Editorial

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# Dermoscopy Key Points: Recommendations from the International Dermoscopy Society

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All the authors are board members of the International Dermoscopy Society. This paper reflects a consensus document from this organisation.

The dermoscopy era is developing momentum. Our greater understanding of the morphological features seen with dermoscopy has corresponded with an exponential rise in dermoscopy publications. Publications have included conditions as diverse as inflammatory and infective dermatoses, alongside reports of tumours and pigmented and non-pigmented skin lesions. The terminology used for describing structures seen under dermoscopy have been standardized by consensus and previously published [1]. The 2-step algorithm for differentiating melanocytic from non-melanocytic tumours has become the foundation on which dermoscopic diagnosis depends. Furthermore, several algorithms are currently in use to help differentiate between benign and malignant melanocytic neoplasms [1].

Increasing experience in dermoscopy is reflected by a greater understanding of how best to integrate dermoscopy into clinical practice. A number of common principles or key points have been described by clinicians experienced in dermoscopy, which we feel are important for those new to dermoscopy to understand. A number of these key points have been previously published; however, some are based on clinicians' personal intuition and lack any good scientific data at present. In the future, through ongoing research in dermoscopy by clinicians both locally and through the International Dermoscopy Society, the list of key points will undoubtedly evolve as more scientific data becomes available. Until then this article aims to reflect a number of principles that are common to dermoscopy as we understand at this point in time.

*Disclaimer: Adherence to these recommendations will not ensure successful diagnosis and treatment in every situation. Furthermore, the ultimate judgment regarding the property of any specific procedure must be made by the physician in light of all the circumstances presented by the individual patient.*

Which patients should be examined clinically?

1 Basically there is no agreement in the literature concerning the effectiveness of skin cancer screening. However, there is at least some evidence that adults with risk factors for melanoma (personal or familial history of melanoma, multiple nevi, fair skin, multiple sunburns, previous non-melanoma skin cancer) might benefit from skin examination for melanoma screening [2].

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2 In high-risk patients total cutaneous examination should be considered to be the standard of care. During this type of examination all of the skin including palms, soles and scalp should be inspected clinically. Additionally self-examination of the skin on a monthly basis should be encouraged [3].

3 Documentation of the clinical and dermoscopic features for relevant atypical or changing lesions examined, including specific anatomical site(s), is an important part of good clinical practice and should be encouraged wherever possible.

Which lesions deserve closer examination with dermoscopy?

4 It is known that total dermoscopy examination may identify suspicious lesions not found with naked-eye pre-selection [4]. Ideally as many lesions as possible should be evaluated; however, special attention should be paid to the following type of lesions:
(a) Lesions with reported history of change (in colour, size, shape, symptoms, etc.). In particular, careful evaluation of new or changing lesions in adults older than 50 years is recommended [5]. In addition, any lesion that the patient is concerned about but is unable to verbalise as to why they are concerned should also be evaluated closely [6–13].
(b) A lesion which is clinically different from the other pigmented lesions of the patient (e.g. the 'ugly duckling' sign: like in Andersen's tale in which the ugly duckling looks different from its brothers and sisters) [14, 15].
(c) Lesions which have the same clinical appearance of all other lesions from a distance, but which at a closer look are different from the others (e.g. the 'Little Red Riding Hood' sign: from afar it looks like the grandmother but at a closer look one can see the sharp teeth of the wolf) [16]. This sign is especially helpful in patients with the dysplastic nevus syndrome and/or with a high number of lesions.
(d) Lesions that look clinically like melanoma (e.g. those with eccentric peripheral hyperpigmentation, or with a clinical index of suspicion with the ABCD rule, etc.) [17–19].

Which lesions should be excised or followed up closely?

5 A pigmented lesion in a high-risk patient with reported or documented history of change should be either excised or followed up depending on its clinical and/or dermoscopic appearance [7–10, 20].

6 Complete excision should be considered in a lesion that shows significant dermoscopic changes on follow-up [7–10].

7 A pigmented lesion with blue and/or white regression structures may warrant excision [21].

8 A suspicious nodular lesion should *never* be subjected to short-term or long-term monitoring.

9 Melanocytic lesions with a symmetrical peripheral rim of globules are dynamic and will commonly increase in size with time. If, in addition, there is an asymmetry of structures within the lesion, the lesion should be closely monitored or excised [7–10].

10 Biopsy should be considered if suspicious and/or amelanotic or dermoscopically equivocal lesions arise in areas of previous treatment (e.g. cryotherapy, surgery, LASER).

11 An amelanotic or partially pigmented lesion with milky red globules or areas with atypical blood vessels (linear irregular vessels with or without dotted vessels) should be considered for biopsy [22, 23].

12 Atypical blue naevi should be closely monitored or excised [24, 25].

13 Excision should be considered for all Spitzoid lesions.

14 An isolated pigmented or atypical 'seborrhoeic keratosis' should be closely monitored or excised to exclude a seborrhoeic keratosis-like melanoma [26–28].

15 Acral melanocytic lesions in adults with atypical clinical and/or dermoscopic features ('non-typical' pattern) should be closely monitored or excised [29–32].

16 Dermatofibromas showing an atypical dermoscopic pattern [33–36].

17 Lesions with uncertain diagnosis under clinical and/or dermoscopic examination should be carefully monitored or excised.

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