Skin has many stories to tell.
You just need to be able to read them.

Picture source: © master1305 / istockphoto.com

COMPENDIUM OF DERMATOSCOPY

HEINE


30
YEARS
1st DERMATOSCOPE

1989: HEINE invents the first dermatoscope

The first dermatoscope in the world, the HEINE DELTA 10, has fundamentally changed the view on naevi and melanomas of all kinds.

It globally increased the accuracy of dermatologists' diagnoses, almost doubling it from 55% to 90%.

Since then, dermatologists have been seeing birthmarks in a new light.

A dermatoscope allows dermatologists to see much more on the skin than they can with the naked eye. That's why we invented the dermatoscope 30 years ago. Here's how it happened: It was as a precaution that Helmut A. Heine, our company founder, went to the dermatologist with his wife back in 1989 because they both thought a birthmark looked peculiar. The dermatologist took a quick glance and said, 'I wouldn't worry about it'.

Our company founder was stunned. How could the doctor come to that conclusion without performing a precise examination? This wasn't enough for Mr Heine. And so, HEINE Optotechnik and Professor Otto Braun-Falco developed the first dermatoscope, DELTA 10.

That's something we take great pride in to this day! Correctly identifying diseases as early as possible to help cure them – especially ones as deadly as skin cancer – is what we aspire to do. It's what motivates us day after day.

Does anyone make better dermatoscopes than the inventor of the dermatoscope?

It goes without saying that we've got something up our sleeve for our 30th anniversary. Something big. And something small too. Would you like to hear about what we have planned?

Introducing the new HEINE DELTA 30 and the new DELTA*one*. Both are brand-new, take a technological step into the future and can be used digitally with an iPhone* and the exclusive HEINE DERM app or in combination with the HEINE Cube System**.

The new HEINE DELTA*one*

Extremely sharp image with the new achromatic HEINE optical system

Fast change from contact to non-contact examination

Fits into any pocket

Polarisation eliminates reflections and glare

LED HQ
LED NOW IN HEINE QUALITY.

Excellent colour rendering due to LED^{HQ}

Digital documentation with the exclusive HEINE DERM app or the HEINE Cube System**

The new HEINE DELTA 30

Extremely sharp image with the new achromatic HEINE optical system

Largest true field of view of 30 mm (lens 32 mm) Ø

LED HQ
LED NOW IN HEINE QUALITY.

Fast change from contact to non-contact examination

Excellent colour rendering due to LED^{HQ}

Ergonomic handling due to angled product design

Digital documentation with the exclusive HEINE DERM app or the HEINE Cube System**

*The Apple iPhone is not included in the scope of delivery. Apple, the Apple logo and iPhone are trademarks of Apple Inc., registered in the U.S. and other countries. App Store is a service mark of Apple Inc.
**Not available in all countries.

Picture source: © Ahmed Shendi Abdelmonem / Shutterstock.com

Skin cancer: a master of concealment.

Skin cancer isn't always easy to detect.
The development, introduction, widespread use and research of dermatoscopy have significantly contributed to malignant skin tumours being detected early, giving patients a better prognosis. What's more, the rate of benign skin tumours being excised unnecessarily has dropped drastically.

The annual incidence of melanoma, basal cell carcinoma and squamous cell carcinoma continues to rise significantly, leading to malignant skin tumours in light-skinned people (types I to III on the Fitzpatrick skin type scale) becoming one of the most frequent malignant tumours in women and men.

This guide aims to impart sound basic knowledge of the field of dermatoscopy and to inspire a well organised approach to diagnosing pigmented and non-pigmented lesions.

It is only by constantly using them on patients, by correlating dermatoscopic images with the histologies of excised skin tumours and by attending advanced training events that users become familiar with the required routine and enjoy increasing safety in use with dermatoscopes.

Instruments for dermatoscopy
The various dermatoscopes from HEINE Optotechnik are handy, robust and reliable reflected-light microscopes. With approx. 10 to 16x analogue magnification, up to 40x digital magnification and with or without polarisation technology they are perfectly ideal for everyday examination of pigmented and non-pigmented lesions and other indications.

Pigmented lesions are assessed through the contact plate with the illuminated dermatoscope by using an immersion fluid to wet the area.

While no immersion fluid is needed for the DELTA 20 Plus with polarisation filter in principle, it is helpful especially for melanocytic and/or vessel-rich skin tumours.

Some dermatoscopes, such as the DELTA 20T, allow you to switch between the polarised and non-polarised illumination modes at the touch of a button. Switching back and forth between the illumination modes – the toggle function – allows detection of 'blink signs' when viewing crystalline structures and milia.

The digital documentation of dermatoscopic images isn't just a great aid for communicating with patients and histopathologists; it's also a vital part of follow-up, research and teaching. And what's more, it's possible with almost all HEINE Dermatoscopes.

Dermatoscopy of pigmented and non-pigmented lesions – a guide.

Andreas Blum, Herwig Swoboda and Rainer Hofmann-Wellenhof

This guide compiles the most important features of dermatoscopy and updates them in line with the literature. The first guide, written by Professor Stolz, formed the basis of this one. The HEINE SLR photo adaptor was used together with the DELTA 20 Plus dermatoscope or DELTA 20T dermatoscope for photography purposes.

Important information for users: Medical findings are constantly changing as a result of research and clinical experience. The authors of this publication have taken great care to ensure that the diagnostic information provided herein corresponds to our current knowledge.

However, this does not release users from their obligation to check whether the information provided in further, up-to-date written sources differs from that given herein. Users are solely responsible for classifying and diagnosing skin tumours and pigmented lesions.

Constance, Germany and Graz, Austria, July 2013

Table of contents

Methodology and dermatoscopic criteria for the examination

Regardless of the number of skin changes examined, the diagnosis of pigmented and non-pigmented skin lesions is based on knowledge of the various differential structures and colours in the dermatoscopic image and their correct classification.

Below you will find a series of dermatoscopic images of an early invasive melanoma (< 0.2 mm tumour thickness, predominantly melanoma in-situ) with details of the various filters, applications of immersion fluid and the intensity of illumination (Fig. 1–8):

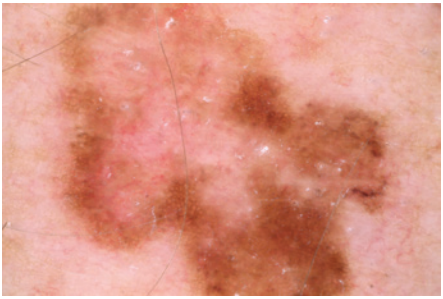


Fig. 1: With polarisation filter, without immersion fluid and with full illumination (4 LEDs).

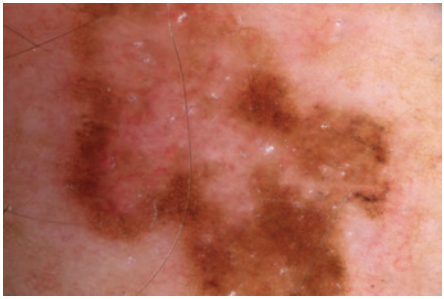


Fig. 2: With polarisation filter, without immersion fluid and with semi-illumination (2 LEDs).

