(White Paper)

Nevi and other skin lesions: a simplified procedure algorithm

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Abstract

After reviewing the current literature and our systematically evaluated experience gained in daily practice, we propose a simplified action algorithm in case of nevi and other melanocytic skin lesions. Our approach is less stressful for the patients and, according to our conclusions, more economical, efficient and, above all, much safer than the recommendations currently in effect.

Current situation

The management of nevi and other skin tumors has been based on assessment by eye examination, use of lenses, consecutive check-ups at a dermatologist, and self-observation according to the ABCD rule (Fig. 1) since the 1960ies:[1,4]

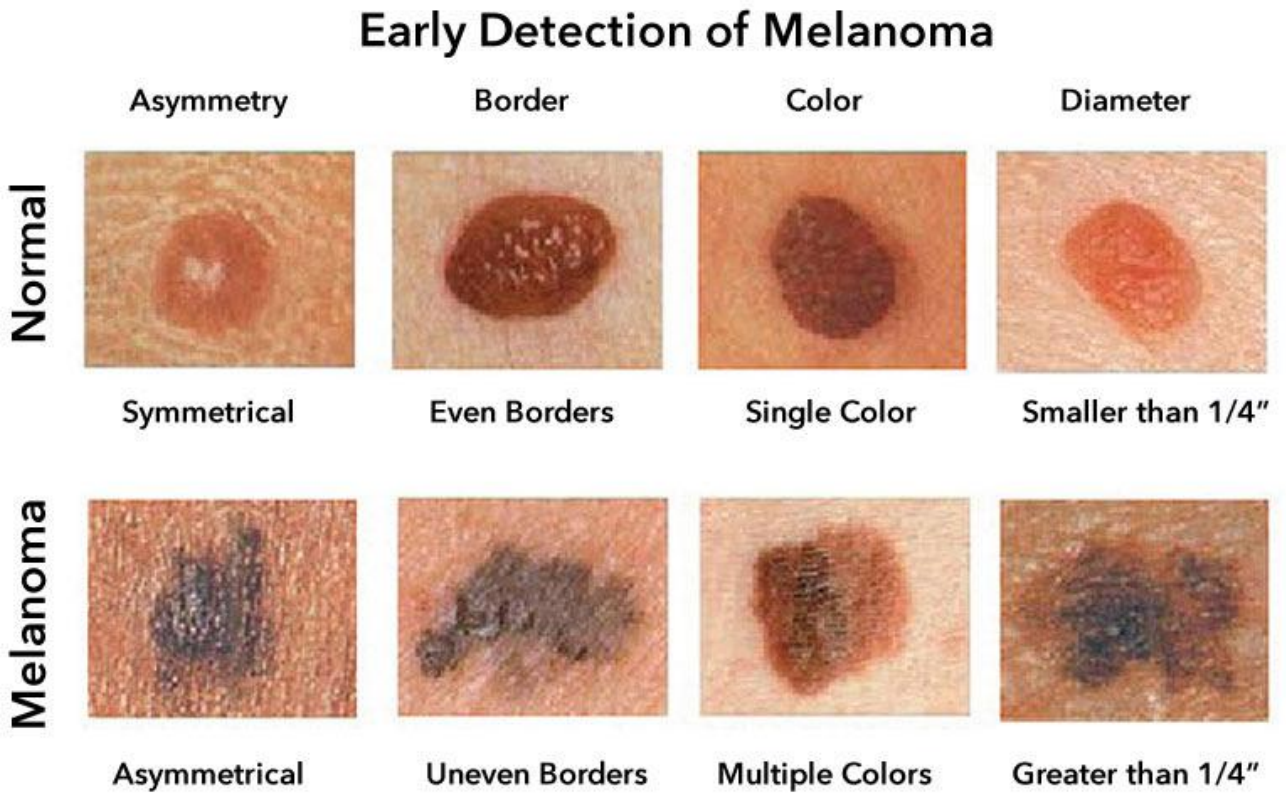

Fig. 1

In addition, regular screening and diagnosis by means of dermatoscopy have become commonplace, now often on expensive digital equipment that must be well utilized to make a profit. The question, however, is what benefit these "prevention screenings" have in a fast-growing cancer like malignant melanoma.[5] At best, early detection is of value, but a melanoma cannot be prevented by "preventive examinations". In our opinion, these are completely useless in the case of melanoma and lull patients into a

false sense of security. Equally questionable are expensive digital dermatoscopies for nevi that look irregular or that the patient has otherwise noticed (e.g., through symptoms).[3,5,6] What is the benefit of dermoscopy (Fig. 2), possibly with close follow-up in these cases? In the case of tumors in the body that are difficult to remove, imaging techniques and the like are certainly appropriate and important. But a skin biopsy is such a low-risk, painless and safe procedure that it does not justify any delay or playing with devices like a dermatoscope while removing the lesion would just take a couple of minutes.

