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IN THIS ISSUE

A Retrospective, Single-Center Study of Hair Transplantation Using FUE Technique in Women with Androgenetic Alopecia

Follicular Unit Excision in Females: Technique and Experience of Three Centers

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ABSTRACT

Introduction: Hair transplantation has traditionally been a surgery sought after by men. However, the number of women interested in this procedure is increasing, but only select surgeons consider themselves able to perform it as female hair transplantation requires excellent technical skills and a keen aesthetic sense. We believe it is important to demonstrate the female hair transplant technique in order to encourage further research and publication on the subject.

Methods: We report on our group's collective experience in female hair transplant procedures. Our team is comprised of eight surgeons performing transplants across three centers. Our approach to the female hair transplant entails using the follicular unit excision (FUE) technique adapted to the female patient, which includes the addition of an "intra-operative regenerative" step developed by our team.

Results: After the surgery, the patients were clinically monitored and did not have any complaints that overrode their satisfaction with the procedure. The results in women, as in men, require an average of 6 to 12 months. At the end of this period, it was possible to observe very natural results, such as fuller hair and more feminine faces.

Discussion & Conclusion: Female hair transplant requires in-depth knowledge of the technique to avoid complications and obtain satisfactory results. Surgeons who dedicate themselves to learning how to perform it will have more tools available to them to achieve female patients' goals.

Keywords: alopecia, female pattern hair loss, follicular unit excision (FUE), hair transplantation, women

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INTRODUCTION

Hair transplantation in women has become more prominent in recent years. Increasingly, women seek care for their hair with rising interest in hair restoration surgery to enhance their femininity further and improve their self-esteem.[1] More than 30% of women over the age of 30 suffer from some complaint related to hair loss and seek to reverse this situation by searching for more effective alternatives, not just topical or oral medications.[2] Therefore, hair transplantation has gained increasing prominence among female patients as it is a minimally invasive surgery with satisfactory results.[3,4] However, when it comes to female hair restoration, more studies are needed to increase data on appropriate techniques and survival rates in this population and to encourage surgeons to perform the procedure in the appropriate female patient. There is often more complexity involved in identifying appropriate surgical candidates and in the surgical technique. Factors for surgical complexity include the desire for a more delicate hairline and more concern regarding their appearance following the procedure both in the short- and long-term.[5]

For the correct surgical indication, the patient's diagnosis must be properly established as a starting point for treatment planning.[5,6] Among the most common causes seen in our practice that lead women to choose hair transplantation are female-pattern androgenetic alopecia (AGA), desired reduction in fore-

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Message from 2024 ISHRS World Congress Program Chair — Henrique N. Radwanski, MD

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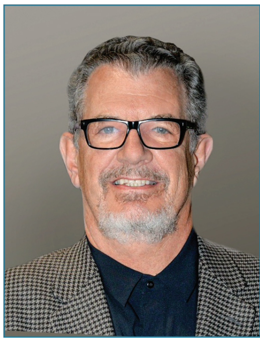

President's Message

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BALANCING TIME AND RESOURCES: UPHOLDING ETHICS IN HAIR RESTORATION SURGERY

We recently held a scheduled Zoom meeting of the Global Council of Hair Restoration Surgery Societies. The meeting was well attended by representatives from the ISHRS and the majority of the 23 societies. The societies of the Global Council are an integral part of the ISHRS; we are all partners who work together to promote safe and ethical hair restoration surgery throughout the world. We partner to offer educational opportunities for hair restoration surgeons around the world including the following: a) ISHRS Regional Workshops, organized by individual ISHRS members (such as the workshop recently held in Pakistan, which was the first ISHRS-sponsored workshop held in Pakistan, and it was an overwhelming success); b) ISHRS Global Council Society Workshops supported by the ISHRS (such as the upcoming 2024 Conjoint Annual Scientific Meeting of CAHRS [the Chinese Association] and AAHRS [the Asian Association]); c) ISHRS Live Surgery Workshops that are short workshops in which we partner with the meeting of a Global Council society meeting and organize a one-day Live Surgery Workshop (such as the upcoming May 2024 S.I.Tri. meeting in Milan); and d) ISHRS Live Surgery Workshops, which are standalone live surgery workshops organized and approved by the ISHRS (such as the Live Surgery Workshop held in Poland prior to the 2017 World Congress in Prague).

