

Teletrichology: A New Tool During the COVID-19 Emergency

Teletricología: una nueva herramienta durante la emergencia sanitaria por el COVID-19

Sonia Sofía Ocampo-Garza,^{1,2} Jorge Ocampo-Candiani,¹ Gabriella Fabbrocini,² Massimiliano Scalvenzi² y Alessia Villani²

¹ Departamento de Dermatología, Hospital Universitario Dr. José Eleuterio González, Universidad Autónoma de Nuevo León, Monterrey, Nuevo León

² Dermatologic Unit, Department of Clinical Medicine and Surgery, University of Naples Federico II, Naples, Italy

ABSTRACT

Telemedicine will probably play a more permanent role during and after the COVID-19 pandemic. Teletrichology was described for hair disorders including androgenetic alopecia, alopecia areata, telogen effluvium, and some scarring alopecias. We would like to share our own experience in order to encourage the use of teletrichology among dermatologists.

KEYWORDS: *teledermatology, telemedicine, teletrichology, COVID-19, trichoscopy, alopecia, hair loss.*

RESUMEN

Durante la pandemia por el COVID-19 la telemedicina ha ocupado un rol muy importante, el cual seguramente continuará como parte de la dermatología a nivel mundial. La teletricología se ha descrito para diagnosticar y tratar diferentes enfermedades del cuero cabelludo, entre ellas la alopecia androgenética, la alopecia areata, el efлюvio telógeno, así como algunas alopecias cicatriciales. En este artículo queremos compartir con otros dermatólogos nuestra experiencia para incentivar el uso de la teletricología.

PALABRAS CLAVE: *teledermatología, telemedicina, teletricología, COVID-19, tricoscopia, alopecia, pérdida de cabello.*

Dear editor:

In late 2019 the novel coronavirus spread throughout the world; causing many dermatology departments and practices to close or to reduce their outpatient visits to urgent cases.^{1,2} This led to an increased use of telemedicine and teledermatology. Several studies showed that some skin conditions such as acne, rosacea, psoriasis, and acute dermatitis (atopic and contact dermatitis) are amenable for teledermatology. Other conditions, including hair diseases are harder to attend through telemedicine.³ Nowadays, many practices and hospitals have opened their doors, but the increasing cases of COVID-19 has limited the number of patients seen in-person and has urged us to continue with social distancing. Telemedicine will likely play a more permanent role during and after the pandemic.⁴ Randolph and collaborators described teletrichology for hair disorders including androgenetic alopecia, alopecia areata, telogen effluvium, and some

scarring alopecias.¹ We would like to share our own experience in order to encourage the use of teletrichology among dermatologists. When planning a telemedicine consultation for hair diseases, well-defined instructions on how to properly obtain clinical images are given to the patient. The help of a family member or acquaintance is advised. Photos should be taken in a well illuminated room or under natural light. First, a frontal picture is taken, placing attention to the hairline. Both temporals are photographed and afterwards the patient is asked to look down, so an image including both parietals and vertex region is taken (figure 1). After the clinical images have been completed, we continue with teletrichoscopy. It could be performed, if possible, with a handheld microscope or if the patient is notable to obtain one, using the zoom of the cellphone or camera. We ask the patients to come as close to the skin as possible and take multiple pictures with the highest resolution they can get. If

CORRESPONDENCIA

Dra. Alessia Villani ■ ali.vil@hotmail.it
Via Pansini 5, 80131, Nápoles, Italia

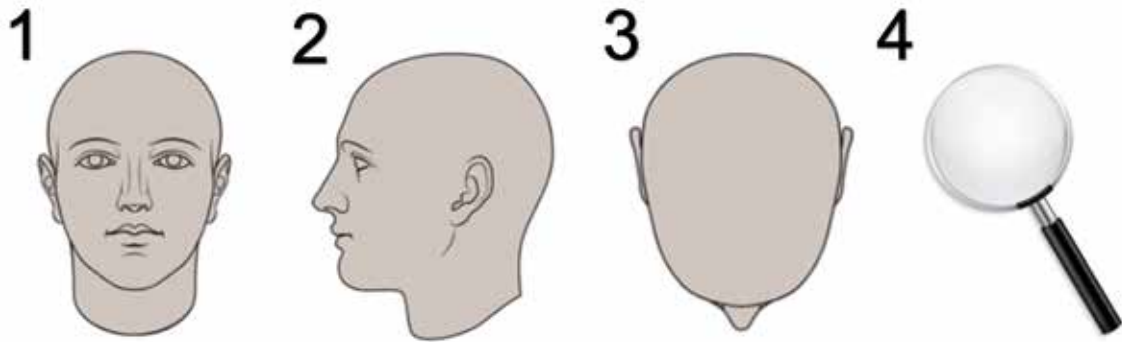


Figure 1. Well-defined instructions on how to properly obtain clinical images are given to the patient. First, a frontal picture is taken, then both temporals are photographed, and afterwards the patient is asked to look down so an image including both parietals and vertex region is taken. The last step is taking closer images of patchy alopecia (images were taken from Freepik).

