On the occasion of Hair India 2014,\textsuperscript{1,2} a debate on diagnosing and evaluating scarring alopecias by scalp biopsy versus trichoscopy sparked the idea to make a comment on the value of trichoscopy. Dr. S. P. Punit from Mumbai advocated that scalp biopsy is mandatory, while Dr. M. S. Sukesh from Bangalore argued that trichoscopy is more than enough. The juries were Jerry Shapiro and Ralph M. Trüeb [Figure 1]. Four years have elapsed since then, and tendencies in dermoscopy are taking form that finally call for a general statement to be made.

Trichoscopy is the term introduced in 2006 by Rudnicka \textit{et al.}\textsuperscript{3} for the use of dermatoscope for the evaluation of hair and scalp. Dermatologists involved in the management of hair and scalp disorders have discovered dermatoscope to be useful in their daily clinical practice, and expert studies suggest that dermoscopy may improve diagnostic capability beyond simple clinical inspection. Therefore, trichoscopy has gained popularity as a tool in the differential diagnosis of hair and scalp disorders. Despite the enthusiasm emerging with its establishment as a valuable dermatologic tool, caution is warranted not to elevate trichoscopy to something like a fetish status. As a diagnostic procedure, trichoscopy remains to be understood as representing an integral part of a comprehensive dermatological examination. Furthermore, trichoscopy represents an integral part of surface or epiluminescence microscopy of the skin or dermoscopy. It seems that the dermatoscope for the evaluation of the hair and scalp picks up from the culture of a stethoscope within internal medicine, in terms of being a time-tested, sophisticated, hand-held diagnostic medical instrument conferring an uncontested dignity in the hands of a physician attending hair and scalp disorders.

Originally developed for distinguishing benign from malignant skin lesions, especially in the diagnosis of malignant melanoma, the use of the examination technique has been extended to evaluate other dermatological conditions and eventually the hair and scalp. The method allows viewing of the hair and scalp at high magnifications using a simple handheld dermatoscope, with alcohol as the interface solution. It can be combined with photography and digital imaging for clinical documentation purposes.

Using dermoscopy, signature patterns are seen in a range of pathologic hair and scalp conditions. Some predominate in certain diseases, while others can even help making a diagnosis in clinically uncertain cases. Tosti\textsuperscript{7} was the...
first to have systematically evaluated, classified, and summarized them in her original textbook in 2007. Since then, the number of scientific publications on dermoscopic patterns of diverse conditions of the hair and scalp has risen exponentially, culminating in diagnostic algorithms, textbooks and atlases, online courses, and eventually the founding of International Trichoscopy Society in 2017 that reunites its proponents and experts for exchange of knowledge and opinions on the occasion of its meetings.

As with any medical problem, a patient complaining of hair loss requires a comprehensive medical history, physical examination, and appropriate laboratory evaluation to identify the cause. By approaching the hair loss patient in a methodical way, commencing with the simplest and easiest to recognize objects, and ascending step by step to the knowledge of the more complex, a final diagnosis can be made as prerequisite to a treatment that is appropriate for that specific condition. Listening attentively is the most powerful diagnostic procedure in the diagnosis of hair growth disorders: A doctor who takes a careful history reaches a correct diagnosis in 70% of cases. This is far more efficient than all currently available tests and technologies. Touching is the oldest and most effective tool in doctoring: The relationship with the patient often alters dramatically after the physical examination (scalp, complete skin, nails, mucous membranes, assessment of hair part width, hair pull, and hair feathering test). The supreme tool is the dermatoscope as originally introduced by Tosti for this purpose: This simple, inexpensive device is invaluable for recognizing even subtle clues to the diagnosis, while costly, multi-parameter computer-assisted technologies are far less effective in clinical practice.

In many instances, a specific diagnosis is made in a fraction of a second if it is a simple matter of recognition, whether with or without dermoscopy. The informed look is the one most practiced by dermatologists: It comes from knowledge, experience, and visual memory. Where the diagnosis does not come from a glance, the diagnostic tests come in. Access to the diagnostic tools and facilities required are summarized in Table 1.

Trichoscopy has gained popularity in daily clinic practice as a valuable tool in differential diagnosis of hair and scalp disorders. Despite the enthusiasm emerging with its establishment as a dermatologic tool in the diagnosis of hair and scalp disorders, caution is warranted though not to elevate trichoscopy to something like a fetish status within medical practice. As a diagnostic procedure, trichoscopy is to be understood as representing an integral part of a comprehensive dermatological examination, as summarized in Table 1. Trichoscopy also represents an integral part of surface or epiluminescence microscopy of the skin (dermatoscopy, dermoscopy), and as such even the term trichoscopy would seem etymologically not precise, since it refers to the hair (from Greek τ ρίχα), while an important portion of trichoscopic signature patterns relate to the condition of the scalp skin. Moreover, the golden standard for diagnosis of hair shaft disorders remains the light microscopic examination (including polarization microscopy as indicated), despite the fact that some hair shaft pathologies can well be appreciated by trichoscopy. Finally, in case of scalp pathologies with evidence of inflammation and scarring, microbiological studies and performance of a scalp biopsy remain indicated, irrespective of performance of dermoscopy. In fact,