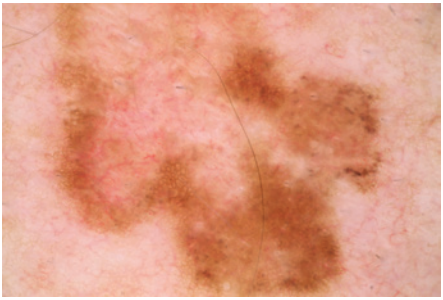


Fig. 3: With polarisation filter, with immersion fluid (HEINE Dermatoscopy Oil) and with full illumination (4 LEDs).

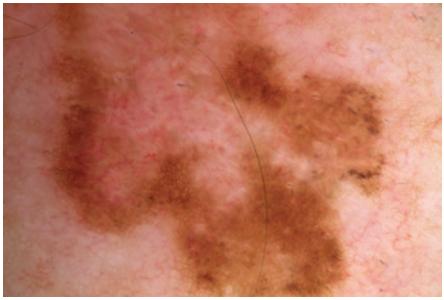


Fig. 4: With polarisation filter, with immersion fluid (HEINE Dermatoscopy Oil) and with semi-illumination (2 LEDs).

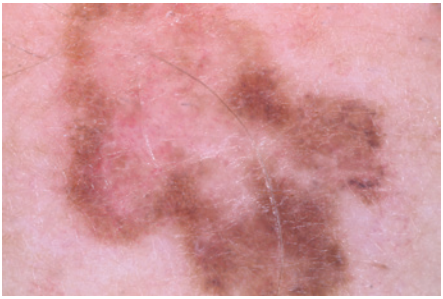


Fig. 5: Without polarisation filter, without immersion fluid and with full illumination (4 LEDs).

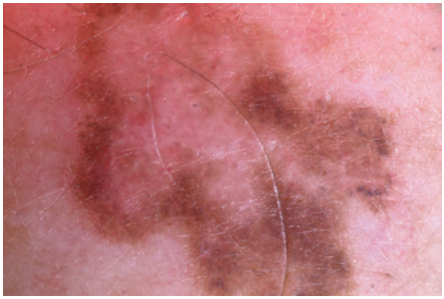


Fig. 6: Without polarisation filter, without immersion fluid and with semi-illumination (2 LEDs).

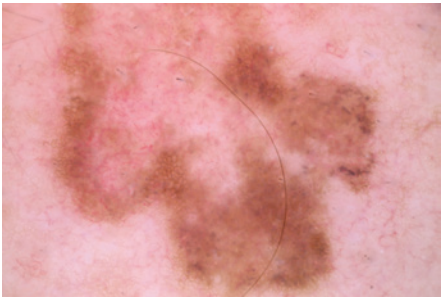


Fig. 7: Without polarisation filter, with immersion fluid (HEINE Dermatoscopy Oil) and with full illumination (4 LEDs).

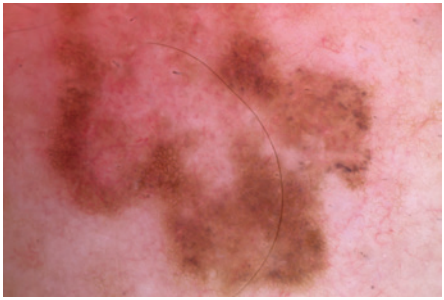


Fig. 8: Without polarisation filter, with immersion fluid (HEINE Dermatoscopy Oil) and with semi-illumination (2 LEDs).

In most cases, in particular in case of vascular lesions, we apply the dermatoscope with polarisation filter, immersion fluid and full illumination (4 LEDs). With very light skin or light lesions it has been proven appropriate to use semi-illumination of the dermatoscope, i.e. two instead of four LEDs. Specific structures (e.g. pseudohorn cysts, comedo-like openings, cerebriform pattern) are easier to identify without a polarisation filter.

Algorithm for differentiating between melanocytic and non-melanocytic skin tumours

The first diagnostic differentiation should classify the skin changes into a melanocytic or non-melanocytic skin tumour (Fig. 9). The algorithm modified according to Kreusch and Stolz can be used to classify nearly all pigmented and non-pigmented skin lesions into one of the listed diagnoses. Rarely occurring skin tumours that cannot be differentiated with this algorithm fall into the "Third Step" group due to the absence of characteristic differential structures and are therefore classified as "suspect". This increases the certainty for the patient and the examiner.

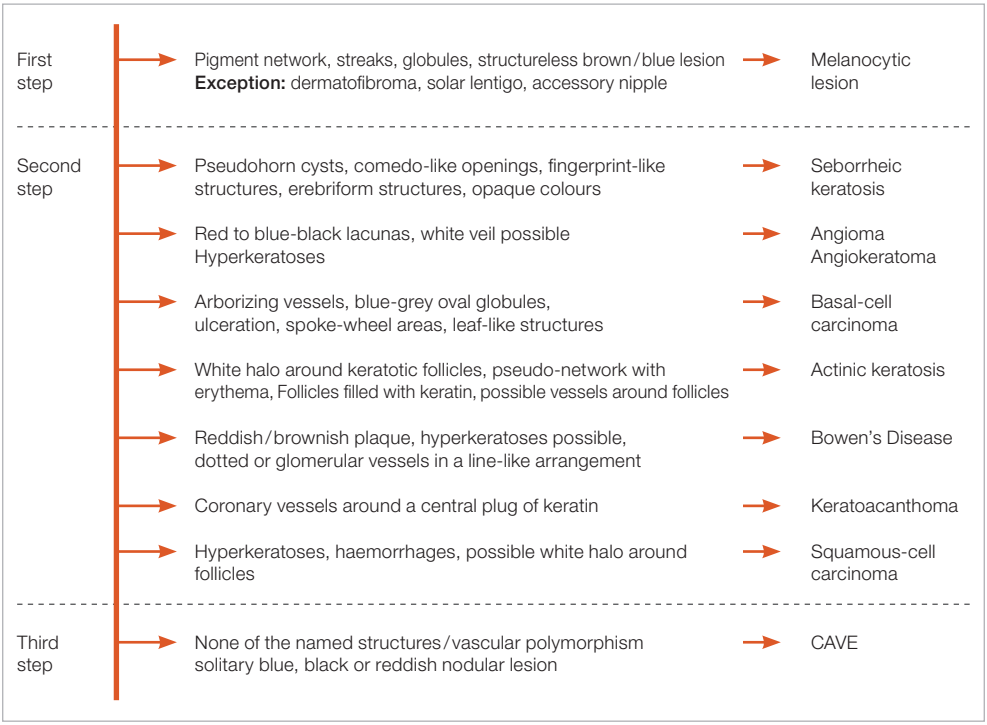


Fig. 9: Multistep algorithm for differentiating between melanocytic and non-melanocytic skin tumours (modified according to Kreusch and Stolz).

First step

The presented algorithm is divided into three steps. The first step analyses if a network (Fig. 10), streaks (Fig.11), globules (Fig.11) or homogeneous blue pigmentation are visible dermatoscopically. If so, a melanocytic skin tumour is present. Exceptions include dermatofibromas with post-inflammatory hyperpigmentation at the rim, actinic lentigines and accessory nipple with a distinct network.

