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As the ISHRS  
celebrates its  
25<sup>th</sup> anniversary,  
those who were  
there at the  
start share their  
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## Graft Placement Using the Dull Needle Implanter (DNI) Technique

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### INTRODUCTION

Graft implanters were described by Choi in 1992.<sup>1</sup> The instrument was designed to be used with sharp needles (Figure 1), which allows simultaneous site making and placement of FUs, accelerating the implantation process.

Since only the surgeon was allowed to do these incisions, and thus delegation of placement was not possible, this instrument was not incorporated by most teams worldwide.

With the popularization of the follicular unit extraction (FUE) technique, in which the FUs are even more delicate, the advantage of implanters has become more appreciated for its atraumatic placing of the grafts. In the FUE technique, typically the surgeon has the responsibility and the job of harvesting all the FUs. But in combination with a one-step sharp implanter, this can lead to work overload and consequent fatigue for the surgeon. The dull needle implanter (DNI) technique allows a gentle placing of the grafts and permits delegation of placing to the technicians.<sup>2</sup> The site creation is done by the surgeon and dull graft placing is less traumatic.

It is common for a team to have great resistance to change from a routine that's been in place for years or even decades, such as is the case of using forceps for placement of grafts. It is up to the team leader to show the benefits of change, especially if we are talking about FUs harvested using the FUE technique. In order to make the transition a success for the technicians, it is essential that the physician understands all the advantages of the technique and how to teach the use of implanters.

### THE DULL NEEDLE IMPLANTER

Although the use of implanters in premade sites was mentioned and eventually used by some colleagues,<sup>3,4</sup> its advantages have never been described in detail. In 2016, I published an article in the *Forum* describing nine advantages of the DNI (dull needle implanter) technique.<sup>2</sup> To these, Dr. Vance Elliot, who commented on the article, added two others. Dr. Robert True, in his Co-editor's Message lead-in to the article, noted the technique "could very well become the preferred method for placing FUE grafts."

The basic difference between the traditional sharp needle implanter and the dull needle implanter is that it is impossible for the latter to pierce the skin. This allows delegating the placement after the creation of pre-made recipient sites. Because there are currently no implanters sold with premade dull needles, it is necessary to modify them in an artisanal way.

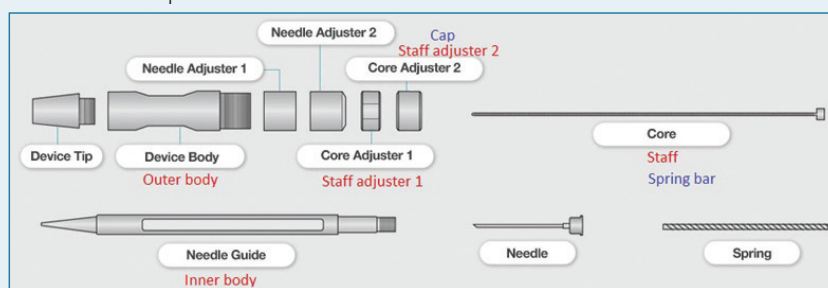
### Diagram of an implanter

Figure 2 shows the parts of an OKT implanter and, in red and blue, the different names used by other companies.

FIGURE 1. Sharp needle



FIGURE 2. OKT implanter



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## HAIR TRANSPLANT FORUM INTERNATIONAL

is published bi-monthly by the  
*International Society of Hair Restoration Surgery*

First-class postage paid Milwaukee, WI and additional mailing offices.

POSTMASTER Send address changes to:

*Hair Transplant Forum International*  
*International Society of Hair Restoration Surgery*  
303 West State Street  
Geneva, IL 60134 USA  
Telephone 1-630-262-5399  
U.S. Domestic Toll Free 1-800-444-2737  
Fax 1-630-262-1520

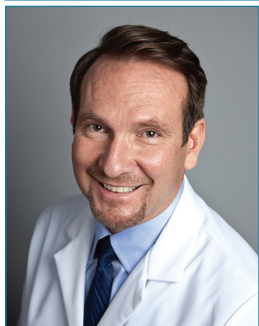
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Meeting Reviews	TBD
Literature Review	Jeffrey Donovan, MD, PhD, FISHRS Nicole E. Rogers, MD, FISHRS

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*International Society of Hair Restoration Surgery*,  
303 West State Street,  
Geneva, IL 60134 USA

Printed in the USA.



