunately, the surgeons most prone to suboptimal results are newcomers to the field. Even surgeons with vast experience in other surgical specialties, such as plastic and general surgery, are likely to achieve poor results due to lack of education in basic HRS skills and artistry, and the absence of a skilled HRS team. The surgical portion of HRS is deceptively simple and most experienced surgeons do not appreciate the details necessary to achieve acceptable results. Perhaps the most striking example, we cannot achieve our current level of results without an experienced surgical team.

The traditional surgical procedure requires the surgeon to primarily perform the procedure. On the other hand, hair transplantation requires the team to perform the majority of the surgery. Cutting and placing grafts is the most time-consuming segment of the operation. Assembling and training that team is the Achilles heel of our specialty, because without the HRS team, we could not attain the height of achievement we observe today. This is precisely why we must turn our attention to the HRS surgical assistant. We need to nurture their education, create a formal curriculum for them, and ensure they have adequate surgical skills so that they can operate in any physician's office. This is analogous to the school of surgical technology offered in many regions of the United States and the world. Any certified surgical technologist (CST) is capable of operating competently with virtually any surgeon in the world. While it is true that CSTs must learn the specific nuances of each surgeon, their basic skills will bring them up to a level where they can quickly adapt to any new surgical environment. The surgeons in our Society will understand this concept.

HRS assistants are currently in short supply and each individual physician must take on the responsibility of training each new assistant hired. Regrettably, each physician's investment of time, money, and energy in training their assistants is always at risk of losing them to illness, marriage, transfers, and to their competition. To address this severe shortcoming, the ISHRS is seriously evaluating the feasibility of creating a training academy for HRS assistants. Each assistant will be given the same core education of basic anatomy and physiology and be surgically trained in graft preparation, handling, and placement.

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Co-Editors' Messages

Michael L. Beehner, MD *Saratoga Springs, New York*


Michael L. Beehner, MD

Some Final Thank-You's

This month it is a somewhat nostalgic task to pen my final column, as it is my last issue to edit. It has been a great run for Bill and me. I'm sure Bill would agree that the past three years have been a work of joy, lots of hours on the computer, and, at the same time, a true privilege to be a part of. I would like to take this occasion to thank a number of people: The ISHRS, for having the confidence in Bill and me and giving us the opportunity to head up the *Forum*. Cheryl Duckler, our invaluable copy editor in Chicago, who took all of our rough copy and notes and made it into an elegant, professional looking journal—her advice and suggestions were always "right on" and enhanced our articles tremendously. To Victoria Ceh, who tirelessly contributed suggestions and performed our "final edit" on every issue, always in a helpful way. What a treasure she and Cheryl are for the ISHRS! To my partner, Bill, who was a joy to work with, always handling every small crisis and challenge with his usual wry sense of humor and never getting ruffled. He's one of those rare guys you could work with for 25 years and never exchange a cross word. To all our "regular column" contributors and all of you that sent in articles over the past 3 years. To Richard Shiell, whose sage advice and presence was always there for us to tap (and we did!). Richard warned us that, after we finished up our editorship, along with a sense of relief, we would suffer some withdrawal symptoms and actually miss being in the midst of the battle. And, finally, my wife, Harrilyn, who sacrificed some of my availability to her, so I could serve as editor.

More Positive TV Exposure for HT

The show Dateline (NBC) recently began following five men for one year who are each using one of five different treatment regimens for hair loss—hair transplant, lasercomb, herbal remedy, single medical therapy, and combined medical therapy. A recent show, which looked at their 6-month progress, appears to be a tremendous shot-in-the-arm for the HT field, as the hair transplant patient appeared to be leading the pack by several lengths. Alan Baumann, MD, of Florida, is the patient's surgeon. A follow-up show is planned at the one-year point, and, as we all know, will most likely show a huge increase in hair growth. The fact that so many people will have the opportunity to see results that counter the commonly held image of transplants being pluggy and detectable is a huge PR plus for our field. At the Orlando workshop, I heard Alan's talk on marketing one's practice, and he is certainly one of the Society's foremost experts in this area. Hopefully, one day soon the *Forum* can get him to summarize the points he made in that talk here on these pages. I recall a few years back seeing him featured on page one of *USA Today* with packaged Florida vacations combined with hair transplant surgery.

