INTERNATIONAL SOCIETY OF HAIR RESTORATION SURGERY
ISHRS

HAIR TRANSPLANT forum INTERNATIONAL

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See *page 174*...New Dates and Venue for the 2006 Annual Scientific Meeting!

COLUMNS

150 President's Message
151 Co-Editors' Messages
153 Notes from the Editor Emeritus
160 Pioneer of the Month
176 Cyberspace Chat
181 Letters to the Editors
182 Surgical Assistants Message
187 Classified Ads

FEATURE ARTICLES

155 New British Decontamination Standards: Implications for Private Practice
157 Midline Convergence: Nature's Way to Maximize he Appearance of Midline Density
161 Highlights from the Advanced Review Course
162 Highlights from the Basics in Hair Restoration Course
163 Highlights from the General Session
167 ISHRS Honors Its Own
171 Highlights from the General Session
172 Highlights from the Live Surgery Workshop
173 Highlights from the Paper Presentations
179 ISHRS Announces Successful Launch of Inaugural Practice Census Survey: *Members "Stood Up" & "Were Counted"*
183 What Makes a Good Hair Transplant Assistant?

See *page 179*...The ISHRS inaugural Practice Census Survey has been launched!

2005 Annual Meeting Highlights Inside

Hair Transplantation without Post-operative Edema

Gholamali Abbasi, MD *Tehran, Iran*

Edema of the forehead or eyelids is a common complication after hair transplantation, appearing 2–6 days after the operation. In rare cases, edema is accompanied by ecchymosis of the eyelids. In some cases, this edema is so severe that the patient cannot open his or her eyes, and this can delay returning to normal life and work.

Over the years a variety of physical methods and steroid regimens have been recommended to reduce this edema.[1] Physical methods have included maintaining a semi-reclining position,[1] usage of a firm head band, usage of adhesive tape below the hair line, and usage of ice packs. Steroid regimens have included oral medications, intramuscular injections, and the addition of steroids to xylocaine. Unfortunately, none of these methods reliably prevent edema.

Objective

The objective of this study was to compare a new steroid-containing tumescent fluid injection technique with existing techniques for effectiveness in reducing post-operative edema.

Patients and Methods

Three hundred and seventy-two patients undergoing hair restoration surgery from May 2001 to August 2003 were placed into one of eight treatment groups described below. Three hundred and forty patients completed the protocols, including 291 men and 49 women, aged 26 to 62 (mean 43.5 ± 7.1).

All patients underwent identical surgery to restore the hairline, frontal and vertex zones, using follicular unit grafts placed into slits. All patients wore a scalp dressing for 24 hours and showered after removal of the dressing. All patients took prophylactic antibiotics for 10 days beginning one day prior to surgery.

Duration, severity, and anatomical site of edema were evaluated daily from the second day to the sixth, and were scored on a 0–IV scale. Patients not evaluated for staging were dropped from the study:

Stage 0: No edema
Stage I: Upper forehead edema (days 2–3)
Stage II: Upper and lower forehead edema (days 3–4)
Stage III: Pre-orbital edema (days 4–5)
Stage IV: Black eyes (days 5–6)

Treatment Groups

Groups I–IV: Steroid Methods

Group I: Tumescent Steroid Solution

100cc of Normal Saline with 40mg of triamcinolone acetonide and 1cc of epinephrine 1:1000 used as recipient area tumescent solution. 126 patients were enrolled in this group. 9 patients dropped out due to incomplete follow-up.

continued on page 158

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President's Message

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

Paul T. Rose, MD

Another year has passed and another annual meeting has signaled the change. This year's meeting in Sydney was certainly one of the finest. I think that all who attended would agree that it was a great success. The hospitality of our Aussie colleagues was fantastic.

The meeting comprised a broad range of information covering basic science to surgical techniques and devices, and produced "pearls" for all who attended. Even those unable to attend may benefit by obtaining an audio recording CD of the general session proceedings.