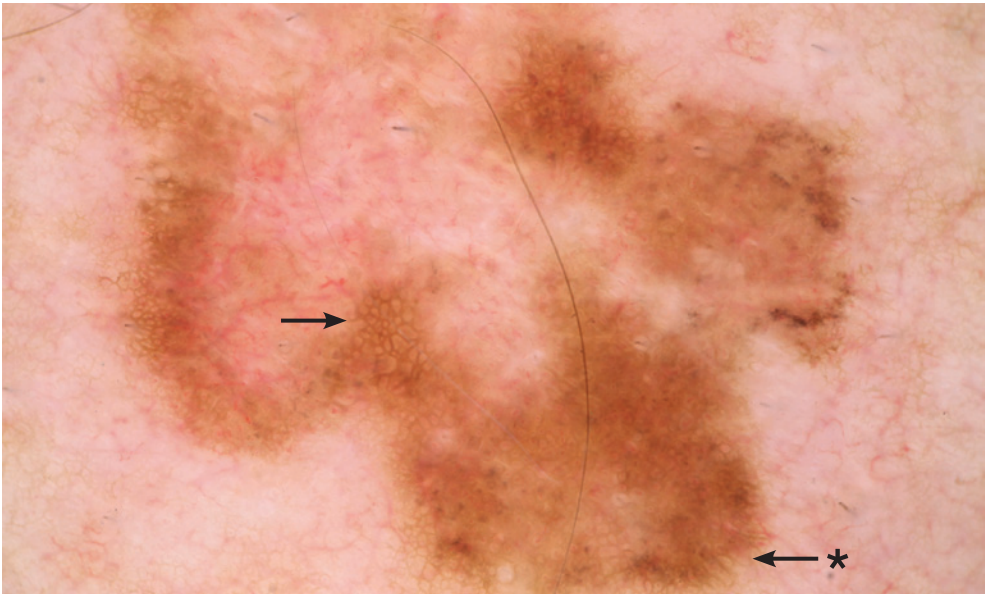


Fig.10: Pigment network (arrow) and streaks (arrow with *) in an early invasive melanoma < 0,2 mm tumour thickness, predominantly melanoma in-situ). Image taken with polarisation filter, with immersion fluid (HEINE Dermatoscopy Oil) and with full illumination (4 LEDs).

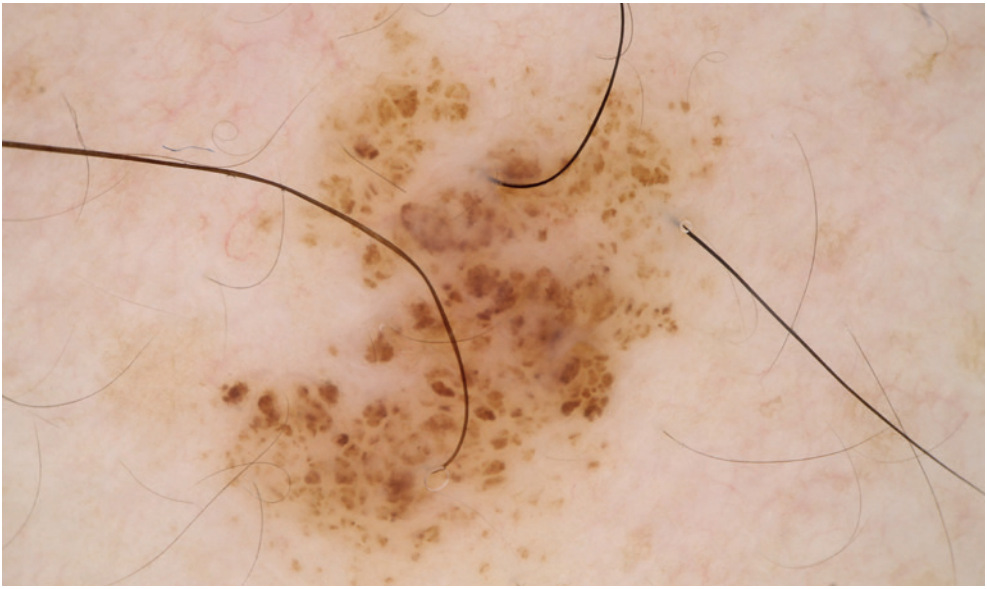


Fig. 11: Globules in a melanocytic nevus. Image taken with polarisation filter, with immersion fluid (HEINE Dermatoscopy Oil) and with full illumination (4 LEDs).

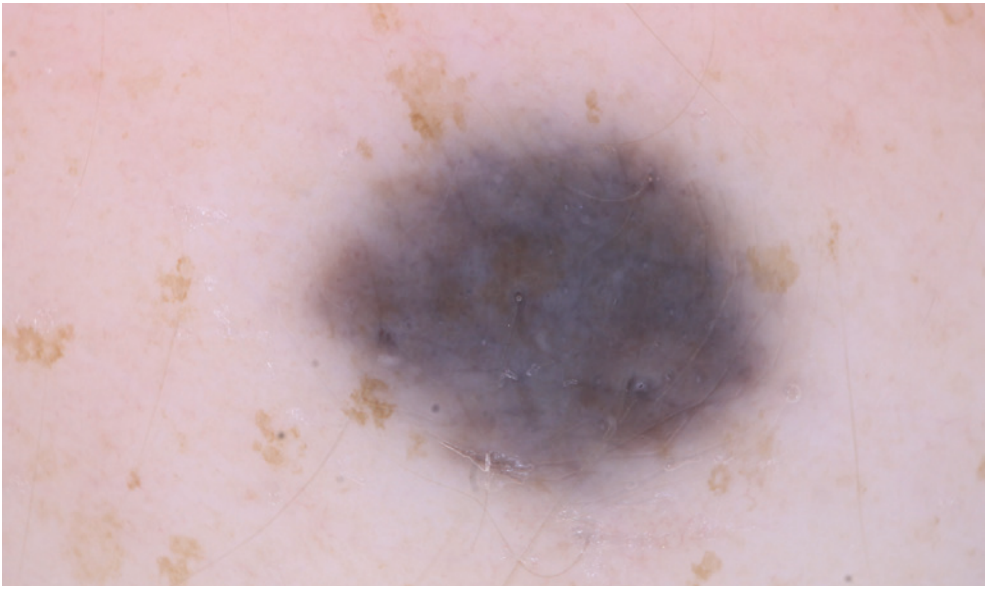


Fig. 12: Homogeneous blue pigmentation in a blue nevus (image taken with polarisation filter, with immersion fluid (HEINE Dermatoscopy Oil) and with full illumination (4 LEDs).

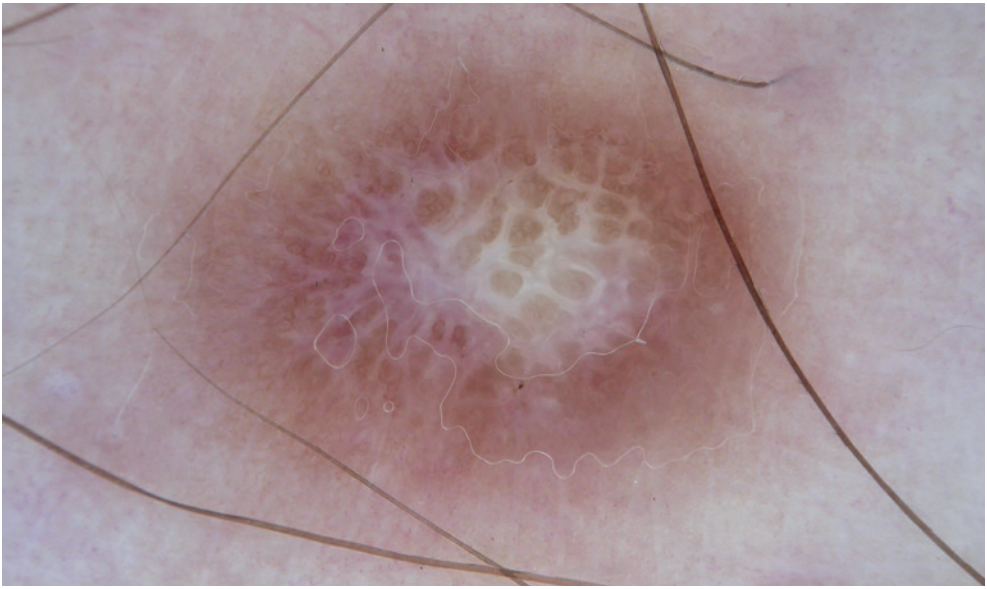


Fig. 13a: Post-inflammatory hyperpigmentation at the rim with central star-shaped area of lightness and white streaks in a dermatofibroma. Image taken with polarisation filter, with immersion fluid (HEINE Dermatoscopy Oil) and with full illumination (4 LEDs).