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William M. Parsley, MD *Louisville, Kentucky*


William M. Parsley, MD

As our time with the *Hair Transplant Forum International* comes to an end, one can't help but reflect on the past 3 years and assess our current health. We have a President, Dr. Tony Mangubat, who has boundless energy and a zest for advancing and uniting our field. We have two new techniques—lateral grafting and follicular unit extraction—that are developing rapidly and are changing our field. Diversity being our greatest strength, we have active, valuable members from nearly everywhere on earth. We have two new Editors—Drs. Bob Haber and Jerry Cooley—who already are developing innovative and educational ideas. We have the seeds of future landmark developments—hair multiplication and holding solutions. In short, the health of the field of hair restoration is very good!

Having observed hair restoration grow and develop for over 30 years, it has occurred to me that there are several categories of doctors who have contributed greatly to our field: 1) thinkers, 2) appliers, 3) scientists, and 4) promoters. Frequently an individual can be several of these. Thinkers are always coming up with innovative thoughts, but often don't act on them and they die in place. How many great ideas never leave the head? Appliers take promising ideas, then develop and apply them, often with great energy, in the clinical workplace. Scientists want to analyze the data of the appliers to determine their value and significance. Promoters explain and spread the idea or technique to the doctors and to the public. So who is the most important? They all are, and they need to work together. Absence of any of these steps could bring the contribution down. We have all seen what happens if a promoter acts without the other three in place. Promoters with integrity are of immense value to our profession, while shady promoters continue to give us a bad public image. Appliers are always listening to the thinkers, often taking their ideas and applying them—and we are the better for it. Now for the "scientists"; they are another matter. They are the "thorn" in everyone's side. For some reason, they want to act before the promoters. The audacity! I think that in spite of his awards and books, Dr. Walter Unger is still one of the most under appreciated members of our Society. Appliers and promoters see results in a general way and are quite confident in their validity; but to be accepted by the medical community at large, valid scientific data must be presented. Most of us really don't know how to interpret data and run valid scientific tests, and we are intimidated by them—plus, they are a lot of work. So the scientists are often a royal pain. We need to give them a little more respect, as they are the ones who give validity to the general medical field. It is a tough, often thankless job.

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Beehner Message

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To my knowledge, at least three of the Extreme Makeover shows have featured hair transplants as part of the cosmetic improvement project but, alas, the show's producers don't have the patience to wait for transplanted hair to grow. In the show I viewed, after Dr. Bill Rassman performed the transplant, they marched the patient right down to the hairpiece salon for a hair addition that was placed over the top of the transplant for the patient's official "coming out." (Bill privately told me that that particular patient had hair growth from his grafts right out of the gate, without the usual telogen dropout, threw away the piece after a few weeks, and is thrilled to death with his new hair!)

Focal Dense Packing

One of the frustrating aspects of hair transplant surgery is that when we try a new technique or approach, it is often several months or even a full year before we get to see the results from our new way of doing things. This was the case for me over the past year and a half, during which I have been performing what I call "*focal dense packing*"—transplanting small key areas of the scalp with "dense packing," using mostly 3-hair grafts at a density of 35–45 per cm^2 with either 18 or 19g needles. Most commonly, this was done either in the "frontal core" area or just behind the front-lateral hairline in the recession area. I have used this technique in about 50 patients and have seen around 20 back so far. While there have been some with gratifying results, overall I am somewhat disappointed with the hair growth, especially in the female patients, who made up the majority of these patients. In these women, I "dense-packed" a small 3–4 cm^2 area in the "frontal core" just behind the central portion of the front hairline, using a "stick-and-place" method. I am starting to strongly suspect that the key for obtaining good growth with closely packed FUs is to use *as small an incision as possible*. The study I presented in Vancouver of FUs placed at 20, 30, 40, and 50 FUs per cm^2 showed that hair growth remained high at 90% survival in both patients even at 50/cm^2, and, looking back, I think this is due to the fact that I used 20g needles (all FUs were 2 hairs apiece). Where I think I went wrong in my method of dense packing was trying to perform this technique with *all 3-hair FUs*, which in many patients with coarse hair required an 18g needle. I am continuing to use this technique, but in a smaller number of patients (until I see what results it brings), and am now limiting myself to using only 2-hair FUs and making recipient sites with only 20 and 19g needles. Many observers have commented on Drs. Victor Hasson and Jerry Wong's impressive results to the effect that maybe the key to their success is the small incision sites (and well-trained staff!), rather than the lateral orientation of the micro-slit recipient site. It will be interesting in the next few years to see how all of this pans out as we search for the magic formula for ideal FU growth.

