Dermatoscopy in Skin of Color: How Different are We?

Dermatoscopy is a rapidly evolving branch in clinical dermatology that has attracted an enhanced interest in recent years. Skin surface microscopy was first used in the mid-17th century by Peter Borelus and Johan Christophorus Kolhaus.^[1] Johann Saphier, coined the term "dermatoscopy" in 1920 and outlined the possible clinical applications of skin surface microscopy.^[1] In late 1900s, Friedman and colleagues popularized "dermoscopy" with it's widespread application in detection of skin cancers.^[2] Though the traditional and well-established indication of dermatoscopy is in early detection of melanoma and non-melanoma skin cancers, its application has advanced in recent years to pigmentary, inflammatory, and infective dermatoses.^[3] Site-specific application of dermatoscope for hair and nail are better known as trichoscopy and onychoscopy.^[4,5]

The dermatoscopic appearance varies with the skin phototype of the subject. [6-9] This is due to the color contrast provided by the background pigment network. Also, the application of dermatoscope varies drastically according to the skin phototype. In patients with lighter skin tones (Fitzpatrick skin phototype I-III) dermatoscopy has become an indispensible part of screening and early diagnosis of skin cancers. In contrast, among patients with darker skin phototypes (Fitzpatrick IV-VI), it is commonly used as an auxiliary tool in diagnosing inflammatory and pigmentary dermatoses. Certain dermatoses are unique to pigmented races and dermatoscopic knowledge of such dermatoses is limited.[10,11] Since majority of the published literature on dermatoscopy is among Caucasians and with an aim to promote the dermatoscopic knowledge among Indian skin, Indian Dermatology Online Journal had conceptualized and initiated a dedicated section "Through the dermoscope".[12]

In last 4 years since introducing this exclusive section, many relevant articles on dermatoscopy of ethnic skin have been published. In the current issue of the journal, a symposium on "Dermatoscopy in Skin of Color" have articles pertaining to dermatoscopy in pigmentary diseases, inflammatory and granulomatous dermatoses, and infections and infestations specifically highlighting the unique features in pigmented skin and dermatoscopic practice in tropical countries. (to be quoted).

Skin imaging has been rapidly evolving than ever before. Dermatoscopy has found its non-conventional application in diagnosing diseases of mucosa, sweat glands, tropical infections, and infestations. [13-16] Various innovations and modification have been suggested to suit local needs, special sites, and overall to enhance the practice of dermatoscopy. Confocal microscopy and cutaneous ultrasonography are other arms of skin imaging whose use is currently limited

to advanced dermatological centers and research institutes. Widespread availability of these imaging modalities in future may herald a sub-specialty of cutaneous imaging. Stored dermatoscopic and confocal microscopy images may also have a role in machine learning and artificial intelligence with widespread diagnostic and prognostic application.^[17]

Skin imaging is likely to be an indispensible part of residency programs and dermatology practice in the near future. We hope our readers are benefitted through this symposium and also encourage postgraduates and practitioners to incorporate dermatoscopy in their daily clinical practice.

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References

- Berk-Krauss J, Laird ME. What's in a Name-Dermoscopy vs Dermatoscopy. JAMA Dermatol 2017;153:1235.
- Friedman RJ, Rigel DS, Silverman MK, Kopf AW, Vossaert KA. Malignant melanoma in the 1990s: The continued importance of early detection and the role of physician examination and self-examination of the skin. CA Cancer J Clin 1991;41:201-26.
- Errichetti E, Stinco G. Dermoscopy in general dermatology: A practical overview. Dermatol Ther (Heidelb) 2016;6:471-507.
- Olszewska M, Rudnicka L, Rakowska A, Kowalska-Oledzka E, Slowinska M. Trichoscopy. Arch Dermatol 2008;144:1007.
- Lencastre A, Lamas A, Sá D, Tosti A. Onychoscopy. Clin Dermatol 2013;31:587-93.
- Sonthalia S, Jha AK, Goldust M, Omchery A, Dayrit JF. Dermoscopic characterization in pigmented skin: Interpret "Pigmented" structures carefully. Dermatol Pract Concept 2019;9:211-3.
- Tuma B, Yamada S, Atallah ÁN, Araujo FM, Hirata SH. Dermoscopy of black skin: A cross-sectional study of clinical and dermoscopic features of melanocytic lesions in individuals with type V/VI skin compared to those with type I/II skin. J Am Acad Dermatol 2015;73:114-9.
- Ankad BS, Beergouder SL. Pityriasis lichenoides et varioliformis acuta in skin of color: New observations by dermoscopy. Dermatol Pract Concept 2017;7:27-34.
- Kaliyadan F, Alkhateeb A, Kuruvilla J, Swaroop K, Alabdulsalam AA. Dermoscopy of primary cutaneous amyloidosis in skin of color. Dermatol Pract Concept 2019;9:232-4.
- 10. Vinay K, Bishnoi A, Parsad D, Saikia UN, Sendhil Kumaran M.

- Dermatoscopic evaluation and histopathological correlation of acquired dermal macular hyperpigmentation. Int J Dermatol 2017;56:1395-9.
- Astur M, Farkas CB, Junqueira JP, Enokihara MM, Enokihara MY, Michalany N, et al. Reassessing melanonychia striata in phototypes IV, V, and VI patients. Dermatologic Surg 2016;42:183-90.
- 12. Kaliyadan F. The scope of the dermoscope. Indian Dermatol Online J 2016;7:359-63.
- 13. Jakhar D, Kaur I. Hidroscopy: *In vivo* videodermoscopy of the sweat glands. Ski Res Technol 2019;25:410-1.
- Jakhar D, Grover C. Innovative modification of the USB dermatoscope for mucoscopy. J Am Acad Dermatol 2018;78:e3-4.
- Vinay K, Kamat D, Chatterjee D, Narang T, Dogra S. Dermatoscopy in leprosy and its correlation with clinical spectrum and histopathology: A prospective observational study. J Eur Acad Dermatology Venereol 2019;33:1947-51.
- Vinay K, Bhattacharjee R, Bishnoi A, Chatterjee D, Rudramurthy S, Dogra S. Dermatoscopic features of cutaneous sporotrichosis. J Eur Acad Dermatol Venereol 2020. doi: 10.1111/jdv. 16539. Online ahead of print.
- 17. Lee EY, Maloney NJ, Cheng K, Bach DQ. Machine learning for precision dermatology: Advances, opportunities, and outlook.

J Am Acad Dermatol 2020;S0190-9622(20)32161-7. doi: 10.1016/j.jaad. 2020.06.1019. Online ahead of print.

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