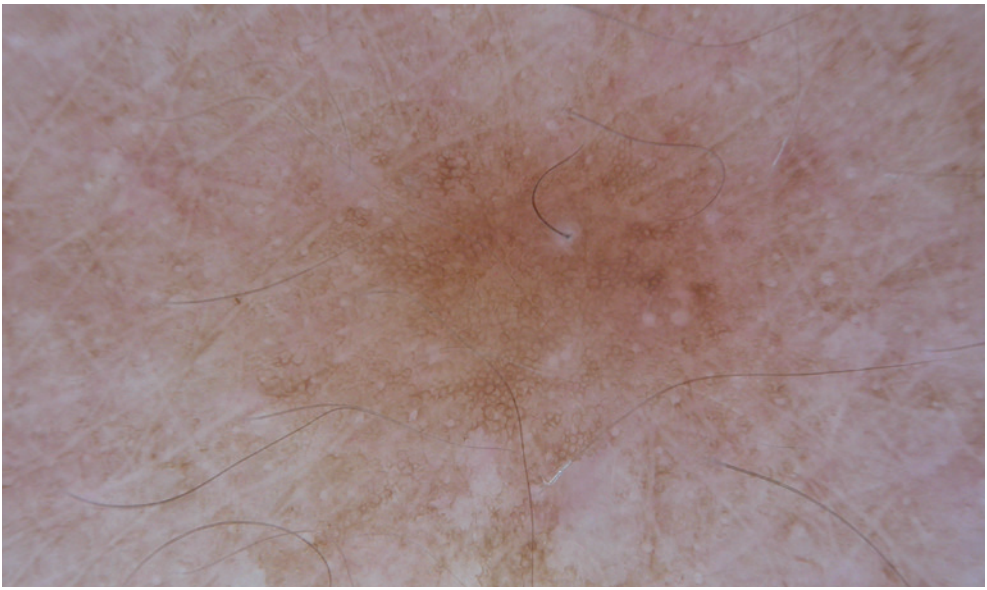


Fig. 13b: Network-like hyperpigmentation of a solar lentigo. Image taken with polarisation filter, with immersion fluid (HEINE Dermatoscopy Oil) and with full illumination (4 LEDs).

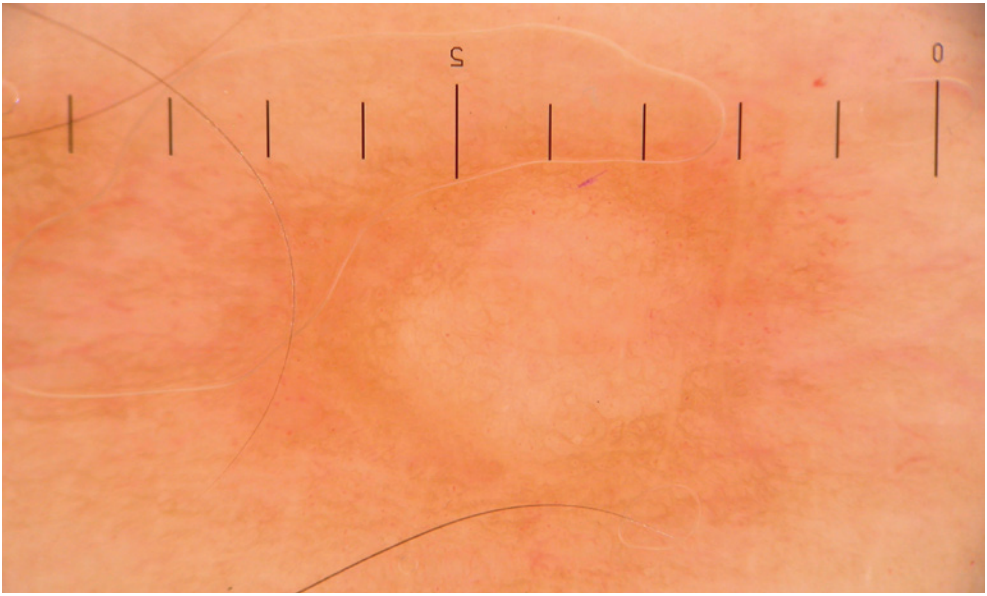


Fig. 13c: Network-like hyperpigmentation of an accessory nipple. Image taken with polarisation filter, with immersion fluid (HEINE Dermatoscopy Oil) and with full illumination (4 LEDs).

Second step

If no pigment network, streaks, irregular globules or homogeneous blue pigmentation are visible, the second step is to look for the differential structures of seborrheic keratosis (Fig. 14a–d), angioma (Fig. 15a and b) or angiokeratoma, basal-cell carcinoma (Fig. 16a and b), actinic keratosis (Fig. 17a–c), Bowen's disease (Fig. 18), keratoacanthoma (Fig. 19) and squamous-cell carcinoma (Fig. 20). Corresponding examples are provided in the image section of these instructions.

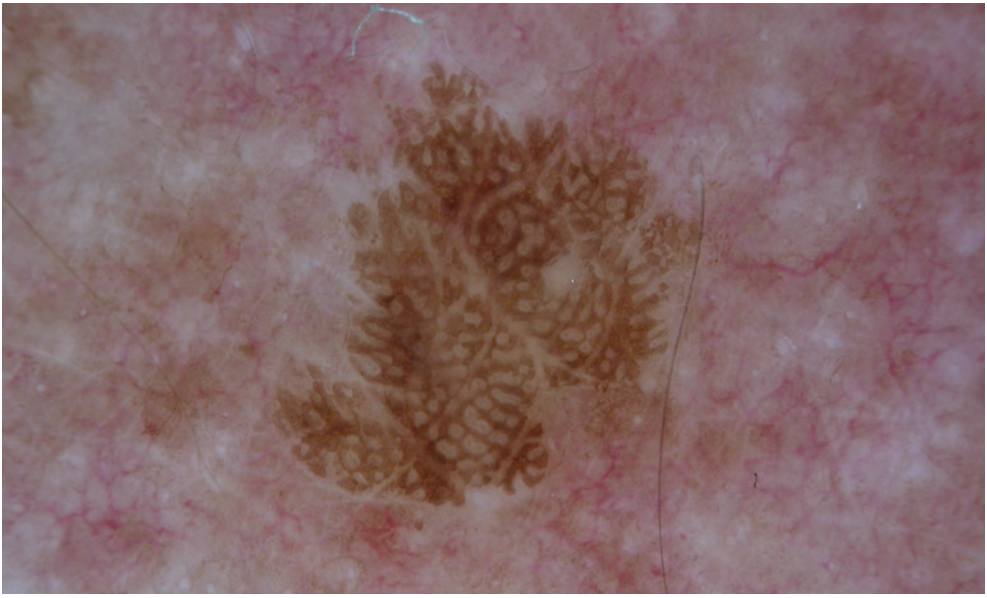


Fig. 14a: Fingerprint-like lines in an early seborrheic keratosis. Image taken with polarisation filter, with immersion fluid (HEINE Dermatoscopy Oil) and with full illumination (4 LEDs).

