

Editorial

Taking the Dermoscope from Bench to Practice

Dermoscopy saw its first uses in the diagnosis and detection of pigmented lesions during the first half of the 20th century.¹ Dermoscopy is known by many other synonyms like epiluminescence light microscopy, dermoscopy, incident light microscopy, and surface microscopy. However, the most commonly used term “dermoscopy” was proposed by Friedman et al.² The devices used for the same have undergone phenomenal modification from the larger devices without storage capacity for images to sleek handheld devices with attachments for storage capacity. Additions in the form of special filters for pigment boost facility in few models help in enhancing contrast and thereby increase the accuracy in the diagnosis of various disorders.

The dermoscope is no longer an instrument for the privileged few as it is rapidly making its way to the private practitioners across the country and the world and is no longer restricted to the teaching institutes and considered as a research instrument. In comparison to the hand lens that has been used over the decades, dermoscope weighs over by having the ability not just for magnification but also to look at the subsurface structures defining the patterns.

Significant work has been done in the field of dermoscopy, trichoscopy, inflamoscopy, onychoscopy, and entomoscopy in the last few decades. As more and more setups start using the device, more and more contributions begin and continue to happen in this field, thereby resulting in the description of patterns and findings not just in skin cancers but also in common dermatological disorders.

Dermoscopy is a relatively young science with an open arena for newer observations and its documentations. Significant work across the world has been done in cutaneous malignancies and pigmentary traits, but a larger arena of other dermatological disorder still has a void to be filled.

The questions regarding this science arise right from where to procure training to which instruments to buy and how to master the art of dermoscopy. The trick to learn dermoscopy is simple apart from acquiring basic knowledge through hands-on workshops and reading atlas with clear explanations on the same. Most experts agree they were amateurs in this field and have mastered this art by putting their scope on every lesion that they came across. Putting the dermoscope not only on the pathological conditions but also on the normal skin acquaints the eye of the normal structures and patterns under the scope, which thereby helps to identify anything that is abnormal.³

Few of the rules that one could think of sticking to while initiating dermoscopy in clinical practice would involve the following:

- Practicing dermoscopy *in vivo*
- Care of the dermoscope
- Choice of instrument
- Acquiring training in dermoscopy
- Educational material for updating knowledge in this field

Points to be borne in Mind while practicing Dermoscopy *in vivo*

- The choice between wet and dry dermoscopy: It is always a good idea to start with dry dermoscopy first to visualize the scales followed by wet dermoscopy to visualize the subsurface structures. Wet dermoscopy is more useful for the demonstration of vasculature and pathology in the upper dermis. The choice of linkage fluid in wet dermoscopy could range from immersion oil to water to ultrasound gel based on availability, cost, and feasibility.
- The investigator must familiarize himself/herself with the normal skin of the affected individual and proceed toward the diseased skin or scalp. This helps in picking up the abnormalities quickly specific to the affected individual.
- The area to be examined must be stabilized to avoid out-of-focus images and findings.
- In practice, most commonly contact dermoscopy can be avoided for infected/infective lesions.

- While practicing contact dermoscopy, it is important to avoid excess pressure over the lesion so as to avoid blanching effect.
- The use of polarized and nonpolarized mode will depend on whether the investigator wishes to demonstrate the surface (nonpolarized mode) or subsurface (polarized mode) structures.
- The use of additional facilities like pigment boost could be explored while dealing with hyper-/hypopigmentary disorders.
- Few devices also have ultraviolet light as an additional feature, which facilitates in monitoring conditions like vitiligo.

Care of Dermoscope

- Handheld devices must be stored in their respective care box postusage.
- The dermoscope must not be placed on its face keeping the face plate in contact or the eye piece in contact.
- Cleansing of the equipment can be done using isopropyl alcohol and muslin cloth.
- Avoid usage of cotton for cleaning owing to the risk of cotton fibers on the glass plate leading to artifacts.
- In case of equipments that can be dismantled, the device must be stored after dismantling and free of any attachments if any.
- The device may be laid on its side while not in use.

Choice of Instrument

- Magnification forms an important criterion while choosing a working dermoscope.
- Easy handling, storage, and photocapture add to the benefits of the dermoscope.
- Dermoscope requiring additional equipment support in the form of a monitor or adaptor for photocapture comes out as cumbersome to the user.
- Universal attachment for the smartphones is widely accepted to be most handy among all devices.

Acquiring Training in Dermoscopy

Training in dermoscopy can be acquired through various workshops and seminars that are held at regional and national levels. Although there are no formal training courses in India regarding the same, training may be acquired from the pioneers in the subject first by observation and then by putting it into practice and documenting newer findings. Dermoscopy blog spots may be another additional portal for acquiring knowledge and skill in this field.

Educational Material for updating Knowledge in the Field

Educational material for updating knowledge in this field ranges from atlas and textbooks by authors from India and across the world to journal articles in leading journals. Many journals now are coming up with dedicated sections in dermoscopy to familiarize dermatologists with the findings and explanations on the same. Our journal here makes its maiden attempt to comprehensively cater to the needs of students, practitioners, and professionals toward their effort to learn dermoscopy.

Tips and Tricks while practicing Dermoscopy

- It is always better to toggle from nonpolarized to polarized mode while doing dermoscopy.
- Doing dry dermoscopy of any lesion be it on the body or scalp followed by wet dermoscopy is preferable.
- Rolling over the face plate of the dermoscope on the lesion avoids artifacts.
- Stabilizing the body part before doing dermoscopy helps in obtaining sharper image.
- Parting the hair while doing trichoscopy helps avoid a chaotic image under the dermoscope.

Dermoscopy in India is still in its nascent stage where much work needs to be done, especially with regard to disorders unrelated to dermatological malignancies. Having said this, it is our proud privilege to state that our very own editor-in-chief Dr Subrata Malakar has given shape to the world of trichoscopy in India which is now fast gaining worldwide acclaim. Taking this instrument from bench to practice will help in documenting and finding newer specific signs for accurate, correct, and speedy diagnosis, thereby hastening the initiation of therapy.

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