Official Publication of the  
*International Society of Hair Restoration Surgery*



## President's Message

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Dear Colleagues,

Last month, I had the great pleasure of attending HAIRCON 2017 in Ludhiana, India. The meeting, with its "Redefining Limits" theme, was hosted by Kapil and Aman

Dua for the Association of Hair Restoration Surgery-India. It was truly a tremendous success in all aspects. While there, I couldn't help but marvel at yet another impressive educational offering by one of our Global Council colleagues. As we begin our Silver Jubilee year in earnest, I am in awe of the growth in educational content offered or sponsored by the ISHRS and the esteemed member societies of the ISHRS Global Council. Our society has continued to grow at a considerable rate adding over 600 new members over the past 5 years, with approximately 70% of our membership coming from countries other than the United States. The Global Council of the ISHRS now consists of 20 member societies.

is our continued achievement of Accreditation with Commendation from the Accreditation Council for Continuing Medical Education. I encourage you to use our calendar of educational events in every issue of the *Forum* or visit <http://www.ishrs.org/content/upcoming-events>.

On another note, at our recent meeting of the Global Council at the World Congress in Las Vegas, the Global Council member societies expressed a strong sense of unity and passion in the fight against the unlicensed practice of medicine and surgery in hair restoration, worldwide. In addition to the ongoing multi-front battles by our members against this dangerous and divisive precedent, we recently circulated a request to deny as faculty any speaker who is a known advocate of the unlicensed practice of medicine or is an integral part of an organization that is sympathetic or supportive of the unlicensed practice. As you might expect, we have received enthusiastic support of this initiative.

One of the most popular offerings of the ISHRS is our biennial Practice Census Survey. Every two years, we query our membership on a wide variety of hair restoration issues. Shortly, you will be receiving the 2017 ISHRS Practice Census web-based survey. We encourage you to please set aside time to complete this important survey. When more of our members participate, the more reliable the data will be, so, yes, each member makes a difference.

Lastly, I encourage all members to raise your hands and become active in the ISHRS. We know that you have a lot to offer, and the success of our society depends on volunteerism. Please go to [www.ISHRS.org](http://www.ISHRS.org) and review the different committees and educational opportunities available for participation by clicking on the "Physicians: Join Our Community" icon.

You are definitely welcome. ■

**PHYSICIANS:  
JOIN OUR COMMUNITY**

*Interested in learning about the benefits of  
being a part of the ISHRS community?*

**FIND OUT MORE ►**



In the lead up to the "big one" in Prague and Polanica Zdrój, rich educational offerings, usually with a live surgery component, are being offered by the ISHRS (Orlando Live Surgery Workshop) or members of the Global Council

(Asian Association and Italian, Korean, and Paraguayan societies) almost monthly. Education is firmly entrenched as one of the three pillars of the ISHRS alongside Research and Collegiality. The best example of the ISHRS focus on excellence in education

### ISHRS 3 PILLARS

Education Research Collegiality



**LIVE SURGERY WORKSHOP**  
**FUE IMMERSION**  
POLANICA ZDRÓJ OCT 1-2, 2017

**INTERNATIONAL SOCIETY OF HAIR RESTORATION SURGERY**  
**25TH WORLD CONGRESS**  
PRAGUE OCT 4-7, 2017

**PLAN TO ATTEND**

**WWW.25THANNUAL.ORG**



## Co-editors' Messages



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While summer is ending in the southern hemisphere, we are enjoying the first signs of spring in the north. Small flowers appear out of the melting snow, followed by colorful tulips. It is a miracle of nature just like the growth of hair. But while tulip bulbs are quite robust, hair roots are very sensitive. Great care must be taken when we transplant them.