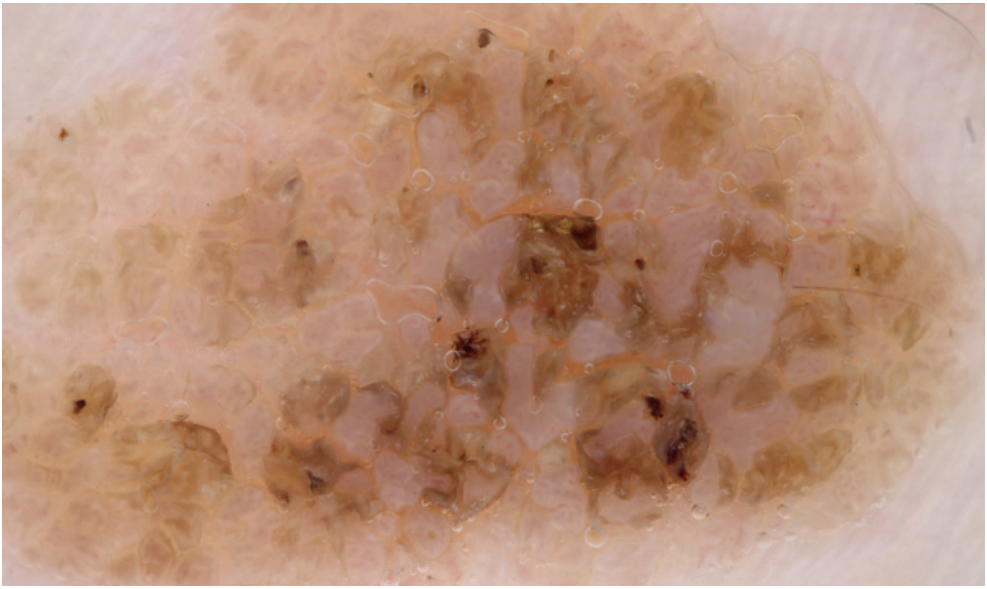


Fig. 14b: Fingerprint-like lines with cerebriform structures in a seborrheic keratosis. Image taken with polarisation filter, with immersion fluid (HEINE Dermatoscopy Oil) and with full illumination (4 LEDs).

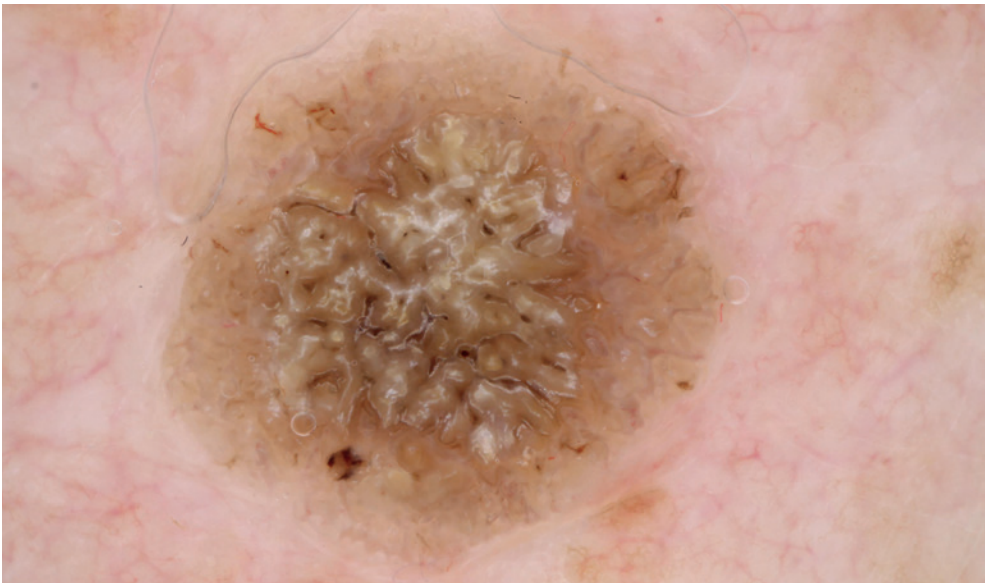


Fig. 14c: Fingerprint-like lines in the periphery, central cerebriform structures with pseudohorn cysts in a seborrheic keratosis. Image taken with polarisation filter, with immersion fluid (HEINE Dermatoscopy Oil) and with full illumination (4 LEDs).

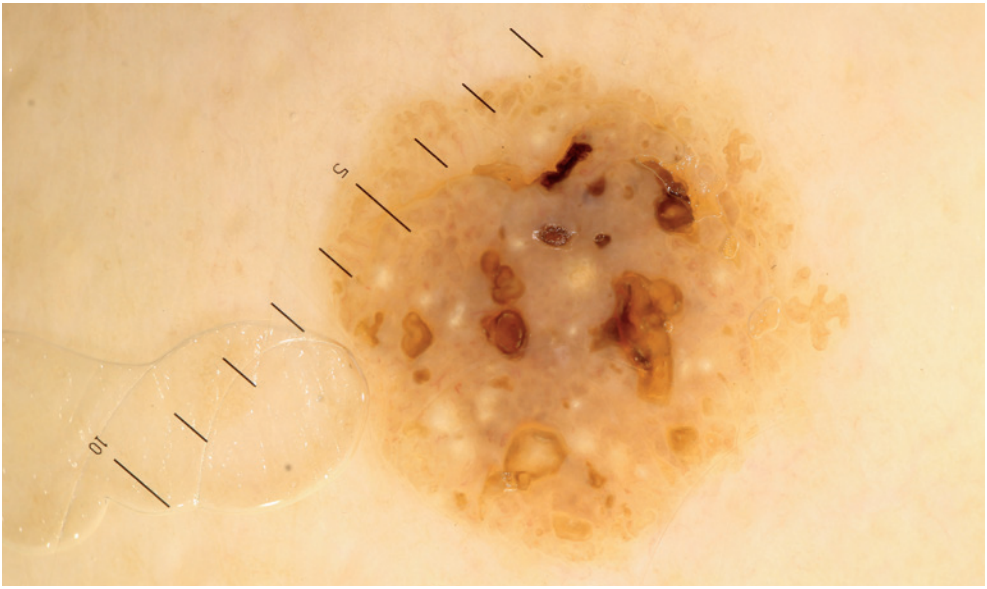


Fig. 14d: Pseudohorn cysts, comedo-like openings, fingerprint-like lines in the periphery, in a seborrheic keratosis with opaque colouring. Image taken without polarisation filter, with immersion fluid (HEINE Dermatoscopy Oil) and with semi-illumination (2 LEDs).