Welcome

A final word of welcome and congratulations to our new editors, Drs. Jerry Cooley and Bob Haber, who will take over the reins of the *Forum* with the next issue, and who I am confident will continue the great tradition we have as ISHRS members of using the *Forum*'s pages to rapidly exchange information and learn.

Michael Beehner, MD

Parsley Message

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I would also like to remind the readership that our *Forum* and organization are run by some very valuable and extremely competent women. Victoria Ceh (what can you "say"?) is nothing short of incredible, along with her wonderful staff. Everyone thinks Dr. Limmer's biggest contribution to the field was in FUG, but in reality it was bringing back Victoria as Executive Director. The small, but growing, number of female doctors are some of the best in our field. And don't forget some of the most valuable women to us all—our assistants, as most are women. If all women dropped out of our field tomorrow, it would be far more devastating than if all the men left. Finally, all of us need to give a heartfelt thanks to Cheryl Duckler, our Managing Editor and Graphic Design expert, with whom working has been a true pleasure. For the past year she has been dealing with health problems of her young son Zach, yet has continued putting together the *Forum* with the special expertise she possesses. All of her family at the ISHRS wish the best for Zach. Most of all, I would like to thank my wife Mary Ann for both supporting me and putting up with me for these past 3 years. I could not have done it without her.

This is my last piece as Editor, even though it appears that most if not all of the past Editors will be taking part in the Editor Emeritus column. We have been blessed to be able to work with a great staff. Particular thanks go to Drs. Ed Epstein, Jennifer Martinick, Bernie Nusbaum, Vance Elliott, Jerry Cooley, John Gillespie, and Bob Leonard, who have freely donated their time and worked so hard over the past 3 years. Finally, I want to thank the ISHRS for allowing me to work with my good friend Mike Beehner for the past 3 years. Mike is a special individual, and I did not fully appreciate all of his skills and passion for the field until we had the chance to work together on the *Forum*. He is one of the most intellectually honest doctors in our field and has a unique ability to teach. I remember one meeting during which we had the Breakfast of Champions, where a faculty member would sit at each table and, during breakfast, answer any questions from regular attendees. Mike's table filled up first, and for a while I sat with 2 other faculty members at my empty table—one was one of the most brilliant members in our field and the other was the developer of the hottest new technique, both of whom also had empty tables. But that is Mike, the "pied piper" of the teachers. I will miss working with him.

Now is the time for an influx of new ideas and educational tools that the hands of Drs. Haber and Cooley will bring. I can't help but be excited by the abilities and energy they bring to the table. One note to the readership: Please don't hesitate to communicate with them. This *Forum* is for you, and your feedback is necessary and very much appreciated. I have been told by some authors that they were honored that we published their articles. The truth is that we were honored that they took the time to send them to us. Thanks to all of you.

William Parsley, MD

Notes from the Editor Emeritus

Richard C. Shiell, MBBS *Melbourne, Australia*


Richard C. Shiell, MBBS

Although I signed off my 9-year shift in the December issue, I find that I have been drafted to write the first EE Notes of 2005. In the future, readers will be getting the Notes from Drs. Bill Parsley or Mike Beehner or any of our six Editors Emeriti who feel moved to comment.

Our two new Editors, Drs. Bob Haber and Jerry Cooley, are already hard at work choosing the colors, fonts, and headers for their new baby. High on their agenda is getting more recognition for this baby—notably a listing in the important scientific Indexes. As we are all aware, the *Forum* is the premier print authority on what is happening in the field of hair restoration. The occasional article that appears in the dermatology or surgery journals is often poor in content and well out of date to the eyes of experienced practitioners by the time it is published. This can sometimes be a year or more after submission of the manuscript.