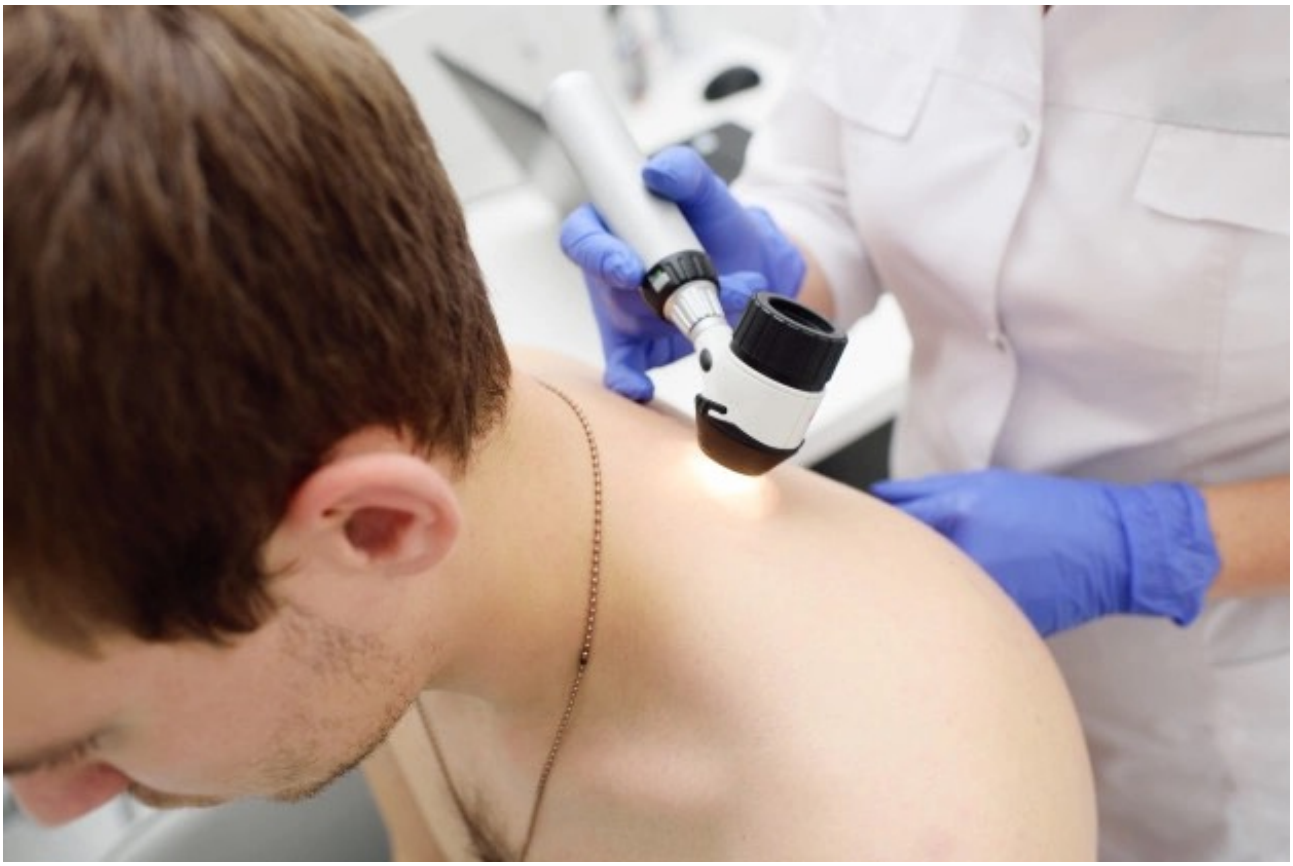

Fig. 2

Neither the ABCD-rule nor dermatoscopy provide sufficient certainty.[1-6] Dermatoscopy depends highly on typical dermoscopic features and has therefore only a very limited sensitivity in the diagnosis of early melanomas without “typical” aspects.[3] These techniques are highly dependent on the experience of the physician and have been shown in studies to have a maximum diagnostic reliability of 70% to 80%. This is far too low to maintain these methods as an acceptable standard.[2,3,9] Every dermatologist knows: if a dark spot develops de novo on healthy skin or if there is a mole that changes in some way or becomes symptomatic, this means red alert. Then there is absolutely no reason to not remove the skin tumor immediately and send it to an experienced pathologist for examination on the cellular level. The only exception to this are seborrheic keratosis and lentigo solaris as well as freckles. Apart from these, the rule has to be:

New/changing colored lesion -> excision -> diagnosis by a pathologist

A “wait and see policy” is a totally irresponsible approach in 90% of all nevi given the minimal burden of excision (Fig. 3). The above mentioned seborrheic keratosis, lentigo solaris and freckles are the only exceptions. These three entities can indeed be followed-up dermatoscopically.