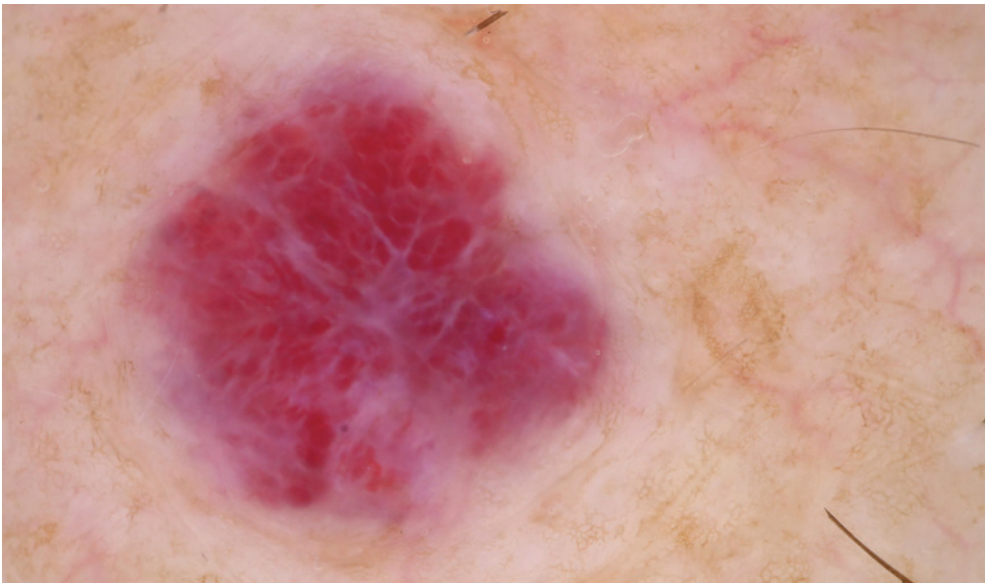


Fig. 15a: Reddish lacunas with whitish, thin streaks in a senile angioma. Image taken with polarisation filter, with immersion fluid (HEINE Dermatoscopy Oil) and with full illumination (4 LEDs).

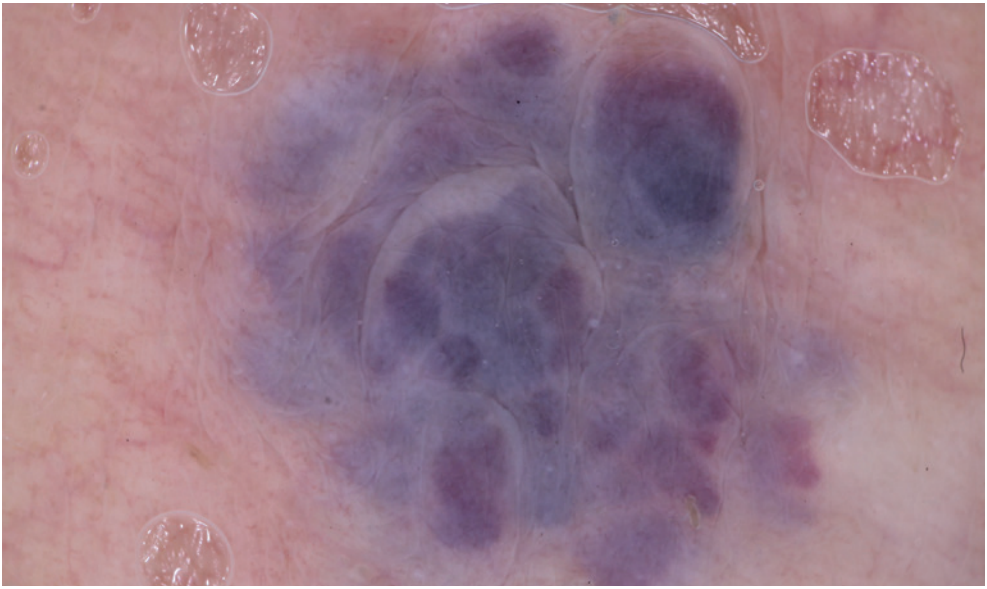


Fig. 15b: Livid-bluish lacunas with whitish streaks in an eruptive angioma. Image taken with polarisation filter, with immersion fluid (HEINE Dermatoscopy Oil) and with full illumination (4 LEDs).

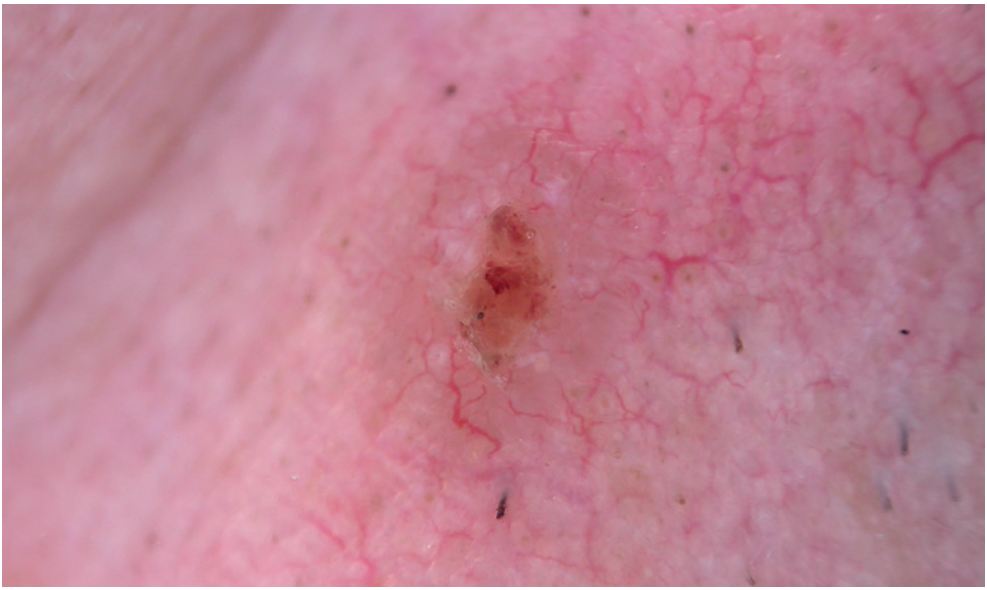


Fig. 16a: Reddish lesion with delicate arborizing vessels and a central ulceration in a basal-cell carcinoma. Image taken with polarisation filter, with immersion fluid (HEINE Dermatoscopy Oil) and with full illumination (4 LEDs).