The delay is caused largely by the cumbersome "peer review" process that, while supposedly protecting the readership from mediocrity and scientific fraud, frequently serves to inhibit the transmission of truly original concepts while encouraging the continuation of the status quo *(see box)*.

The *Forum* has sidestepped the traditional peer review process these past 13 years by having a series of very experienced and farsighted Editors who act as built-in reviewers. The Editors frequently call on the services of fellow experts if any doubts arise about the merit of a particular paper. The fact that the authors and reviewers are well known to each other has the benefit of preventing some of the petty objections and occasional rejections that arise when egos and professional rivalries clash. The peer review process is rarely truly blinded. The expert reviewer nearly always knows the author of a paper by his style and subject, and the hapless author generally has a fair idea of the identity of the reviewer who has harshly criticised his paper.

Having said all this and pointing out some of the flaws in the peer review process, there is no way we can change it. If we wish our articles to be listed in the Index, we need to play by the established rules. It is up to our new Editors to negotiate some arrangement with the proprietors. It would be counterproductive to insist that all material in the *Forum* be peer reviewed as this would mean a great reduction in the speed and spontaneity for which the *Forum* has become renowned. Perhaps we could aim for one or two articles in each edition for a start and build from there. It would be great to gain greater prestige for our newsletter but we must be careful that in doing so we do not "*discard the baby with the bathwater.*"

(Norman Orentreich's original article, *"Autografts in Alopecias and Other Selected Dermatological Conditions,"* was rejected by the reviewers of *Archives of Dermatology* and later accepted by the lesser known *Annals of the N.Y. Academy of Sciences*. This immensely influential paper that founded the hair transplant industry was published in November 1959.

Closer to home, Dr. David Seager's truly outstanding article, *"The One Pass Hair Transplant—A Six-Year Perspective,"* was rejected by *Dermatologic Surgery* in 2002 on the grounds of "style" and published by the *Forum* a few months later to great acclaim.

The December *Forum*

Dr. Marcelo Gandelman's reverse extraction method certainly gives food for thought, but although there will be an absence of tiny circular scars, I wonder if the resultant linear scar will always be ideal. Some scalps seem to heal with an undesirable scar even when the closure is seemingly free from tension. This was the main rationale for the development of follicular extraction in the first place.

Dr. Cam Simmons is Dr. David Seager's partner in Toronto and his paper on hairline design (page 201) shows him to be a worthy successor. Most of the principles he expounds are not new but deserve a fresh airing in this well-written paper. I am not sure if his three new bony landmarks will be useful to the tyro in hairline design, but perhaps I have been "eyeballing" my hairlines for too long and have forgotten how difficult this was in the early days.

Also interesting was Dr. Craig Ziering's article (page 205) discussing his technique for the advancement of donor wound edges without traditional undermining techniques by making multiple perpendicular "tunnels." Time will show whether this technique proves to be as useful as claimed by the author. I certainly hope it is.

Dr. William Reed gives a timely warning about the potential dangers of oral spironolactone in older patients and particularly those with congestive heart disease and those already taking ACE inhibitors (page 207). While this will not be a problem to most of the thousands of young to middle-aged women taking spironolactone for hair loss, it is a warning to doctors that we do not know where the safety line actually lies.

Sydney Meeting

Only 7 months to go until the big meeting "Down Under" that you all say you have been waiting for these many years past. You need to book well in advance to use those accumulated travel points, so contact your airline immediately. If you are frightened by the prospect of the long flight to Australia, then break your journey up into two parts. Hawaii is ideal if flying from the American continent, or Bangkok or Singapore if you are coming from Europe.

Now let me give you a crash course in Australian culture to try and expel a few misconceptions:

1. Most Australians do not live in the Outback like "Crocodile Dundee," but in large modern cities within one hour's drive from the ocean. Most Aussies have never seen a koala, kangaroo, or emu in the wild.
2. Although Australia is home to an extraordinary range

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Editor Emeritus

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of man-eating sharks, deadly snakes, and poisonous spiders, jellyfish, and octopi, you are very unlikely to even see one, let alone be the victim of such critters. You are 1,000 times more likely to be hit by an automobile, which, for reasons known only to our Founding Fathers 200 years ago, travel on the opposite side of the road to those in America and most of Europe.