| Table 1: Diagnostic techniques and tools for diagnosis of hair and scalp disorders |
|-------------------------------------------------------------------------------------------------------------------------------------|
| Clinical examination (scalp, complete skin, nails, mucous membranes, pattern recognition)                                         |
| Dermatological techniques (black-and-white felt examination, assessment of hair part width, hair pull, and hair feathering test)   |
| Dermoscopic examination of hair and scalp (trichoscopy)                                                                            |
| Hair pluck (trichogram)                                                                                                           |
| Microscopic hair analysis (light and polarization)                                                                                |
| Scalp biopsy for histopathology and immunofluorescence studies                                                                  |
| Wood lamp examination                                                                                                            |
| Mycology including potassium hydroxide preparation and fungal cultures                                                          |
| Other microbiological services                                                                                                    |
| Photographic methods (global photographic assessment, phototrichogram)                                                           |
| Blood test facilities (phlebotomy and laboratory services)                                                                     |
| Access to nondermatological clinical disciplines                                                                               |
| Effective communication with nonmedical hair professions for referrals                                                          |
dermoscopy has been proposed to even be helpful to guide to an appropriate site for scalp biopsy.[14]

It would be imprudent to replace well-tried dermatologic examination procedures with dermoscopy alone, such as the hair pluck (in telogen effluvium), the light microscopic hair shaft analysis (in congenital and acquired disorders of the hair shaft), the microbiological studies (in tinea capitis and folliculitis decalvans), and the scalp biopsy for histopathological examination, and direct immunofluorescence studies (in the scarring alopecias).[15] So far, only in the diagnosis of early female androgenetic alopecia, dermoscopy has proven to be superior to the respective traditional diagnostic procedure.[16]

It seems that the dermatoscope for the evaluation of the hair and scalp picks up from the culture of a stethoscope within internal medicine, in terms of being a time-tested, sophisticated, handheld diagnostic medical instrument conferring an uncontested dignity in the hands of the physician attending hair and scalp disorders.[17]

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

REFERENCES

1. Murugusundram S. Bon appétit-hair India 2014. Int J Trichology 2014;6:86-7.
2. Trüeb RM. From science to spirituality. Int J Trichology 2014;6:154-5.
3. Ruhićka L, Olaszewska, M., Majsterek M, Czuwara, J Slowinska M. Presence and future of dermoscopy. Expert Review of Dermatology. 2006;1:769.
4. Gilje O, O’Leary PA, Baldis EY. Capillary microscopic examination in skin disease. Arch Dermatol 1958;68:136-54.
5. Diepgen P. History of Medicine. Berlin: de Gruyter, 1965:138-53.
6. Sapheir J. Dermoscopy. I. Communication. Arch Dermatol Syphiol 1920;128:1-19.
7. Tosti A. Dermoscopy of Hair and Scalp: Pathological and Clinical Correlation. Illustrated Editor. USA: CRC Press; 2007. p. 51-3.
8. Descartes R. A Discourse on Method: Meditations and Principles. Translated by Veitch J. London: Orion Publishing Group; 2004.
9. Van Neste D, Trüeb RM. Critical study of hair growth analysis with computer-assisted methods. J Eur Acad Dermatol Venereol 2006;20:578-83.
10. Trüeb RM. The Difficult Hair Loss Patient. Guide to Successful Management of Alopecia and Related Conditions. Heidelberg: Springer; 2015. p. 10.
11. Broom A, Kirby E, Gibson AF, Post JJ, Broom J. Myth, manners, and medical ritual: Defensive medicine and the fetish of antibiotics. Qual Health Res 2017;27:1994-2005.
12. Whiting DA, Dalgic C. Office diagnosis of hair shaft defects. Semin Cutan Med Surg 2006;25:24-34.
13. Rakowska A, Slowinska M, Kowalska-Olejzka E, Ruhićka L. Trichoscopy in genetic hair shaft abnormalities. J Dermatol Case Rep 2008;2:14-20.
14. Miteva M, Tosti A. Dermoscopy guided scalp biopsy in cicatricial alopecia. J Eur Acad Dermatol Venereol 2013;27:1299-303.
15. Trachsel S, Trueb RM. Value of direct immunofluorescence for differential diagnosis of cicatricial alopecia. Dermatology 2005;211:98-102.
16. Galliker NA, Trüeb RM. Value of trichoscopy versus trichogram for diagnosis of female androgenetic alopecia. Int J Trichology 2012;4:19-22.
17. Germa F. Stethoscopes and stories. Can Fam Physician 2017;63:626-7.