The use of implanters may be potentially helpful to reduce damage to the follicle. Dull needle implanters eliminate some disadvantages of the stick-and-place technique with sharp implanters. The article by Mauro Speranzini nicely explains how to make sharp implanters dull, and it gives a lot of advice regarding loading and placing as well as sterilizing the instruments. Hopefully, new devices will facilitate these steps. In a comment, my fellow co-editor Bradley Wolf questions the general advantage of implanters. Studies regarding the benefits of dull needle implanters compared to manual placing should be performed in different graft types (FUE, FUT, thick or thin hair diameter). What is your experience?

The interesting study by Dell Castillejos on donor hair density in Asian men can provide a good reference for a preoperative assessment. The maximum yield of grafts also depends on the (suspected) size of the safe donor area, the harvesting method, the FU composition, scalp and hair color, donor hair caliber, curliness, and desired length. It is difficult to predict the point when over-harvesting and thinning will occur. No ultimate formula is available. It still requires a lot of experience to estimate the donor hair supply and predict the cosmetic effect of a procedure in the recipient area. In many cases, it may be wiser to do (several) limited procedures, especially in younger, early-stage patients. What do you think?

Anil Garg describes the way he teaches his assistants using different simple materials. These are certainly helpful tips; I am just wondering where to get that goat skin.

Sara Wasserbauer practices some calculations with us. I always like to look at the donor hair on a video screen together with my patients as we measure density, so they know what we are talking about. But we should educate our patients that it's not just how many grafts, but also how and where we place them. Hair restoration is a three-dimensional work of art.

Last, but not least, we have a Cyberspace Chat from Robin Unger, a Literature Review from Jeff Donovan, and an instructive case of an impossible FUE patient from Marco Barusco.

Please send any type of contribution you may have to [forumeditors@ishrs.org](mailto:forumeditors@ishrs.org). ■



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The ISHRS celebrates its 25th anniversary this year. To commemorate this silver jubilee, as well as the first ISHRS conference in Dallas (April 30–May 2, 1993), we will be publishing items in the 2017 issues of the *Forum*. Dow Stough

and Dan Rouso, two of the course directors of that conference, and 1993 ISHRS Board of Directors members Russell Knudsen and Bob Leonard have been gracious enough to recount that first meeting and the events leading up to it. Richard Shiell, who was at all the formative meetings in Dallas, has also been very generous to share his time and amazing memory. As a relative novice, having a little more than two years' experience, I attended that conference. I recall my head spinning after many lectures, especially those on reductions, flaps, and scalp lifts, thinking how is that done! I do remember the line dancing lessons and trying to use the steps (two) at the gala dance. I hope the younger members of our society find the history of our society interesting. If you would like to share your memories of Dallas 1993 or thoughts on the effect of the ISHRS on our field during the last 25 years, please contact us at [forumeditors@ishrs.org](mailto:forumeditors@ishrs.org).

Mauro Speranzini continues to educate us about implanters and their use into premed incisions. The FUE Advancement Committee (FUEAC) is currently conducting an IRB-approved study, "Comparison of the Quality and Survival of Grafts Placed with Implanter and Forceps." The FUEAC invites all ISHRS members who are interested in becoming involved in studies and advancing the science and knowledge base of FUE to contact Dr. James Harris, chair of the FUEAC, at [harrisfueac@hsccolorado.com](mailto:harrisfueac@hsccolorado.com). I look forward to the FUEAC study results.

Prague, the site of our 25th anniversary conference in October, is a wonderful and magical city. It was the cultural center of Europe in the 14th century and is rich in history, architecture, art, and music. Charles University was founded in Prague before America was "discovered" by Columbus! From the Baroque churches of the 17th and 18th centuries, the museum of artist Alphonse Mucha and grave of composer Antonin Dvorak, to the Art Nouveau buildings of the 19th and 20th centuries, there is much to be seen. I would encourage all those attending the conference to either come early or stay after the conference to explore this fascinating city.