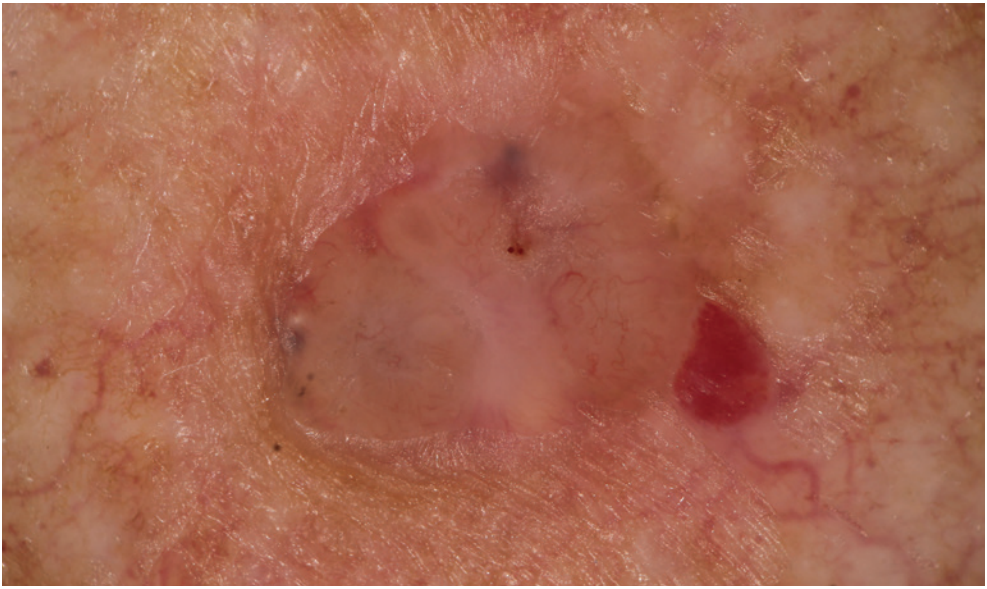


Fig. 16b: Reddish lesion with delicate arborizing vessels, two large blue-grey ovoid nests of a basal-cell carcinoma and a laterally positioned angioma with reddish lacunas (collision tumour). Image taken with polarisation filter, with immersion fluid (HEINE Dermatoscopy Oil) and with semi-illumination (2 LEDs).

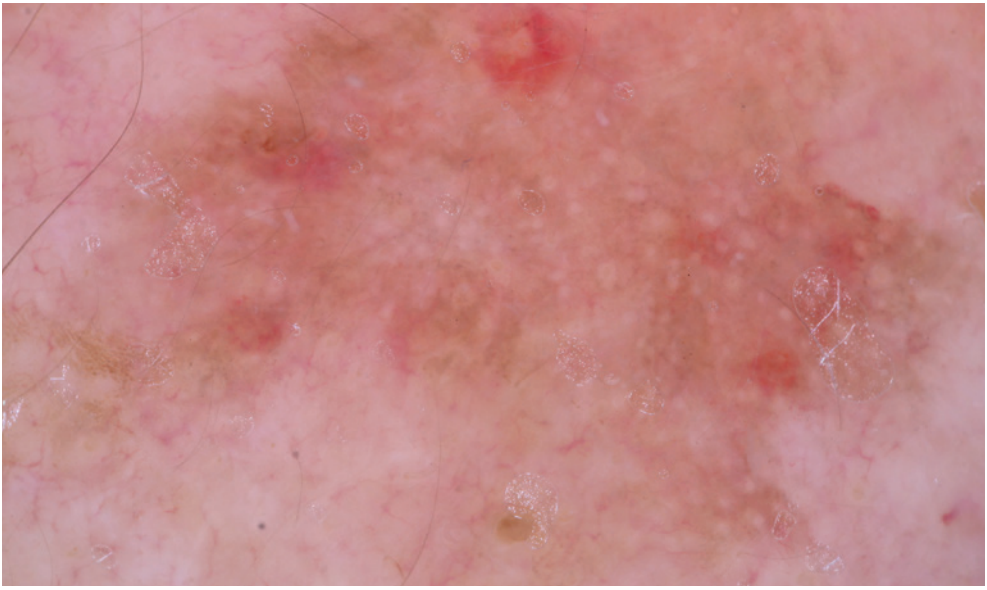


Fig. 17a: Pseudo-network with erythema and discrete pigmentation, with keratin-filled follicles and discrete vessels of an early actinic keratosis (grade 1). Image taken with polarisation filter, with immersion fluid (HEINE Dermatoscopy Oil) and with full illumination (4 LEDs).

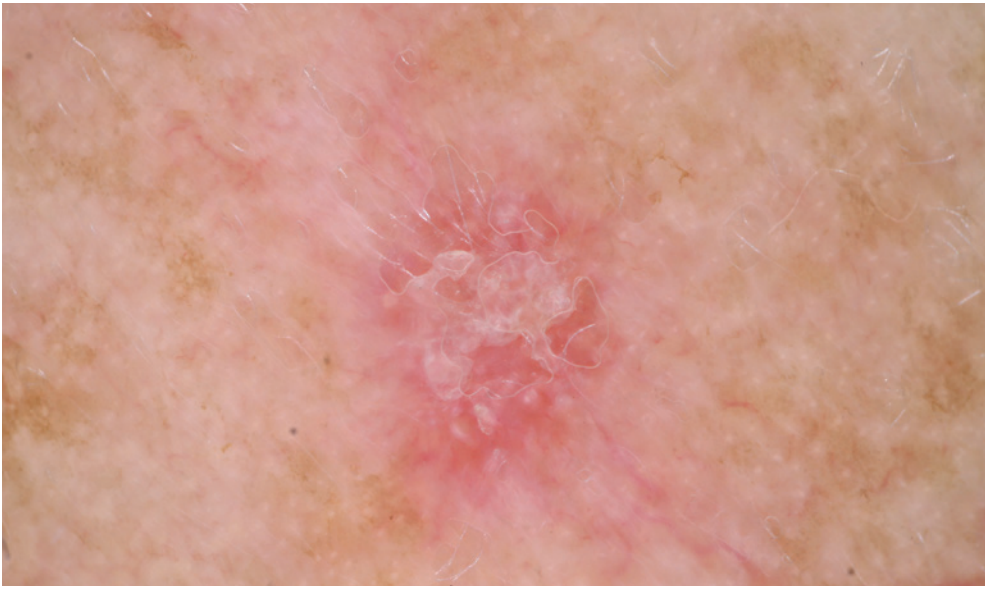


Fig. 17b: Keratin-filled follicle with progressive central hyperkeratoses of an advanced actinic keratosis (grade II). Image taken with polarisation filter, with immersion fluid (HEINE Dermatoscopy Oil) and with full illumination (4 LEDs).

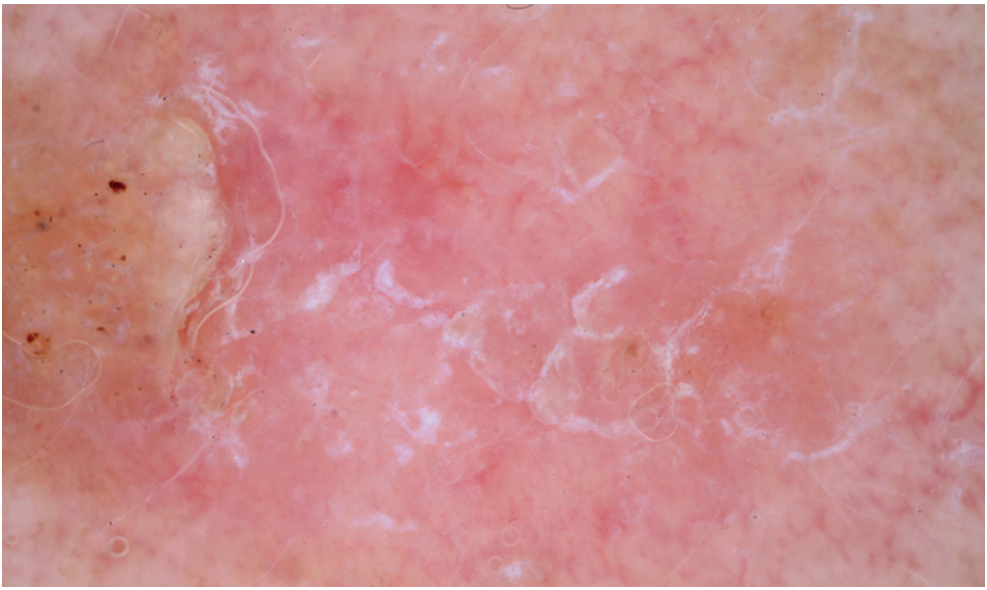


Fig. 17c: Progressive hyperkeratoses with residual erythema in an older actinic keratosis (grade III). Image taken with polarisation filter, with immersion fluid (HEINE Dermatoscopy Oil) and with full illumination (4 LEDs).

