The 10th annual meeting of the International Society of Hair Restoration Surgeons (ISHRS) was held in Chicago this year. It was the best organized ISHRS meeting to date. Members of the hair transplant community from around the world presented educational topics. There were many heated discussions. Most notable was my duel (dressed as a woman) with Australia’s Dr. Jennifer Martinique (dressed as a Kangaroo). I thought it was worthwhile to discuss some politically hot issues as well as business issues surrounding hair transplantation surgery in this newsletter.

The FOX™ Procedure: A New Minimally Invasive Transplantation Technique

Our FOX™ procedure for minimally invasive surgery may have been the highlight of the meeting. My three presentations detailing the procedures were highly anticipated and well attended. A scientific presentation of the technique, including a microscopic analysis of cell histology was presented to a crowded hall. Five hundred copies of our article from the *Journal of Dermatologic Surgery* were made available and were gone in a flash. My second presentation showcased three FOX™ procedure patients, including none other than Dr. Robert McClellan from our Los Angeles office, who had the procedure over a year ago. Physicians had a chance to view, first hand, results of the procedure and interact with our patients. My third presentation was a video showing the actual nuances of the surgery, including examples of FOX™ techniques in a series of live surgeries. To complement the video, attending physicians received a CD-ROM that included video highlights of the FOX™ procedure and copies of appropriate scientific publications. Overall, the audience responded to the innovative presentation with a high level of interest and, like most inventions, they received it with some skepticism.
Webster defines density as, “the quantity of something per unit measure, especially per unit length, area, or volume.” Many hair restoration surgeons and patients, often overlook Webster’s definition. Surgeons are often short sighted in their thinking when questions about density arise during patient consultations.

NHI brought the study of density out of the scientific papers (theory) and into the doctor’s office with the invention of the Densitometer in the early 1990’s. All too often, however, prospective patients are misdirected into thinking that follicular unit numbers (for their degree of baldness) alone equate to good results, suggesting a conclusion that would only apply if the balding pattern, hair color, skin tones, shaft thickness, and hair type were exactly the same for each patient. This is simply not the case.

What the balding patient needs to focus upon is the degree of fullness and coverage that can be realistically achieved. Any definition of success needs to consider hair thickness, hair character, hair color, skin tones and hair length. A patient with coarse hair may have many times the bulk of a patient with fine hair, producing more fullness for each hair transplanted. Hair character (straight or curly) is equally important, and will affect fullness, as

CONTINUED ON PAGE 4

A brief story of one man’s hair transplant journey that, in his mind, subjected to a deforming technique that left him with the “doll’s head” look. His two year transformation into a new man.

Meet Dean, a 38 year-old man who had suffered for many years of 2000 (1), he finally decided to do something about it, begin...
**AN ANALYSIS**

The type of results seen with Victor and Joe are not uncommon in NHI's practice. The solutions however, do not simply focus upon density alone. Yes, density does count and the surgeon does charge based on the work that is done. These two men are different and their results are different. The differences in treating their hair loss demand a blend of art and science practiced by the surgeon. Good communication is as critical as a physician with high integrity. It is easy to sell a "Joe" density to a "Victor" but that would not be honest. Disappointments result when individuals do not fully understand the density debate.

### Hair Characteristics - A Comparison

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<th>Hair/Scalp Contrast</th>
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<td>Shaft Thickness</td>
<td>Medium</td>
<td>Fine</td>
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<tr>
<td>Hair Type</td>
<td>Wavy</td>
<td>Straight</td>
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<tr>
<td>Coverage Value</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Scalp Laxity</td>
<td>Good</td>
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Meet "Victor", a 67 year-old class 7 with medium, wavy hair. Victor, like many with his balding pattern, can achieve the look of fullness and density without high density. He received about 8,800 hairs in 4,405 follicular units over 15 months. One can estimate that he had lost about 75,000 hairs from his birth hair count. After his transplant, his density average is around 11% of his pre-balding average. Yet, look at his results. “How did this happen?” The answer is in Victor’s hair and head characteristics. In addition, his surgeon artistically distributed his follicular units, weighting the hair to the front to maximize coverage. Other patients without these qualities may not be able to replicate Victor’s results. Here, appearance is more important than reality.