In this issue we welcome the Argentine Society, the AARC, to our Global Council. Congratulations to Bruno Szyferman and the founding members. Hopefully your society can connect the physicians in Argentina, the way the ISHRS has united physicians throughout the world for the past 25 years. ■



## Notes from the Editor Emeritus, 1996–98

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What a whacko world of late! It seems to be deconstructing all around us. How involved is hair transplantation surgery in this phenomenon? From my perspective, it too is deconstructing from a medical specialty with its innate,

centuries-old set of ethics into a practice that focuses upon outcomes that serve business interests, both those of the equipment manufacturers as well as those at the practitioner's level. This is where the ISHRS plays a crucial role. But where to start? How about defining the problems and then looking at solutions and roles that the ISHRS has played or could play?

So much of the dialogue that goes on today seems to be about surgical details of follicular unit extraction (FUE) and these details seem to overlook and to accept as "no problem" some underlying

issues so that I am forced to ask, "What does FUE have in common with climate change denial?"

The bottom line answer to this question, in my humble opinion, is that each requires the adherent to focus on science and opinion that supports his/her position while overlooking science and the associated questions raised that run counter to the belief. Many issues, as you will see below, require only simple common sense, and it seems that they should be maximally utilized along with, if not before, trying to achieve the same goals of more hair growth by applying advanced levels of science such as using ACell, ATP, PRP, stem cells, bimatoprost, lasers, etc.

Some issues include:

- Best technique of harvesting donor for optimal yield
- Graft quality and transection
- Vascular damage

And other issues such as:

- Patient informed consent
- Can a surgeon give all his patients the procedure needed without offering both strip harvesting and FUT?

### BEST TECHNIQUE OF HARVESTING FOR OPTIMAL YIELD

Back in the nineties, Dr. Jim Arnold, one of the pioneers of our specialty, gave a presentation at the ISHRS scientific assembly calling the strip harvest a "mini reduction of alopecic scalp." He stated the obvious, but not previously described (which was a style of his), that taking a strip of hair from the donor included taking out the interfollicular alopecic skin as well as the follicle. What was placed back in the recipient area was only the hair without the bald inter-

follicular skin, hence the "scalp reduction." (This benefit has to be tempered by the fact that the strip generates a scar and once the "virgin laxity" is removed, the partial stretchback that Dr. Michael Beehner has described with scalp reduction of about 40% will subtract from the Arnold benefit.) This principle, as it applies to the FUE harvesting of donor hair, means that with FUE, only hair is removed from the donor leaving behind the bald interfollicular skin that would have been removed with the strip harvest. This seems strongly to imply that there will be a more rapid depletion of donor hair if its end point is the minimum density that allows (a poorly defined) styling flexibility.

**I am proud of my association with the ISHRS for its trying to maintain its original mission of teaching and the free exchange of ideas while realizing a need to keep ourselves focused on the ethics of medicine.**

Optimal yield is also stunted, according to my unapologetically simplistic thinking, by limitations imposed by the density step-off that will occur between the whole width of a maximum harvest of the "safe zone" and the adjacent "unsafe zone." The solution

is either grafting a tapering, submaximal density within the "safe zone" or into the adjacent "unsafe" areas as has been described as an approach by FUE advocates who cite that only a low percentage of patients will suffer the embarrassing consequences of scar exposure with progressive balding in the future. I suppose this is acceptable as long as the patient is adequately informed. With patient consent, I would put this latter approach in the category with transplanting a 19-year-old's vertex or giving him a Norwood II hairline; his desperation, typical of a young person, makes the wisdom of his consent questionable.

### GRAFT QUALITY AND TRANSECTIONS

I refer you to the Unger and Shapiro text for numerous studies that need to be refuted before being comfortable with the skinny or transected grafts that FUE can produce. How has the FUE adherent become so comfortable with these studies that show decreased or miniaturized growth? I am not aware that studies refuting these concerns have been performed. Additionally, the transection rates that are tolerated with FUE are percentages that sank the multi-bladed knife harvest years ago. It seems objectivity is being applied inconsistently. The limitations imposed by the hair mass offered by the safe donor have always been a major limitation to our ability to treat alopecia. Are patients fully aware of this likely "follicular holocaust" that can occur with FUE?