During the meeting, we also discussed the upcoming 2024 ISHRS World Congress in Denver and the 2025 World Congress in Berlin. Both will have an associated one-day ISHRS Live Surgery Workshop. So, there are plenty of opportunities for members and potential members to fulfill the minimal educational maintenance requirements for membership. As of 2024, there is a new point system that facilitates those requirements. It can be found on the ISHRS website at: https://ishrs.org/physicians/list-ishrs-approved-meetings-meet-additional-minimum-educational-requirement/. During the meeting, there were lively discussions about several topics but, as usual these days, the most spirited discussion was concerning the Black Market.

In April, we also had an ISHRS Board of Governors (BOG) meeting. Many issues are discussed during each BOG meeting. During the April meeting, we heard from the Membership Committee, chaired by Luis Nader, to vote on new members and members elevating to a higher level. Again, as above, a lot of our time was spent discussing the Black Market.

Dealing with and fighting the Black Market now consumes more and more of the budget of the ISHRS as well as the time and energy of the leadership and committees. Our primary function is providing educational opportunities for our members (as outlined above), but we are often distracted from this important function by the Black Market. Membership applications and the websites of applicants need to be scrutinized by the Membership Committee. There are misleading messages on applicants' websites including "painless," "no scarring," "no surgery," "DHI is superior to FUE," among others. Claiming "DHI is superior to FUE" appears to be in vogue as a misleading message. As the term is now used, "DHI" (direct hair implantation with sharp implanters) is merely a technique to place grafts in the recipient area with sharp implanters and cannot be equated to a method of surgery.

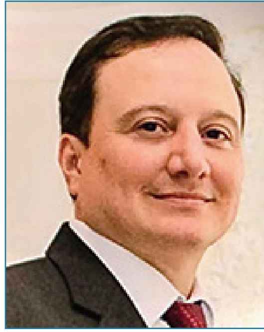
The Black Market is hair transplantation surgery done by assistants and other unlicensed individuals who cannot legally perform surgery. It is most prevalent in Turkey, where many patients have surgery performed simultaneously by unlicensed individuals under the auspice of one licensed physician who may or may not even be in the building. In the United States, licensed cosmetic surgeons who perform non-hair related surgery often buy or rent a hair transplant surgery device and have the surgery performed by assistants trained and made available by the device maker. The doctors are present but are not involved in the hair transplantation procedure. The U.S. clinics have much lower volume than the Turkish model.

There are many clinics that imply that it is legal for the unlicensed individuals to perform surgery because in the medical codes and revised codes, hair transplantation is not specifically addressed. These codes were generally written prior to the development of hair restoration surgery. If there was an issue brought before a medical board, they would need to convene a hearing (essentially a trial) to determine if a rule or rules were broken. When the facts were in, I'm sure a legitimate medical board would always rule against an assistant performing surgery. In Ohio, the state where I practice, it has been determined by the medical board that making an incision is the practice of medicine and the practice of medicine CANNOT be delegated. There is some confusion as to what "delegation" means. It means allowing an unlicensed person to perform doctor supervised simple medical tasks. Many think that if the licensed physician is in the room supervising, anyone can perform any medical task and the doctor harbors the responsibility. This is false. The practice of medicine, surgery, administering anesthesia, and administering controlled substances (even by mouth) among other acts CANNOT be delegated!