Meet "Joe", a 33 year-old class 3 with fine, straight hair. Joe lost between 10-15% of his birth hair count, all confined to the frontal region. His density in the remaining portions of his head is high. Joe received about 11,000 hairs in 5,500 grafts into a much more concentrated area, about 15% of the size of Victor's transplanted area. Two inches of his frontal hairline were created. Joe's temples, which had receded one and one-half inches, were also restored. Joe desperately wanted a very full look. Joe was also a perfectionist and was inflexible with his requirements. To help him achieve his goals, his doctor transplanted a significantly higher density to make up for his deficiencies. His expectations were fully met and another "miracle" was produced.

**Density**

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"Victor" (see left)

"Joe" (see right)

**D**ean's third surgery was performed 6 months after his second. 1,696 follicular units and his old donor area scar was partially taking Propecia, coupled with other medications, that worked crown. His pre-surgery pictures (3) show the results of his first surgery. The improvements speak for themselves.

During his first surgery, Dean's pluggy hairline was surgically removed, re-dissected, and re-transplanted. Notice the difference in his hairline seven months later (2). During his second surgery, his remaining plugs (not in the hairline) were removed.
curly hair will provide greater coverage than straight hair. The appearance of thinning significantly correlates to the contrast of each individual’s scalp tones and hair color. The closer the colors match, the less obvious the appearance of baldness. In addition to all the previous factors, hair length translates into greater hair volume and therefore greater coverage and thickness, especially when one can exploit styling techniques. As Victor’s hair becomes longer, his “comb back” will eventually produce a non-see-through crown.

The term “dense packing” of hair grafts was first defined and published by William Rassman, M.D. in 1993. It was defined as placing significantly more hairs into a given area than was traditional. In 1993, Dr. Rassman’s dense packing technique came close to numbers that can be achieved today. Doctors claimed that dense packing compromised the blood supply, a criticism that reflected the inability of these doctors to emulate the proper technique. Over time, others have adopted the technique and most recently one physician published a paper on the subject, claiming that he invented the technique. In this case “ego” clearly was the dominant force, since the New Hair Institute has been using this technique longer than anyone in the industry. Dense packing is not appropriate for every patient. Anyone considering this tactic should first fully understand the “density logic”.

Hair Restoration is based upon simple mathematics. The average person is born with 100,000 hairs. In the very bald patient, up to 75,000 hairs may be lost (see Victor on left). The remaining 25,000 hairs must be used to cover the area where the 75,000 originally resided. Sparse but weighted coverage is best in this type of balding patient. Anyone expecting normal density would be totally unrealistic. Any doctor who would promote “dense packing” in such advanced balding patterns would be just plain stupid. A realistic approach needs to be developed with an honest doctor who is capable of providing what the patient wants within realistic, achievable goals.

Simply put, two different patients with the same degree of baldness, receiving the same number of grafts, may have significantly different results. Patients must accept lower densities to achieve wider coverage. Focusing on a limited definition of “density” is, at best, simplistic and, at worst, misleading.

Patient is taking Propecia)

is second surgery. He received partially removed. Dean had been worked well to partially fill in his his first two NHI surgeries.

Today, Dean’s results are amazing but still not complete. His pictures, taken just 5 1/2 months following his third surgery are truly remarkable. Say goodbye to the old Dean and hello to his new life, just begun.

DENSITY CONTINUED
New Hope For The Old Pluggy Look

The science of repair surgery to correct work done using older techniques has been taken to a new level with NHI’s recently published research articles in the Journal of Dermatologic Surgery. This is the most prestigious journal in the hair transplant community. The two-part series written by NHI physicians: “The Art of Repair in Surgical Hair Restoration”, spotlights important repair strategies as well as innovative corrective techniques.

The series focuses on aesthetic solutions that solve the supply/demand limitations inherent in most repairs. When hair restoration surgery is performed on a “virgin” scalp, the goal is to mimic nature by matching the newly transplanted hair to the patient’s original hair distribution and growth patterns. NHI’s technique of Follicular Unit Transplantation allows the surgeon to mimic naturally occurring groups of 1-4 hairs, representing the “state-of-the-art” today. One of the major challenges of repair work is to make a previously altered scalp appear natural.

Many of today’s repair challenges come from procedures done before the use of small grafts. The availability of “modern techniques” alone does not protect the patient from bad or antiquated work. Errors in surgical decisions, poor aesthetic judgments, unrealistic expectations, and surgery on unqualified candidates, all add to the possibility of bad work.