I would like to commend Dr. Jennifer Martinick for her efforts in producing a wonderful program. As with any project of this size, there are many others who contributed to the effort who must be acknowledged and thanked. I would like to thank Drs. Russell Knudsen, James Harris, Edwin Suddleson, Arthur Tykocinski, Vance Elliot, and, of course, all the faculty who gave so willingly of their time. Additionally, I would like to acknowledge the work of Helen Marzola, RGN, and Pamela Hulley, RN, for putting together the Surgical Assistants program. Special thanks goes to Helen and Jennifer for providing the wonderful wine. Thanks also to Victoria Ceh, Jule Uddfolk, and the staff of the ISHRS for administering and organizing the logistics of this meeting.

Over the past year, the ISHRS has continued to mature under the careful watch of the members, Board of Governors (BOG), Executive Committee (EC), and administration of Victoria Ceh. We are particularly indebted to the work of Dr. Tony Mangubat who has served as President of the ISHRS this past year. He has set us on a course to extend the educational opportunities for members and to provide sound financial footing for the Society to continue in the future. Like all of his predecessors, he is to be recognized for his foresight and push for strategic initiatives and loyalty to the ISHRS

I am honored to now assume the role of President of the Society and to have the opportunity to serve you, the membership. I feel privileged to have come through the ranks of the BOG and EC to learn how the Society functions. We are fortunate to have the benefit of a dedicated BOG and EC, and the wisdom of the Past Presidents for advice.

It is my intention to continue the initiatives that have been set in place and to continue the course of economic stability and even growth. I am committed to further growth, and to do so we must look to innovative approaches. If we are to grow, we must encourage other physicians to learn about our field and attend the meetings. In particular, I would like to see more participation on an international basis and develop better ways for our non-North American colleagues to benefit from our services and participate in the meetings. I am also hopeful that we can gain interest for our field in residency programs such as Dermatology and Plastic Surgery.

Following Dr. Mangubat's lead, I can relate that with the cooperation of the Board of Governors of the ABHRS we have recently made significant strides in resolving issues surrounding the ABHRS and the ISHRS member interaction. We have been trying to achieve ACCME certification, and we are well on our way toward this important goal. The concept of the Hair Foundation as discussed in Sydney is close to becoming a reality.

It is time for us to look outside our immediate environment and seek inroads with other medical and non-medical hair-related companies. By forming strategic alliances with such entities, we may be able to better fund research and also provide our members education in hair-related areas to which they do not currently have access. Such alliances may also allow us to increase public recognition of our field and position ourselves as the leading resource for information regarding hair and hair loss treatments.

continued on page 152

Co-Editors' Messages

Robert S. Haber, MD *Cleveland, Ohio*

Robert S. Haber, MD

How awful that a tragedy must bring out the worst in us, with looting and shooting in New Orleans in its greatest time of need. And yet how extraordinary that the same catastrophe brought offers of aid and concern from around the world, including from nations that we might consider our adversaries given the current state of the world. How quickly we can descend into chaos, and how quickly the divisions of politics and nations can be overlooked when humanitarian needs arise.

I think we often take for granted that the ISHRS is composed of men and women from dozens of nations, who professionally and personally get along quite well, considering that many of those nations are at conflict with one another. It is as it should be, a Society where prejudice and discord dwindle from lack of room to grow, and hopefully we can bring that spirit of cooperation back to our homes and encourage its growth.

My visit to Australia was one of the best trips of my life. A nation, a continent, a witty and generous people, friendly cities, and fascinating and dangerous natural wonders all made for a memorable experience. I hope that those of you who missed the meeting had compelling reasons for doing so, for it was one of the best. Kudos to Dr. Jennifer Martinick and her team for living up to the expectations placed upon them. I never cease to be amazed that year after year there is more to learn, more new things to try, and more high-quality surgery being performed all over the world.

Dr. Tony Mangubat led us well, and has gunned the engines of this ship. Dr. Paul Rose must now take the helm and keep us in control, guiding us further along the pathway to ACCME accreditation, the Hair Foundation, and extending the reach of the Society well beyond its current membership. It is not enough that we remain stable, rather we must grow. Only by gathering to our core each and every hair transplant surgeon in the world and educating them properly will we be able to realize the complete turnaround of this field from the laughingstock of yesteryear to the respected and even admired position it rightfully deserves.

