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MEETING REVIEW



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Clinical Practice Guidelines for Virtual Consultations in the Practice of Hair Restoration Surgery

Developed by the International Society of Hair Restoration Surgery Task Force for Guidelines for Virtual Consultations

Authors (alphabetical): Nilofer P. Farjo, MBCChB, FISHRS; Venkataram Mysore, MBBS, FISHRS; Robert H. True, MD, MPH

Guidelines for Virtual Consultation Task Force Chair and Primary Editor: Robert H. True, MD, MPH

Disclaimer: These guidelines on virtual consultations, also referred to herein as telemedicine, are provided for educational and informational purposes only. They should not be interpreted as setting a standard of care, or be deemed inclusive of all proper methods of care, nor exclusive of other methods of care. Following these guidelines will not ensure successful treatment in every situation. Each individual physician should make an independent judgment regarding the proper treatment and the use of virtual consultation for each patient based on the particular facts and circumstances. These guidelines are provided “as is.” The International Society of Hair Restoration Surgery (ISHRS) makes no representation or warranty as to their accuracy or completeness. The guidelines reflect the best available data at the time they were prepared. Future studies may yield results that require revisions to the recommendations in this guideline to reflect new data.

The Task Force for Guidelines for Virtual Consultations of the International Society of Hair Restoration Surgery has written this treatise on virtual consultations/telemedicine in which suggestions for how to best offer virtual consultations are provided. It was authored and reviewed by the committee, and the suggestions were based on any available studies as well as the combined experience and expertise of the committee members. It is intended to provide basic information on how to properly offer and use virtual consultations in the practice of hair restoration.

Please be aware that any suggestions are subject to the laws and regulations of the physician’s respective country/state, and we strongly advise you to familiarize yourself with those in your area of practice.

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INTRODUCTION

These guidelines have been developed by the Task Force for Guidelines on Virtual Communications and approved by the Board of Governors of the ISHRS in response to a recognition that virtual consultation technology is now widely used in the modern practice of medicine including hair restoration surgery. The purpose of these guidelines is to provide members with standards and best practices for the use of telemedicine in providing safe and effective care to patients in their practices. These guidelines are based on current technology and current understanding of the subject and practice and regulations. They are not meant to be absolute and will continue to evolve over time.

While accurate diagnoses, appropriate care, and the best patient outcomes cannot be guaranteed by these guidelines, following them can contribute to achieving these objectives. The guidelines do not convey legal standards. Members should be aware of and adhere to all governmental recommendations in their practice locations and check that their indemnity insurers cover these types of practices.

Telemedicine is a general term that covers any method a hair transplant surgeon employs to remotely, or virtually, communicate with patients. It includes phone calls, voice and text messages, emails, and video chats. Alternative terms include telehealth, digital medicine, e-health, or m-health (for “mobile”). The historical background of some of these technologies can be found in Part 4: History of Telemedicine Technology.



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Telephone 1-630-262-5399

U.S. Domestic Toll Free 1-800-444-2737

Fax 1-630-262-1520

President	Bradley Wolf, MD, FISHRS president@ishrs.org
Executive Director	Victoria Ceh, MPA vceh@ishrs.org
Co-Editors	Natalie Kash, MD Luis A. Nader, MD, FISHRS forumeditors@ishrs.org
Managing Editor & Advertising Sales	Cheryl Duckler ishrsduckler@gmail.com

COLUMNISTS

ABHRS President's Corner	Ken L. Williams, Jr., DO, FISHRS
Controversies	Russell G. Knudsen, MBBS, FISHRS
Hair's the Question	Sara M. Wasserbauer, MD, FISHRS
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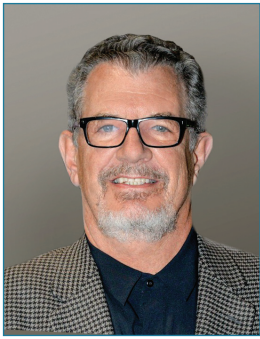
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President's Message

Bradley R. Wolf, MD, FISHRS | Cincinnati, Ohio, USA | president@ishrs.org



Congratulations to all who participated in our 31st annual congress in Delhi, India. It was a wonderful event, hosted by our Immediate Past President, Kapil Dua. Kapil, his wife Aman, and all the Indian members treated us

to an amazing experience full of color, pageantry, history, culinary delights, and incredible hospitality. Greg Williams (Program Chair), the Scientific Committee, and the ISHRS management team, led by Victoria Ceh and Melanie Stan-campiano, continued the tradition of making the last meeting, currently India, the best meeting in our history.

Prior to the meeting, the Board of Governors (BOG) and past presidents embarked on an overnight excursion to Agra and a day in Delhi. I'm sure many of you visited the mesmerizing and unforgettable Taj Mahal in Agra (see photo). We have all seen it in photos but being there is a unique and spiritual experience. Our visit to the spice market in Old Delhi gave us a taste of the colorful and bustling heart of this amazing culture.

