Characterization of the Safe Donor Area in the Indian Population Aged 50-55 Years

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ABSTRACT

Introduction: The safe donor area (SDA) in hair transplants has been categorized in various studies. This study was designed to profile and grade the occipital donor area in our patient population of Indian men, aged 50-55, with androgenetic alopecia (AGA).

Objective: To profile and grade the pattern of receding hair over the occipital donor area among Indian men, aged 50-55 years, with androgenetic alopecia.

Methods: A total of 681 Indian men with AGA (grade Norwood III and above, diffuse unpatterned AGA and/or retrograde AGA), aged 50-55 years, were included in the study group. Occipital donor areas were analyzed and photographed with the head in the sagittal plane. A team of two dermatologists graded the hair loss and the pattern of the receding hair over the occipital donor area and devised a method to grade and profile the donor area.

Results: Of the occipital donor areas analyzed, according to our scale, 78% were graded 1, 2, or 3 and fulfilled the standard SDA criteria; 22% did not fit well into the standard SDA grading scale. Diffuse thinning and/or reverse thinning of the occipital donor area were also observed.

Conclusion: There is no clear-cut defined SDA that can be applied to all patients; therefore, SDA selection should always be conservative and overharvesting of the occipital donor region should be avoided.

Key words: safe donor area (SDA), androgenetic alopecia (AGA), occipital donor area, diffuse thinning (DT), reverse thinning (RT)

INTRODUCTION

Safe donor area (SDA) in hair transplant surgery has been categorized by various studies. In our clinical practice, retrograde androgenetic alopecia (AGA)/reverse pattern hair loss, diffuse AGA, and possibility of miniaturization in occipital scalp are observed routinely; however, these factors are not clearly addressed in the standard SDA definition. This study profiled the occipital donor area in our male Indian patient population and devised a grading scale for the donor area.

METHODS

A total of 681 men between the ages of 50-55 with AGA (Norwood grade III and above, diffuse unpatterned AGA and/or retrograde AGA) were included in this study. Each patient’s occipital donor area was analyzed and photographed with the head in the sagittal plane. A team of two dermatologists graded the hair loss and the pattern of the receding hair over the occipital donor area and then devised a grading scale based on the location of the lowest point of the occipital fringe from an imaginary horizontal line connecting the superior surface of the helical rims (grades 1 to 5, with or without diffuse hair loss and/or reverse thinning). Grades were defined as follows:

- Grade 5: The lowest point of the occipital fringe is below the horizontal line connecting the superior surface of the helical rim.
- Grade 4: The lowest point of the occipital fringe is at the level of the horizontal line.
- Grade 3: The lowest point of the occipital fringe is at a distance of up to 3cm from the horizontal line.
- Grade 2: The lowest point of the occipital fringe is at a distance of 3-5cm from the horizontal line.
- Grade 1: The lowest point of the occipital fringe is at a distance of 5cm and above from the horizontal line.
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President’s Message
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Reading and Listening Recommendations for the COVID Lockdown

Dear colleagues,

Who could have imagined when we were at our meeting last year in Bangkok that we would be in this situation now? Unbelievable! The COVID pandemic has disrupted all of our ISHRS educational projects and traveling plans for the entire year of 2020. First, we had to cancel the workshop in Houston, then the European workshop in Athens, then the St. Louis Workshop, and now the big one, the World Congress in Panama. The good news at least is that the World Congress will still be held, albeit virtually. At a personal level, though, I am disappointed that I will be unable to meet and greet you all in person at the Congress in the year that I am serving as ISHRS President. However, I also feel strongly that circumstances such as these provide us with the opportunity to learn how to deal with emergency situations in leadership positions, and this is something that not everyone has the chance to experience in their lifetime. Besides, planning a virtual online congress for such a large society as the ISHRS is going to be a wonderful learning experience in itself, and I am sure that it will help us all to familiarize ourselves with new technical and planning methods that can be applied to future meetings of all kinds.