As always, one of the most valuable aspects of the meeting, as well as the extra time I spent both before and after with my colleagues, was the opportunity to glean various gems of technique and theory that can be brought home and applied to my practice. There is no aspect of my approach that will not change in some way, from the consult to anesthesia to placement to aftercare. Perhaps one of these days I'll actually settle on one way of doing things, but I doubt it. The greatest minds I know are those that are constantly testing and experimenting and changing, and I'll happily tag along behind them picking up good ideas.

I enjoyed my role as one of the "Official" photographers. Perhaps you will find yourself in one of the photos in this issue, but don't fret, as I discreetly erased the most embarrassing ones. Jerry and I look forward to presenting in this and the upcoming issues of the *Forum* some of the highlights of the meeting and most current concepts you need to know.

Bob Haber, MD

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

Jerry E. Cooley, MD

The 13th Annual Scientific Meeting is now behind us. For me, it was the most enjoyable meeting ever. This was partly due to the meeting being so well run and organized by Dr. Jennifer Martinick and all who assisted her. Part of it was due to me (mostly) keeping my resolve to attend all the talks and absorb as much as I could. And much of it was due to being in the beautiful city of Sydney and enjoying the hospitality of our Aussie colleagues. Particularly memorable for me was the chance to observe in their natural habitat the strange and interesting wildlife of Australia: the kangaroo, the koala, the wombat, and the Russell Knudsen.

Two pearls from the meeting stand out for me: the new tissue spreader used for donor harvesting developed by Dr. Bob Haber and the graft site staining technique of Dr. Mohammad Rashid, both to be described elsewhere in the *Forum*. One thing I was struck by at this meeting was that, for better or worse, many of the fiery debates of the past have quietly faded away. So what does the future hold for us as hair surgeons?

Of course, what I predict is simply my opinion. The ability to perform consistently high-quality transplants with thousands of densely placed grafts will become more commonplace and will not be restricted to just a few premier clinics. We will scientifically determine the best holding solution for grafts and stop using saline.

The post-op period will attract much needed attention with attempts to stimulate angiogenesis and revascularization of the grafts with growth factors and other pharmaceuticals. The skeptics among us may be surprised to see that physical modalities (low-level laser, electrical stimulation, pulsed electromagnetic energy, etc.) are proven beneficial in the early post-op period.

In the non-surgical realm, 5-alpha-reductase inhibitors will be around for a long time but will later become extinct as more targeted therapies become available. We will see more topical hair growth stimulators like minoxidil. Gene therapy will become a reality too. In particular, we may see topical genes that stimulate the "WNT" pathway, and/or those that block transforming growth factor-beta (TGF-ß) with antisense technology. TGF-ß seems to be upregulated by DHT and may be the most important factor causing androgenetic alopecia.

continued on page 152

President's Message

continued from page 150

It must be remembered that the ISHRS is unable to provide an intensive and costly public relations program that would serve all of our membership equally; however, with the cooperation of multi-national companies a significant amount of the work could be accomplished. For example, we may be able to utilize projects such as Operation Restore to convey our abilities and concern for patients.

At the same time, we must continue to refine and promote the ISHRS Website. This is increasingly becoming a valuable resource for the public and our members. In the future it may become an additional means for physician members to access educational material and obtain CME credits.

Many opportunities for involvement within the ISHRS exist, and it is my hope to more readily convey the international aspects of our membership. I encourage members to seek participation in the various committees of the ISHRS.

Our meeting for next year will be under the able direction of Dr. Bernie Nusbaum, and there is no doubt that he and the members of the Annual Scientific Meeting Committee will provide a superb learning experience for the members of the Society.

Not surprisingly, there has been a great deal of concern expressed about holding the meeting in New Orleans. I can assure you that we are looking at all of the possibilities. Most importantly, the meeting will take place, and we hope you will make plans to attend.

While the past years have been good for the ISHRS, we must also realize that our enthusiasm must be tempered by the recent devastation in New Orleans and the surrounding areas affected by Hurricane Katrina. We should be grateful for our good fortune, and, hopefully, all the members of our Society will recognize that it may be an appropriate time to do whatever we can as physicians and human beings to assist those who have been hurt by this catastrophe. We must also remember to respond in kind to disasters that occur in other parts of the world.