I believe that the ethical practice of medicine and the ethical treatment of patients should take precedence over any law, or the interpretation of a law, in question. I assume most of you reading these words went to medical school and did some type of residency. During those training periods, did anyone observe an assistant making an incision or performing surgery? Of course not.

Why, in our specialty, do so many doctors and assistants push the envelope, break the law, advertise to mislead the public (and potential patients), and damage patients? It really is a poor reflection of our specialty, and fighting the good fight takes up much of our time, energy, and resources.

The ISHRS and societies of the Global Council will continue to Fight The FIGHT while we do our best to offer the best educational opportunities possible. We are a diverse group of doctors and assistants dedicated to excellence, research, innovation, and most importantly the compassionate care of patients who trust us to treat them with the highest standards. Always keep the core purpose of the ISHRS at the forefront in all that we do, "improving quality of life for patients with hair loss through medical therapy and hair restoration surgery." ■



Co-Editors' Message

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This issue focuses on hair transplantation in female patients and includes a number of helpful articles on this topic. While there is often a focus on diagnostic precision, medical management, and in identifying when not to perform hair transplantation in women, it is also important to be familiar with scenarios where hair transplantation in a female patient could be an appropriate treatment option to help an individual achieve their goals. In these cases, it is important to be familiar with appropriate surgical techniques to be used with female patients, including in those with female pattern hair loss.

To start, Dr. Thalita Machado Carlesso and colleagues report on their experience and the techniques used performing female hair transplants using follicular unit excision (FUE). Next, Dr. Alba Zubiaur and colleagues, in their study "Retrospective, Single-Center Study of Hair Transplantation Using FUE Technique in Women with Androgenetic Alopecia," report on their results of a retrospective study of 17 women with androgenetic alopecia at their center. Finally, the Notable Articles Project highlights the 2011 article, "Candidacy of females for hair transplantation," by Dr. Walter Unger, which discusses an alternative way to think of the appropriate use of hair transplantation in female patients to focus on the areas of most concern. Dr. Jennifer Krejci provides a well-written and clinically applicable summary and commentary on the article. These articles highlight the importance of considering a holistic approach in female patients, including the role of hair transplant surgery, which is often overlooked in this patient population.

Another focus of this issue is regenerative therapies. The article by Dr. Carlesso and colleagues briefly discusses an intra-operative regenerative technique that they use in female patients. Dr. Russel Knudsen's Controversies column further discusses the current status of a number of options, potential benefits, and limitations of regenerative therapies. Although our personal views can impact our medical advice, we must always present factual information and discuss the pros and cons of pharmaceuticals and regenerative procedures with our patients.

Dr. Brad Wolf's President's Message provides a well-written description of the advancements in our society's efforts to promote quality Live Surgery workshops and meetings worldwide, despite facing challenges from Black Market clinics that allow the unlicensed practice of medicine and unethical advertising.

The ISHRS 2024 World Congress is coming up soon, and Program Chair Dr. Henrique Radwanski gives us a sneak peek of what we can expect. We are thrilled to learn that the focused sessions, planned by Dr. Maxim Chumak, will cover interesting topics such as long hair and new punch designs. Additionally, we are delighted to hear that the CSI presentations, chaired by Dr. Greg Williams, will be hard-copy posters once again, which is always great to view at the conference venue.

In Literature Review, Dr. Guillermo Guerrero summarizes recent studies on the association between androgenetic alopecia and various metabolic factors. He emphasizes that a hair consultation can provide a valuable opportunity to suggest, screen for, or recommend that patients undergo appropriate screenings for related health issues with other medical professionals. To round out this issue, a big thank-you to Dr. Marwan Noureldin for his work on the Hear from the Assistants column. Here, he speaks with liyana Karadakova and Sanna Rautiainenn, from Dr. Piero Tesauro's clinic, who share their daily approach and offer some great advice. You also will not want to miss Dr. Steven Gabel's ABHRS President's Corner where he does a deep dive into how the ABHRS written exam questions come to be. Additionally, Drs. Flávia Dias and Radawanski give us a look into the First Advanced Eyebrow Transplant Course by the Brazilian Association of Hair Restoration Surgery that took place this past April in São Paulo, Brazil.