This concern aside, the inherent individual variation in graft quality that results in, for example, skeletonized grafts or high transection rates, begs the question of whether a hair transplant surgeon can practice ethically without also offering strip excision or, at least, having consent signed that the procedure will not proceed if such problems arise. (How

much transection during FUE is acceptable if strip excision transection approaches zero?)

## VASCULAR DAMAGE

The total incising with a 2,000-graft case is approximately 50cm for a 24cm strip versus about 569cm for 2,000 FUEs with a 0.9mm punch. Admittedly, the depth of the punch varies significantly with different FUE techniques (some could be deeper than a strip; some, less) so that it is hard to know how to compare FUE with strip excision. But what a huge difference in total wounding and who knows what the impact is on donor vasculature after multiple procedures magnify this difference yet further. Does the ischemia produced with this wounding decrease donor density yet further? Nobody knows.

Over the years, I have repeatedly asked various ISHRS Board members why the ISHRS doesn't stand for certain standards of quality from its members. Not unreasonably at the time, the response was that the ISHRS's purpose is education and that adopting standards of performance would alienate and create internal dissent that would adversely impact the exchange of ideas. This seems true, yet now is a time when one hears of businessmen running mills in countries overseas and, even in the United States, businessmen are allegedly setting up mills with multiple operating rooms and 20 or more technicians and poor medical supervision. If the businesses selling the FUE machines were to police themselves and the qualifications of their clients, there would be no problem. After all, one of the business models charges on a per graft basis and, therefore, has to stay in touch with its clients. However, such rarely seems to be the policy of the business culture, and that brings us once again to the importance of the ISHRS to stand as the institution representing the physician-patient relationship and what the related ethics should be. So, clearly, times are different from the founding of our society. Perhaps the ISHRS should also sanction the medical device companies who don't mind selling their weapons indiscriminately as well and not permit them to sell at our meetings.

I am proud of my association with the ISHRS for its trying to maintain its original mission of teaching and the free exchange of ideas while realizing a need to keep ourselves focused on the ethics of medicine. For the former, I congratulate their open-mindedness in trying to objectify FUE with various, multicenter studies with their FUE Advancement Committee on which sit many of the most sophisticated practitioners of the procedure. For the latter, establishing standards of ethics, I congratulate them for having come up with, and having as a requirement for membership, standards for ethical marketing and having members agree that unqualified personnel will not be performing the procedure in their practices. They should promote these superior qualities of their members more forcefully to the various social media centers that advocate for and communicate with large numbers of the balding population as these policies reflect high underlying principles.

Finally, how do we agree that a physician has shown sufficient commitment to being a quality HT surgeon when he or she opens up for business down the road? All of us

at some point struggled with this issue in our own pursuit and options available varied considerably. Fellowships are not realistically going to provide a solution both for the number of physicians that could be produced as well as the real-world considerations of traveling away from one's base to an unpaid position elsewhere. It would seem that the ISHRS's offerings of its Basic Course, Advanced Course, an FUE course, and perhaps a hairline course, which would require attending several meetings, could indicate an intent, and formalizing this as a policy (with qualifications) would be a welcoming gesture to newcomers, the practitioners of tomorrow.

I should mention, in closing, that there are many technicians who have more ability and concern for the patient than most doctors, and I am indebted for what they have taught me. You know who you are. Nevertheless, to protect patients from the greed of some business-minded entrepreneurs, keeping this surgical procedure tightly under the auspices of a degreed medical practitioner is important, in my humble opinion, for reasons stated above. Unfortunately, a medical degree is far from a perfect filter for protecting the patient's well-being and this is where the ISHRS should step up to be an institution that stands for such quality, and I applaud its efforts to this point. Keep on striving for the high ground! ■

*Ellis*

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