3. Most of the black skinned individuals that you will see on your visit to Australia will not be Australian Aborigines but Indian and Sri Lankan doctors and engineers, African taxi drivers, and American basketball players. Yes, Australia has a black indigenous population, the ancestors of whom arrived here some 30–50,000 years ago from what is now the Indonesian region (yes, well before man arrived in the Americas). They were treated badly by the Europeans after colonization began around 1788 and are now mostly very poor, of mixed-blood, and number about 500,000.
4. The cost of most goods and services is a little cheaper in Australia than in the USA, but it is a pity you did not come a couple of years ago when our dollar was worth US 50 cents (it is now around 70 c).
5. Australia uses the European metric system for currency, temperature, distance, weights, and measures so brush up on your kilos, hectares, kilometers, and degrees Celsius.
6. *"Giddaymate owaryagoin-orrite?"* is a common Aussi greeting/question. (Translation for the benefit of non Australians is *"Good afternoon sir. Are you well?")* The reply required is *"Fine, thanks"* or just *"Orrite-mate"* if you want your new friend to think you are a local.

More cultural pearls next month.
Seeya,
Richard Shiell, MBBS

President's Message

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They will have complete instruction in the use of all the instruments available to the HRS physician, including microscopes, backlit dissection blocks, graft cutters, multibladed harvesting scalpels, etc. At the end of their training, they will have earned a performance certificate that will quantify their skills (graft preparation and graft placement per hour) and that will be invaluable when presented to an HRS physician.

Similarly, we should consider a physician HRS training academy. As stated previously, there is no surgical training program in existence that prepares a physician to practice HRS to the high level we expect today. As such, there are limited opportunities for HRS training and almost nonexistent opportunities for hands-on training.

I held my first live surgery workshop (LSW) in Seattle in June 2004 with a unique opportunity due to the laws of Washington State; any physician with a valid license can operate in Washington State. That meant we could give each and every participant the opportunity to perform part of the surgical procedure. I was fortunate to have outstanding faculty in Drs. Bill Parsley and Steve Hopping, both extraordinary teachers who could control the surgical theater and provide meaningful experiences to their students. As powerful as this instruction was, however, it only scratched the surface of what the attendees needed to be competent.

Thus, a structured and formal physician education in HRS is obviously needed. This could take many forms but we should address the entire spectrum of physician experience: Basic, Intermediate, Advanced, and Special Topics. To disseminate the core knowledge, we are investigating developing online tutorials or lectures for each category. Dr. Carlos Puig introduced us to the video conference room, which provided a unique opportunity to view the AV material while also allowing for interactive discussion. I feel we can use this technological infrastructure to provide monthly seminars on HRS in every category.

To address the hands-on surgical skills, we must look to hold LSWs in the many regions that will allow this type of surgical training. In fact, the ISHRS now co-sponsors LSWs with member physicians to help fellow members learn and sharpen their skills (see the Members Only section on the ISHRS Website for more information). The basic LSW primarily consists of an introduction to HRS and serves to familiarize the newcomer to the artistry and skills needed to be competent. Once they have the basic didactic knowledge, they will then need skills training.

The major obstacle in skills training would be acquiring patients who would agree to serve to train physicians in a new procedure. We should borrow a chapter from our dental colleagues who run hands-on programs where each physician would bring their staff and patients to a training site. There they would perform the procedure on their patients under the supervision of an experienced team of physicians and assistants. This would be ideal and those physicians needing more training can return as often as is needed with as many patients as necessary to attain the essential skills.

If we are successful in implementing these programs, we can ensure that new HRS physicians will understand that *"it is critically important not to operate badly and they will take the time to learn how to operate exceptionally well."*

The horizon for HRS is broad and deep. I feel we are just now seeing the surface of what we can achieve together. In order to be successful, however, we must believe in ourselves—that HRS is a specialty with special educational needs—and we must commit the resources necessary to expand our knowledge, training, and credibility around the world.

As a reminder, your Board of Governors will be meeting for an unprecedented third time in person this fiscal year in Orlando, Florida, March 1, 2005. Again, I welcome comments and suggestions.

E. Antonio Mangubat, MD