Over these past few months, and in the midst of the COVID lockdown, one of the few possible benefits has been the opportunity to get around to doing those things that we tend to put off when we have to dedicate so much time to working in our clinics. Maybe finishing that paper that has been on hold for so long, going through that pile of journals we just never found the time for, reading that book we were given as a gift, making that long-promised promotional video for our website, trying out that new recipe, practicing that piano or guitar riff…. There are so many things to do that, for me at least, time has seemed to move faster than in a normal working day.

Bombarded as we are with news about the COVID epidemic, with graph after graph showing infected patients and mortality rates, scientific articles revealing the hyperinflammatory cytokine storm caused by the virus, lists of what preventive measures seem to be more effective, gloomy economic forecasts, etc., I would prefer not to add to that in this message. We have more than enough from other sources. If I may, I would just like to recommend a few things for you to read and listen to during this lockdown.

The book I recommend is The Forest Unseen: A Year’s Watch in Nature (in Spanish: En un metro de bosque: Un año observando la naturaleza) by David George Haskell, Professor of Biology at Sewanee: The University of the South in Tennessee (USA). The book reveals what can be understood about the natural world through the author’s year-long observation of a one-square-meter patch of old-growth Tennessee forest, explaining the scientific ties binding all life and how the ecosystem has cycled for millions of years. We learn how so many wonders of nature can be uncovered by simply and carefully observing how animals and plants adapt to changes in temperature and environment. The book also underlines the importance of attention to detail, something that we hair restoration surgeons, and indeed all scientists, have in common with naturalists.

As a scientific article in the hair field, I would recommend a recently published article in Science by Michel Rendl and his team from the Icahn School of Medicine at Mount Sinai, New York. The article is titled “Dermal sheath contraction powers stem cell niche relocation during hair cycle regression.” It is somewhat unusual to find a paper on hair in Science, whose impact factor of 41 makes it one of the world’s top scientific journals. To make a simple comparison, publishing a single article in Science equates to publishing 20 articles in Dermatologic Surgery, the most reputable peer review journal in cutaneous surgery. This particular article identifies the dermal sheath that lines the follicle as the key driver of tissue regression and niche relocation via the smooth muscle contractile machinery that generates centripetal constriction force. In other words, if it weren’t for the dermal sheath, now identified as a smooth muscle, the epithelial stem cells could not come back during catagen to their place of origin in the bulge region, and a new hair would not be formed, thereby terminating the lifetime of the follicle in terms of hair shaft production.

I would also like to recommend a couple of songs for you to listen to. The first is “Country,” a tune that appeared on the album My Song by the American jazz pianist and composer Keith Jarrett in June 1978. It was the second album recorded by Jarrett’s European Quartet and features Norwegians Jan Garbarek on tenor saxophone, Palle Danielsson on bass, and Jon Christensen on drums. The whole album is excellent, but “Country” stands out for its emotion and intensity.

In a fine gesture of solidarity, the rights to the second song I recommend have been signed over to the community of Madrid, the region of Spain hardest hit by the effects of COVID19, to use as it sees fit to pay tribute to its health workers. Originally released in 1995, the members of Los Secretos have just recorded from their respective homes an online version of their song, called “Pero a tu lado,” which can be seen on https://youtu.be/7UOWBV6i9Y0. The melody and lyrics will long be remembered as a heartwarming anthem during this lockdown in Spain.

Finally, on behalf of the ISHRS, I would like to send you and your loved ones our very warmest and sincerest greetings.
Co-Editors’ Messages

I’d like to write of another crown, the triple crown of the ISHRS consisting of educational offerings, the leadership, and the Forum. Together these are what make our society relevant and valuable, and none of them happen without inspiration and perspiration (hard work).

The first component, educational opportunities, are the potpourri of outstanding meetings, highlighted by our World Congress, that bring together all those interested in learning, teaching, and exploring our world through the international places we visit and the friends we make. While this year’s meeting will entail us coming together virtually from our homes rather than being in one physical place, being privy to some of the extensive planning going on I know it will provide a highly anticipated special learning experience.