I will always be available to the membership and welcome your comments and ideas. Please feel free to e-mail me at paultrose@yahoo.com.

Paul T. Rose, MD

Cooley's Message

continued from page 151

Interestingly, TGF-ß also seems to play a role in creating cutaneous scars, and several biotech products are under development to block its action. We may be able to use these to prevent donor scarring in the future.

Cell therapy will enter the market in the next decade as a complementary therapy to transplantation. First generation cell therapy will likely produce "filler hair" until the technology improves. All of these therapies will be complementary with surgery over the next 10 to 20 years.

In my opinion, the future of our specialty is very bright.

Jerry Cooley, MD

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Any person submitting content to be published in the *Forum* agrees to the following: 1. The materials, including photographs, used in this submission do not identify, by name or otherwise, suggest the identity of, or present a recognizable likeness of any patient or others; or, if they do, I have obtained all necessary consents from patients and others for the further use, distribution, and publication of such materials. 2. The author indemnifies and holds harmless the ISHRS from any breach of the above. *Send to:*

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Submission deadlines:
November/December, October 10
January/February, December 10

Notes from the Editor Emeritus

O'Tar T. Norwood, MD *Oklahoma City, Oklahoma*

O'Tar T. Norwood, MD

The World Is Flat and Female Pattern Hair Loss Is Due to Androgens

The world is flat and female pattern hair loss is due to androgens. Both of these statements are false but many doctors around the world are still not sure about the second one. I have been preaching about female pattern hair loss and its non-relationship to androgens for over 6 years, though few have paid any attention to me. Gradually some investigators are coming around to my view, but the response has been slow considering the overwhelming evidence supporting my view.

The confusion started when Ludwig first described female pattern hair loss and unfortunately called it female androgenetic alopecia. Later investigators explained the differences between male and female hair loss by the fact that men have much more testosterone and the assumption that females metabolized testosterone differently.

I wouldn't worry about this misconception so much but it is extremely important for the following reasons:

1. The disease is so common (Figure 1). Female pattern hair loss affects about 30% of Caucasian women over 50! That's about 30 million women in the United States alone. Male pattern hair loss in men is so common it is accepted as normal, but hair loss in females is totally unacceptable and can be devastating. Unlike men, women aren't supposed to be bald so they go to great lengths to conceal and disguise it.
2. The misunderstanding of this disease leads to improper therapy (e.g., treating women with finasteride in the vain hope that it will give some relief). It has also led investigators in the wrong directions.
3. Because of finasteride the male pool of hair transplant patients is shrinking and females may represent a larger percentage of transplant patients. Young men are now accepting finasteride much more than they did when it was first approved, as initially the mere suggestion that it might affect sexual performance caused patients to reject it.

A closer look at these two diseases clearly shows that they are entirely different diseases for the following reasons:

1. First, they look entirely different. Male pattern hair loss begins classically with recession of the hairline and results in complete hair loss. Female hair loss classically causes diffuse thinning of the hair at and behind the hairline and there is no recession of the hairline. It is curious to me knowing how dermatologists like to separate entities by clinical appearance, that they assumed that these two anatomically very different diseases represent the same entity. Histologically I must admit that they are similar, both showing miniaturization of the entire hair follicle. The histology is similar but non-specific.
2. Male pattern hair loss begins in the late teens and early 20s when the testosterone levels are high. Female pattern hair loss classically begins in the late 30s and reaches its peak after 50 when testosterone levels are falling.
3. Male pattern hair loss affects up to 70% of all males. Female pattern hair loss affects up to 30% of women over 50. If they were the same disease, the incidence should be the same.
4. Females with predisposition for male pattern hair loss rapidly develop typical male pattern hair loss if given high doses of testosterone (Figure 2).
5. Some males develop typical female pattern hair loss (Figures 3 and 4). A possible reason that it is not more evident in males as might be expected is that they may have both genes; one for male pattern hair loss and one for female pattern hair loss, and the male pattern hair loss would obscure the female pattern hair loss.
6. A case report by Cullen and Messenger described a young woman with hypopituitarism who presented with clinical and histological features of female pattern hair loss in the absence of detectable levels of circulation androgens or other signs of postpubertal androgenation, showing this pattern of hair loss does not necessarily mean it is androgen dependent.
7. A report by me and Blaine Lehr, MD, described a 42-year-old white female with typical female pattern hair loss and a strong family history (going back six generations) of female pattern hair loss.
8. For some reason, minoxidil works better on female pattern hair loss than on male pattern hair loss.