The BOG visits the Taj Mahal in Agra



Our primary strength, education, was on full display in India thanks to work of our ISHRS volunteer members and management team. Our physician volunteers are the backbone of the society as they take time from their busy practices to organize the meeting, present lectures, and serve on the many committees of the ISHRS. Committee assignments expire, and it is my task as president to appoint members to vacancies. Thanks to all who answered the recent call for volunteers. Soon, the new committee members will be notified. You are the future of our society as you will help us tackle current and future issues, solve our problems, and construct the next and future annual meetings.



President to me means a leader who defers the actual decision making to the BOG and makes sure everyone on the Board is heard before a decision is made.

As I am sure you are aware, our annual congress will be in Denver, Colorado, October 16-19, 2024. Henrique Radwanski, Program Chair 2024, is beginning to plan for the Denver meeting with the help of the BOG and ISHRS management staff. Your submitted abstracts are the backbone of the General Sessions. Earlier in my career, I didn't start thinking about submitting an abstract until the "Call for Abstracts" was published, usually at the end of December (and rapidly approaching). The deadline, usually in March, would quickly arrive and I'd miss the window for submission. In 1998, during a stimulating and singular meeting in Washington D.C., I began thinking about abstract topics DURING the meeting for the following meeting. By doing that, my topic was developed by the time the "Call for Abstracts" arrived. Our meetings are a unique time for us when our core principles as well as new information is presented. I feel a portal is opened in my mind where the information flows in stimulating a heightened level of hair awareness, so to speak. I use this unique time to formulate new ideas for abstracts to submit for the next meeting. Try it, it works!

Thanks to Kapil Dua for his service to the society as an energetic and active president and administrator; I learned a lot from him. His BOG worked hard at the strategic planning meeting in January 2023 setting the course for the society for the next five years. Included in this is an ambitious schedule of education opportunities including, currently, five sanctioned meetings for the coming year and possibly more to come. The next meeting is February 23-25, 2024, an ISHRS Regional Workshop in Islamabad, Pakistan, hosted by Rana Irfan.

I'm honored to be serving as the 32nd president of the ISHRS this year. President to me means a leader who defers the actual decision making to the BOG and makes sure everyone on the Board is heard before a decision is made. The president must find the common chord, to listen to and consider what all have to say, and is essentially a democracy facilitator who holds no official power other than to make sure everyone else is given the opportunity to be heard. If you have any questions, comments, ideas, or would like to submit an article to *Hair Transplant Forum International*, please let us know. I look forward to another interesting year. ■



Co-Editors' Message

Natalie Kash, MD | *Bellevue, Washington, USA*;
Luis A. Nader, MD, FISHRS | *Reynosa, Mexico* |
forumeditors@ishrs.org

In a world where technology is constantly advancing, we witness a continuous transformation in how we connect with patients. Initially, we relied on traditional methods like newspapers and Yellow Pages for advertising. Then, we transitioned to magazines and radio. Today, we have a multitude of digital platforms such as websites, social media, and communication apps like WhatsApp and Zoom. It is crucial for us to adapt to how prospective patients expect to find a hair restoration surgeon.

It gives us great pleasure to present as our lead an invaluable article on the clinical practice guidelines for virtual consultations in hair restoration surgery. Authored by Drs. Nilofer Farjo, Venkataram Mysore, and Robert True, this article provides insightful suggestions on how to effectively conduct virtual consultations. While every physician should adhere to their respective governmental and local health regulations, this comprehensive piece enlightens readers about the best standards of practice in telemedicine.

We see in some medical practices that phone calls are now being replaced with WhatsApp-type interactive apps, letters with emails, in-house consultations with virtual ones, written consent forms with electronic online portals, and follow-ups with video calls. The younger generations seem to prefer conducting hair loss consultations conveniently from their phones or laptops, eliminating the need to leave home. While some doctors readily adopt these practices, it's important to be mindful of potential privacy breaches in handling confidential patient information. Additionally, and as important, you must consider the specific licensing requirements for providing telemedicine in your jurisdiction and that of your patient. It is essential to ensure that patients are well-informed about the nature, limitations, and risks associated with telemedicine consultations. Obtaining explicit patient consent before initiating telemedicine consultations is integral. To facilitate this, the authors provide a patient contact form that serves as a formal consent for electronic communication, and it is easy to adapt for your own practice.

Virtual consultations provide several advantages, such as increased accessibility, convenience, and the ability to reach patients who may be in remote areas. A clinic or physician's office should be able to provide clear instructions to patients on how to access and participate in telemedicine consultations. As noted, however, there are certain risks associated with telecommunication including unintended family members, co-workers, or other third parties viewing or hearing these communications.

Training staff on maintaining privacy and security during a consultation in any form is paramount, and good practice

is to establish a feedback mechanism to gather input from patients and staff to continually improve your telemedicine process. It is also essential to keep current on technological advancements and updates in telemedicine regulations.