The second component, the leadership of the ISHRS, rose to the challenge of addressing COVID-19’s impact on our practices and society. True leadership in whatever setting—an office, a nation, a professional society—is called for in times of disruption. The immediate action taken by the ISHRS in early March to present the offerings that many of which our members chose to partake in, such as offering webinars in English and Spanish on telemedicine and other timely subjects, establishing guidelines for returning to practice, and surveying members to learn the impact of quarantines on our practices (the results are presented on page 91), all demonstrated the quality and commitment of the ISHRS’s leadership, backed up by the efforts of executive director Victoria Ceh and her team including Rita Kaufman, Melanie Stancampiano, Blanca Mejia, and others.

Finally, the third component—the Forum. Managed by a long line of prior committed editors, Aditya and I are doing our best to continue on the rapid dissemination of salient ideas and knowledge, a responsibility that could not be achieved without the contributions of our members. This issue’s cover story, which discusses the characterization of the safe donor area in a specific demographic group, is made particularly worthwhile as it features commentary from Drs. Bernstein and Rassman. Last issue’s cover story reignited the sagittal vs. coronal debate, generating the letters to the editors. The Notable Articles Project takes us back to a 2002 article from Outpatient Surgery, “9 Sacred Cows to Banish from Your Facility,” which was reprinted in the 2002 Forum. It discussed infection control in the OR, and we run it again here with a perspective on today’s relevance.

COVID-19 will come and go, and like all crises, will leave us wiser and with a better perspective. The ISHRS and the Forum will be here to guide us in our efforts to be the best clinicians we can be, and will help us raise the bar on how we treat hair loss.

I truly hope this message finds you all safe and well. As countries are going through different stages of the response to COVID-19—some of us are able to reopen while others are in the crux of a lockdown—please know that the ISHRS is here for each and every one of us. The COVID-19 Task Force has assembled several webinars, Zoom discussions, and specialized resources to assist members in reopening our practices (outlined on page 91). This is unchartered territory for all of us, so let’s share our reopening ideas, successes, and failures to find the best strategies and help each other through this difficult time.

This issue of the Forum highlights some great topics worthy of discussion, as always. A topic not discussed too often but that is fairly common is post-operative folliculitis. Tueboon Sriphojanart and colleagues address this in a retrospective study. The results suggest that a younger age and preexisting scalp, facial, and neck acne are potential risk factors for developing folliculitis. This study also addresses the concern that folliculitis may affect graft survival, showing that the prognosis of hair regrowth after post-operative folliculitis is good. Since the development of folliculitis after a hair transplant can be distressing to the patient, identifying risk factors and susceptible populations can help surgeons better inform their patients and reassure them that the overall prognosis should not be affected by folliculitis.

The Hair Sciences column is particularly relevant as it discusses the possibility of COVID-related telogen effluvium through multiple mechanisms. Possible causes include stress or fever-induced, as seen after the Spanish Flu pandemic in 1918, or possibly through direct effects of the virus. There is still so much to learn about the effects of this virus on hair growth, but being aware of this possibility is important to take into consideration when planning surgical treatment in the current times of the pandemic.

Greg Williams’s “Spotlight on Social Media” brings to our attention the advantages and cautions of social media as a medical professional. In the age of social media, posting about health issues and medical experiences has many advantages, such as educating patients and helping them understand what to expect on the day of surgery. Social media is also a great way to advertise your practice (as long as it is done responsibly and ethically). However, there is a gray area when posting about your personal life on social media. This column offers an important reminder to take caution when posting personal stories or opinions as your reputation is at risk.

In closing, Jeff and I are sincerely appreciative of all contributions to the Forum. Your continued participation in sharing your ideas and knowledge is instrumental in advancing the field of hair transplantation. In an attempt to accelerate the editing process, we are asking that all contributions include a structured abstract and up to 6 key words. We look forward to reading your future contributions!