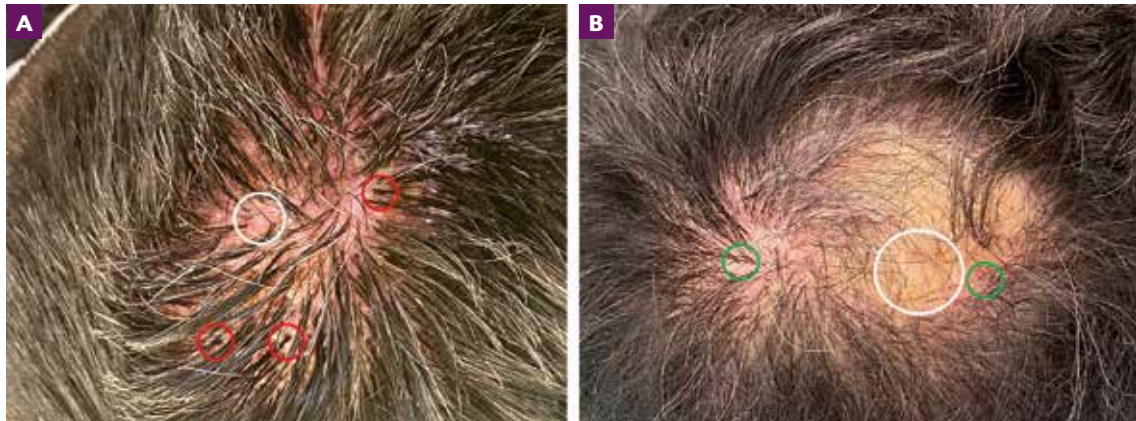


Figure 2. A) Close-up image of a male patient with folliculitis decalvans, tufted hairs (red circles) and absence of follicular openings (white circle) are present. B) Close-up image of a male patient with lichen planopilaris, perifollicular scale and erythema (green circles) and absence of follicular openings (white circle) are present (pictures were taken using an iPhone 11 Pro Max).

a patchy alopecia is present, images from the center and the periphery should be taken. Patients are asked to send the clinical history and the photographs to the doctor for evaluation.

After the clinical images have been analyzed, we proceed to an interactive consultation with a video call, during which patients are instructed for additional tests, including pull/tug test, measurement of the thickness of the ponytail, the distance from the hairline to the glabella or the external canthus, or the diameter of an alopecic patch. Many characteristic features of hair disorders can be observed, including hair shaft variability, yellow or black dots, exclamation mark hairs, absence of vellus hairs, absence of follicular openings, peripilar casts, peripilar erythema or scales, as well as tufted hairs (figure 2). Teletrichology and teletrichoscopy encourage patients and practitioners to continue follow-up of hair disorders, minimizing treatment delay. In no way can a magnifying glass or a camera replace trichoscopy performed by a dermatologist, but it can help incite a prompt diagnosis and

treatment, offering the possibility of global health care for patients in different cities or countries or for patients whose range of motion is affected. We recognize the practice to have several limitations, like the inability to conduct biopsies or procedures (intralesional injections), and the quality of the images due to the cellphone or camera or to the skills of the patient.

REFERENCES

1. Randolph M, Al-Alola A y Tosti A, Diagnosis of hair disorders during the COVID-19 pandemic: an introduction to teletrichoscopy, *J Eur Acad Dermatol Venereol* 2021; 35:e167-8.
2. Kwatra SG, Sweren RJ y Grossberg AL, Dermatology practices as vectors for COVID-19 transmission: a call for immediate cessation of non-emergent dermatology visits, *J Am Acad Dermatol* 2020; 82:e179-80.
3. Perkins S, Cohen JM, Nelson CA y Bunick CG, Teledermatology in the era of COVID-19: experience of an academic department of dermatology, *J Am Acad Dermatol* 2020; 83:e43-4.
4. Villani A, Scalvenzi M y Fabbrocini G, Teledermatology: a useful tool to fight COVID-19, *J Dermatolog Treat* 2020; 31:325.