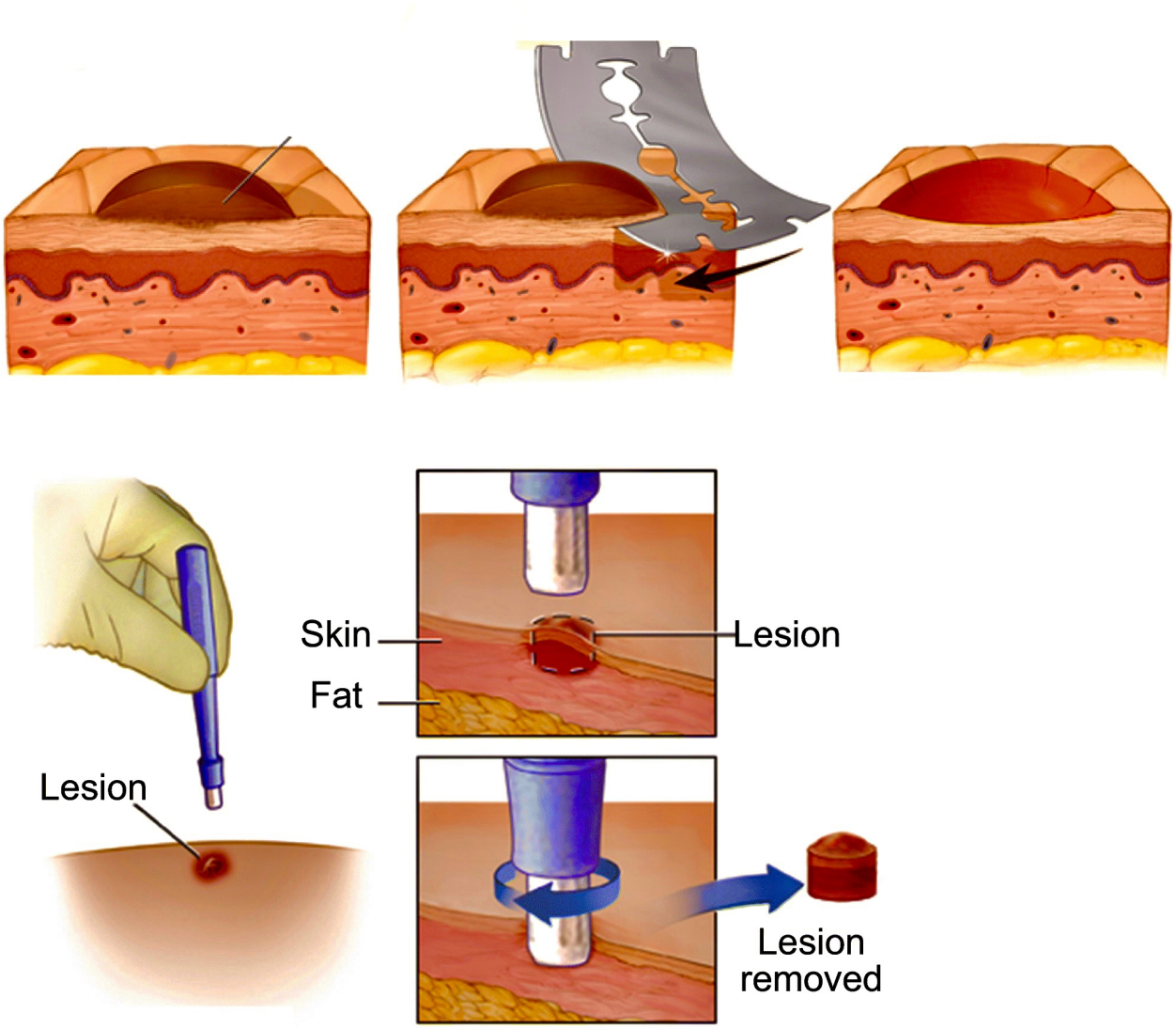

Fig. 3

The ABCD-rule is in turn not applicable at all to the endemically occurring seborrheic keratosis, because these lesions grow, bleed, itch, ooze etc. without any malignant potential.[11] Awareness of this among patients worldwide is alarmingly low. In this case, dermatoscopy has its justification for existence in the hands of a very experienced physician[12] who often does not even need any equipment except his trained eyes to make this diagnosis. Seborrheic keratosis, lentigo solaris and freckles, as well as benign genital melanosis, can be easily diagnosed by telemedicine. All other lesions should be removed without further discussion (Fig. 4). Skin biopsy is

such a harmless and simple procedure that it is contraindicated only in a small minority of patients (e.g., people with severe blood thinning or proven MRSA colonization). Therefore, the rule for the layman should be: if a lesion appears out of nowhere or is changing (medically diagnosed seborrheic keratoses excluded), should see their dermatologist for removal, no matter how small the lesion might be. Confirmed seborrheic keratosis, lentigo solaris, freckles or other (non-melanocytic) skin lesions can be monitored tele-medically.[7,8]