Overall, this issue brings up a number of interesting points, including articles on female hair transplants and regenerative therapies, among others. We hope you enjoy reading it and thank all authors for their contribution to the *Forum*.

We encourage all of our readers to share your experiences and knowledge by submitting an article to the *Forum*. Simply write it, download and fill in the accompanying required author release(s) and checklist forms, which are available at **https://www.ishrs-htforum.org/content/authors**, and email it to **forumeditors@ishrs.org**. ■

Controversies

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Pharmaceutical Therapies vs Regenerative Therapies

There has been a lot of excited chatter recently about the development of regenerative therapies for hair loss. From platelet-rich plasma (PRP) to platelet-rich fibrin (PRF), stromal vascular fraction (SVF), exosomes, photobiomodulation (i.e., low-level laser therapy [LLLT]) to botanicals such as resveratrol, the search goes on to find effective regenerative therapies using the patient's own biology to preserve and/or boost hair growth in thinning patients from any cause of hair loss.

In my experience, combining stimulating therapies with a blocking therapy usually provides a longer lasting effect for stability while also increasing the chance, in an appropriate patient, for improvement.

The enthusiasm is understandable as regenerative therapies are being successfully applied in many areas of medicine. However, some reality needs to be introduced into the debate. To date, I am unaware of ANY treatment modality that has successfully converted vellus hairs into terminal hairs. No research has demonstrated the ability in humans, or in animals, to successfully regenerate to full health any follicle that has been miniaturized by more than 50%. In animal studies, even the addition of cultured stem cells has not achieved this result.

Therefore, for the best results, treatments, whether pharmaceutical or regenerative, need to be administered early in hair loss progression, and repeatedly, to maintain any benefit.

In addition, regenerative therapies fall under the category of stimulating therapies, which are applied through a multitude of different pathways. Pharmaceutical therapies may be either stimulating (e.g., minoxidil) or blocking (e.g., finasteride, dutasteride, spironolactone, bicalutamide) therapies.

So, do we have any indication yet of the comparative value of pharmaceutical vs regenerative therapies? One of our leading luminaries in the field of regeneration and hair loss, Dr. John Cole, stated the following in a WhatsApp conversation: "I want to emphasize that there is no regenerative procedure or pharmaceutical that grows hair on a completely bald scalp. You have to catch the hair loss early for the best result. Pharmaceuticals can do a better job on advanced hair loss than regenerative procedures. When the pharmaceuticals work, you can help prolong the life of the resurrected hair with regenerative procedures."

I would basically agree with this and emphasize that the two approaches are complementary rather than absolute alternatives. Patients will always think "natural" is better, and they need to understand the relative risks and rewards of these approaches. In addition, regenerative therapies are generally procedurally based, mildly invasive (needles and injections), usually involve regular visits to the physician (excluding microneedling and LLLT), and are expensive with no guarantee of success. Pharmaceuticals have the risk of side-effects but are generally cheap, non-invasive and don't require regular visits to the physician.

How many times have patients told us that the minoxidil stopped working after 18 months? The use of stimulating therapies alone will often demonstrate that it slows progression but doesn't stop it in the medium to long term. In my experience, combining stimulating therapies with a blocking therapy usually provides a longer lasting effect for stability while also increasing the chance, in an appropriate patient, for improvement. Stimulating therapies do NOT exert any countering of the DHT effect on the hair follicle.

Our personal views about pharmaceuticals and regenerative procedures will obviously influence the advice we give our patients, BUT we owe it to the patient to be factual when presenting the different options, and we should discuss the pros and cons of each approach. I think the best outcome for the patient may sometimes involve the application of both approaches. ■