For those unable to attend the ISHRS 31st World Congress in Delhi, India, a comprehensive and insightful review of the meeting has been prepared by Rachel Kay and Amy Vowler. While I (Luis Nader) offered some help in this review, I cannot thank Rachel Kay enough for her dedication to this column. This review will prove valuable not only to those who attended the congress in person and can benefit from the comprehensive refresher material, but also to those who purchase the recorded sessions post-congress.

We also would like to thank Dr. David Perez-Meza for his thorough review of the 14th annual "two parallel courses for physicians & staff" Hair Transplant 360 Cadaver Workshop, and Dr. Henrique Radwanski and the Brazilian Society of Hair Restoration Surgery (ABCRC) for their review of the first workshop dedicated to Afro hair, where an international faculty discussed and demonstrated via live surgery the surgical approach to curly and afro-descendant hair.

Additionally, this issue celebrates the work of the numerous individuals—such as Kapil Dua, Gregory Williams, Victoria Ceh, and the ISHRS staff—who contributed to the success of the 2023 ISHRS World Congress.

As we wish you all a happy, healthy end to 2023, we look forward to what the ISHRS, the *Forum*, and our members will accomplish and achieve together under the leadership of newly anointed ISHRS President Bradley Wolf over the upcoming year. ■





Notes from the Editor Emeritus, 2011–2013

Nilofer P. Farjo, MBChB, FISHRS | Manchester, UK | dr.nilofer@farjo.com

Caffeine and Hair

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I was recently asked to give a talk on the topic, “Does caffeine stimulate hair *in vitro* and *in vivo*?”

My knowledge on this topic was limited to acknowledging that there is scientific evidence supporting this question and there are products based on this stimulation. However, I had not seen any robust evidence to support the use of these products for hair loss patients.

BACKGROUND ON CAFFEINE

Caffeine is a phytochemical (plant source) that is found in coffee beans, tea leaves, cocoa beans, and nuts such as the kola nut. It is a small nitrogen-containing structure with a composition like adenosine. Because of this structural similarity, it can compete with adenosine cell receptors A1 and A2. This leads to an increase in the neurotransmitter acetylcholine.¹

When ingested, caffeine is absorbed through the gut with peak levels at 45 minutes, and it has a half-life of 4-7 hours. The majority (97%) is metabolised in the liver to active metabolites: paraxanthine (increases lipolysis), theobromine (dilates blood vessels), and theophylline (dilates smooth muscle). The remainder is excreted in the urine unchanged.

There are many modes of action, including cerebral effects, that include action as a eugeroic (wakefulness promoter) or as a mild cognitive enhancer to increase alertness and attentional performance. It also potentiates other drugs and is often found in combination with pain relief medications such as ibuprofen. It affects smooth muscle in the lungs, and cardiac effects lead to increased heart rate and raised blood pressure.¹ For this reason, many hair transplant surgeons ask patients to refrain from caffeine-containing drinks pre- and intraoperatively.

Caffeine's most well-known mechanism of action is that it increases cyclic AMP through non-selective inhibition of phosphodiesterase, which leads to a decrease in micro-inflammation and an increase in cell proliferation. Both are relevant to hair growth modulation. Caffeine is also an antioxidant and is postulated to be a 5-alpha reductase inhibitor.²⁻⁴

CAFFEINE AND HAIR

In 2019, there was a very good review on phytochemicals and hair loss.⁵ The authors reviewed the available articles including those involving mouse studies. Findings included mechanism of action with topical treatment showing *in vitro* stimulation of outer root sheath cell proliferation and a decrease in apoptosis and cell necrosis (via decreased TGF-beta2 and increased IGF-1 and KGF).⁶ *Ex vivo* studies demonstrated stimulation of hair follicle keratinocytes, 5 α -reductase inhibition, increased cell proliferation, reduced apoptosis, reduced oxidative stress, and decreased

UV-induced damage of the epidermis and hair follicle. The review also highlighted the work of Otberg et al in 2007 and 2008.^{7,8} They showed that caffeine entered the blood after topical application through hair follicle channels at a faster rate than through interfollicular skin. Caffeine is a small hydrophilic molecule that was shown to attach to hair fibres externally and thus has the potential to aid in other molecules attaching to hairs. This could be used to increase water attachment and other molecules that could be used to increase fibre strength or plasticity.⁵

DISCUSSION & CONCLUSION

Caffeine products are classified as a cosmetic not as a drug and as such claims cannot be made about its action on hair follicle growth modulation. If you look at commercially available products, however, many do make claims that it reduces hair loss or causes regrowth. But on a positive note, it is a natural product that is easy to obtain, so for this reason is an option for patients wanting a non-pharmaceutical option for hair loss.

I must admit that my initial thoughts on the use of caffeine were somewhat misguided. It is only through looking at the available research that I now see the value of this versatile chemical. Caffeine has a proven effect on hair follicles, but it remains to be seen if the dosage and frequency have been optimised to treat AGA.

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