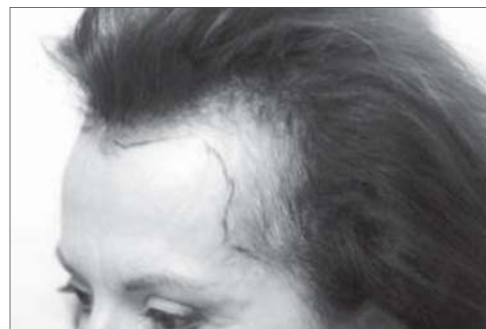

Figure 2. Female with typical male pattern baldness resulting from exogenous testosterone (i.e. estrotest tablets).

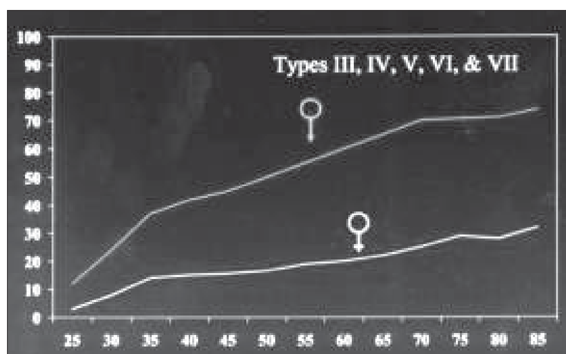

Figure 1. Incidence of male and female pattern hair loss.

To be entirely fair, I must admit that when I look back at this controversy and discuss it with others in the field (e.g., Drs. Andrew Messenger and Rod Sinclair), I am not quite as certain about this as I was 5 years ago. Messenger is more on my side but still has questions, and Sinclair leans

continued on page 154

Editor Emeritus

continued from page 117

more toward the other side and has some pretty good evidence to, at least, make me think twice about it. It will be interesting to see what the consensus is in another 5 years.

I've learned that in order to keep up with any field of medicine you have to be totally immersed in it. Since I retired 5 years ago it is very difficult to keep up, let alone stay ahead of the crowd.

This will probably be my last contribution to the *Forum*. Of all the things I did in hair transplant surgery, I believe the *Forum* contributed more to the improvement of the specialty than anything else I did. I am very proud of it.

O'Tar T. Norwood, MD

Figure 3. Top view of a 40-year-old male with typical female pattern androgenetic alopecia, a strong hairline, and diffuse thinning posteriorly. He stated that most people thought he had hair transplants.

Figure 4. Front view of same patient as in Figure 3.

REFERENCES

1. Sawaya ME, Price VH. Different levels of 5a-reductase type I and II, aromatase, and androgen receptor in hair follicles in women and men with androgenetic alopecia. *J Invest Dermatol* 1997 109:296–300.
2. Norwood OT. Female androgenetic alopecia: a separate entity. *Dermatol Surg* 2000 26(7):679–682.
3. Ludwig E. Classification of the types of androgenetic alopecia (common baldness) occurring in females. *Br J Dermatol* 1977 (March) 247–253.
4. Norwood OT. Incidence of female androgenetic alopecia (female pattern alopecia). *Dermatol Surg* 2001 27:53–54.
5. Cullen OS, Messenger AG. Diffuse female hair loss: are androgens necessary? *Br J Dermatol* 1999 141(3):521–523.
6. Personal communication with Dr. Andrew Messenger and Rod Sinclair.
7. Sinclair R. Treatment of androgenetic alopecia in women with oral antiandrogen therapy. *Ann Dermatol Venereol* 2002 129:1S324.

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