Improperly performed hair restoration surgeries present unique problems. These problems are best solved by deviating from the normal surgical rules that apply to a “virgin” scalp. Any proposed plan must be communicated clearly to the patient from the outset. Surgery must be individualized to the patient’s needs, and be flexible to deal with unanticipated situations. The best restorative work must combine communicative, surgical and aesthetic skills to achieve the patient’s goals. The process is truly an art.

Those of you wishing to obtain a copy of these breakthrough articles can obtain them from our web site (newhair.com) or you can request them in person. Call: 1-800-NEW-HAIR (800-639-4247)

Changing Ethics: A New Minefield for Patients

There is good news and bad news for the consumer in today’s hair transplant community. The good news is that the two biggest deforming procedures (the scalp reduction and the exclusive use of large plugs) are rarely performed today. Currently, better results can be seen from doctors all around the world.

With this movement away from deforming surgeries and towards better patient expectations. Higher expectations have driven some doctors to pass off higher quality work as their own, even if they did not do the work themselves. Copying photos from the internet and representing the work as their own is prevalent.

The wonders of Propecia can be credited with many of the results shown by doctors who fail to mention that the patient was on the drug at the same time the patient had a transplant procedure. When both are used together, dramatic results are often present, partly because both hair transplants and Propecia show their greatest benefit in about 8 months. To emphasize the point, I thought it worthwhile for us to remind you of our patient from last year’s newsletter who shows the effects of Propecia without transplants (see pictures A and B).

Obviously, the medication rather than the surgeon should be given credit for these great results. Some doctors seek fame for the miracle of their surgical skills on such a patient whose benefits clearly came from the drug. Be skeptical of such claims.
Resurrecting Old Techniques

Much of the ISHRS convention lacked substance. Too many presentations reflected hybrid techniques where older, outmoded, variable sized graft procedures were combined with newer follicular unit transplant techniques. These “hybrids” are now being designed to camouflage the defects of the larger grafts by disguising them with follicular units. The failure of the logic behind this “quasi” science reflects myopic thinking. Photographs showing patients in poor lighting conditions cross the line into “quasi-photography” when used to support claims.

Although many outdated techniques such as the exclusive use of large plugs are now rarely performed, an aura of regression towards these hybrid techniques still permeated the meeting. A great deal of valuable time was wasted discussing archaic procedures like scalp reductions and hybrid techniques. Such emphasis only confuses new doctors who attend meetings to learn about advances in the hair transplant field today.

Artificial hair, a very controversial and politicized technique, is being explored in Australia by Dr. Shiell. However, appropriate materials have yet to be found for artificial hair. I will always keep an open mind, but at this time, I question the safety of this process.

Fortunately, most physicians still view our Follicular Unit Transplant procedure as the gold standard in this field.

New Drugs For Hair Loss

Many topical medications, still in research trials, are supposedly not absorbed by the body. Critics of Propecia, still recognized as effective by most, sight that it must be taken orally and continued indefinitely to maintain benefits. Effective topical medicine that can be applied directly to the scalp is in demand. Unfortunately, topical options will not be on the market for a few years. When they are, it is feasible that Propecia patients may (theoretically) be able to switch to topical treatments without any hair loss.

Dutasteride: Men with male pattern baldness have been anxiously awaiting the arrival of a new medication in the battle against hair loss. In recent years Propecia (finasteride) has been a safe and effective mainstay of therapy. In January, 2003, Avodart (dutasteride) makes its appearance. Like Propecia, Dutasteride blocks the conversion of testosterone to DHT (dihydrotestosterone). DHT attacks susceptible hair follicles causing their eventual loss in male pattern balding. Avodart blocks two different enzymes and presumably will be more effective in treating genetic baldness.

Glaxo presented their Phase II study results about three years ago to a closed group of Dermatologists. From what I understand, Dutasteride’s and Finasteride’s (5mg compared to Propecia at 1mg) side effects were very similar. The long half-life of the drug allows the patient’s DHT level to remain below normal for up to one year, once discontinued. Although Glaxo may have more information, they have yet to release additional data.

These studies focused on prostate disease, not hair loss. NHI doctors will not be prescribing Dutasteride when it is released. We will prescribe it only when there is hard data showing its safety. Dutasteride is a very potent dual inhibitor, and must be used with caution due to its long half life.