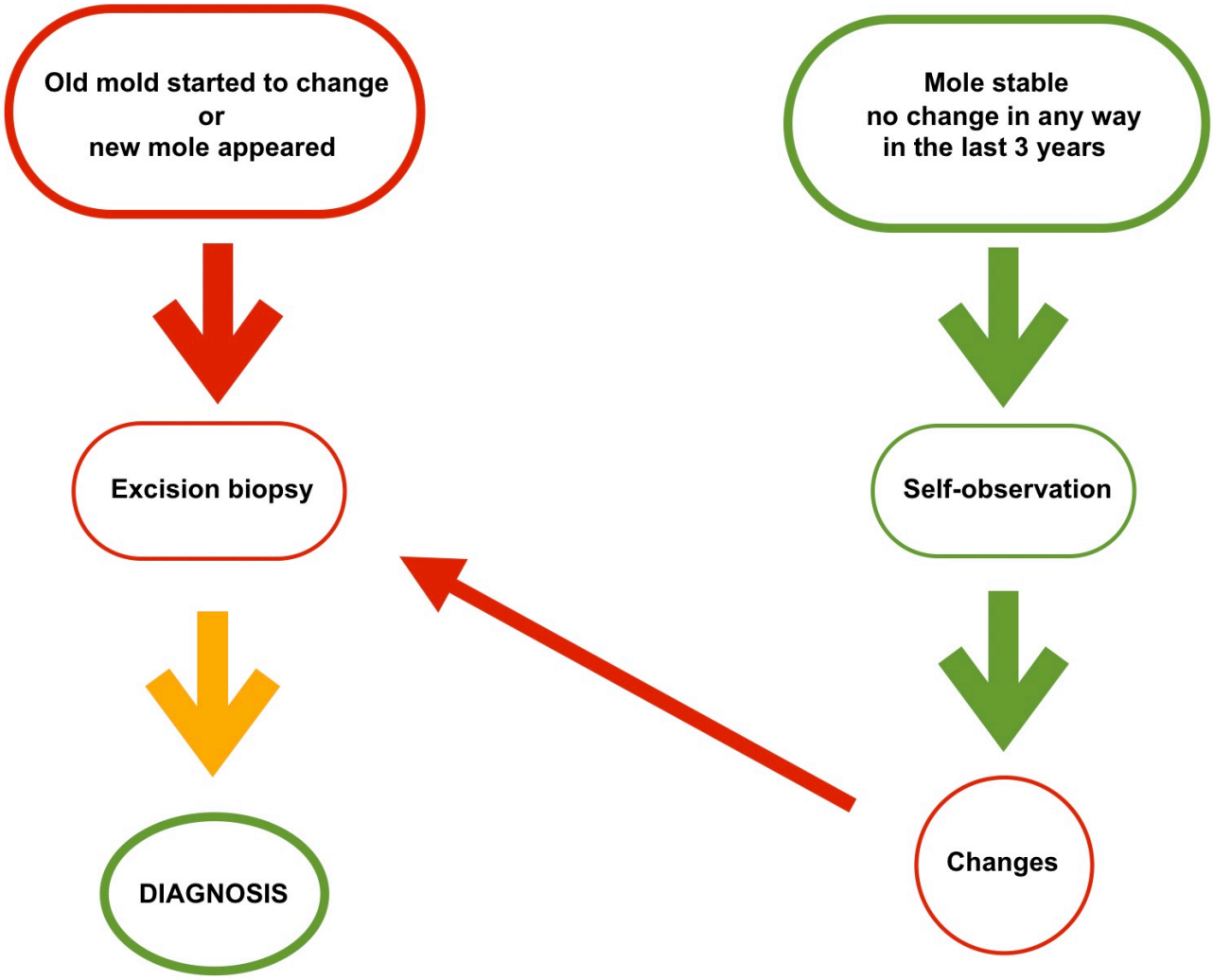

Fig. 4

Conclusion

In the case of fast-growing and dangerous tumors such as malignant melanoma, no "screening" should mislead patients into a false sense of security. Similarly, a wait and see approach to suspicious moles should be rejected in view of the simple and safe possibility of a skin biopsy. Follow-ups and dermatoscopy have a value at best in basal cell carcinoma or squamous cell carcinoma.

Conflicts of interest

Dr. Diamandis has a working relationship with scanoma, tele-dermatology.

Ethical standards and patient's rights

This paper is in accordance with the Declaration of Helsinki.

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