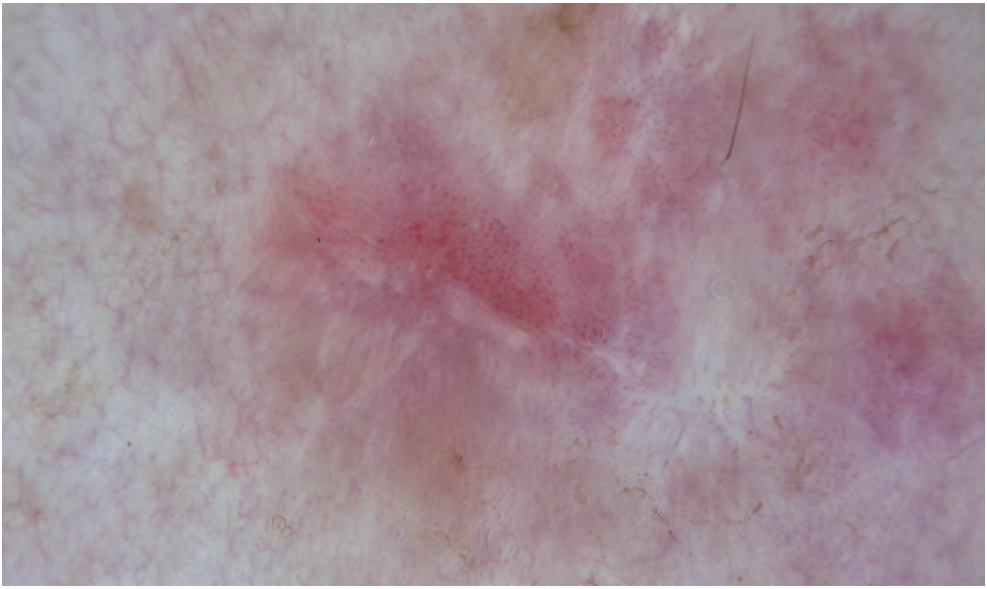


Fig. 18: Reddish plaque with dotted vessels in a line-like arrangement in a case of relapsed Brown's disease. Image taken with polarisation filter, with immersion fluid (HEINE Dermatoscopy Oil) and with full illumination (4 LEDs).

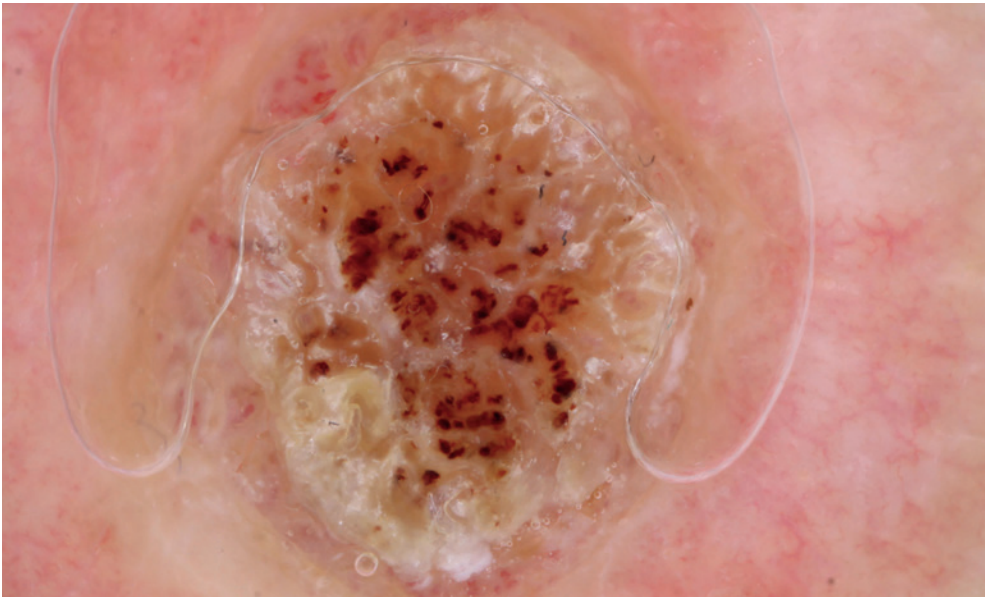


Fig. 19: Coronary vessels around a central keratin plug with haemorrhages in a keratoacanthoma. Image taken with polarisation filter, with immersion fluid (HEINE Dermatoscopy Oil) and with full illumination (4 LEDs).

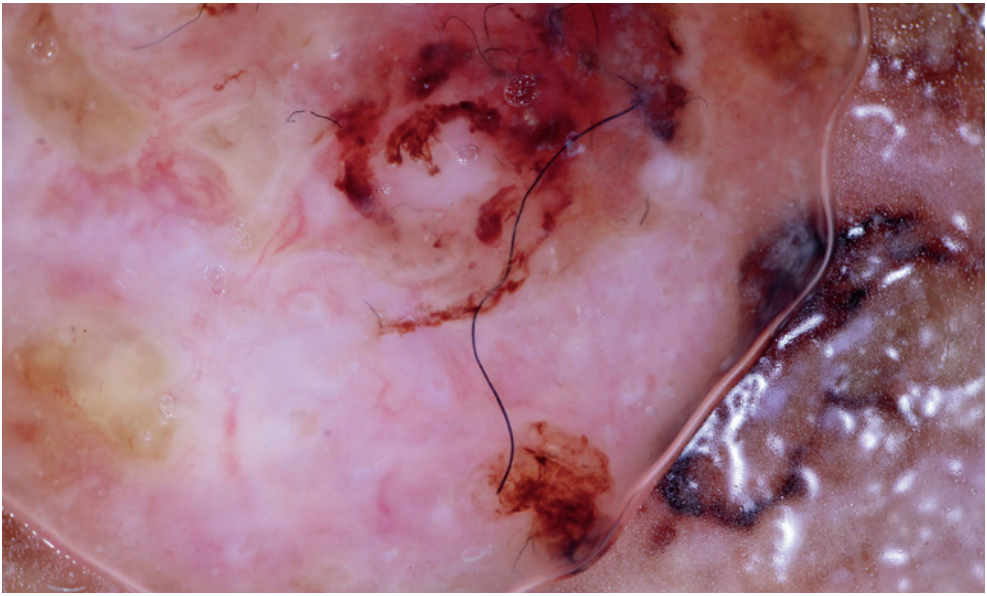


Fig. 20: Hyperkeratoses with haemorrhages and a white halo around follicles in an early invasive squamous-cell carcinoma. Image taken with polarisation filter, with immersion fluid (HEINE Dermatoscopy Oil) and with full illumination (4 LEDs).

Third step

The third step should only be carried out when none of the structures named in the first and second step are visible in the pigmented or non-pigmented skin lesion. In such a case, a malignant skin tumour, particularly a melanoma, should always be considered. This applies in particular if there is evidence of vascular polymorphism (Fig. 21) and/or in case of a solitary and nodular blue, black or reddish skin tumour (Fig. 22, 23).

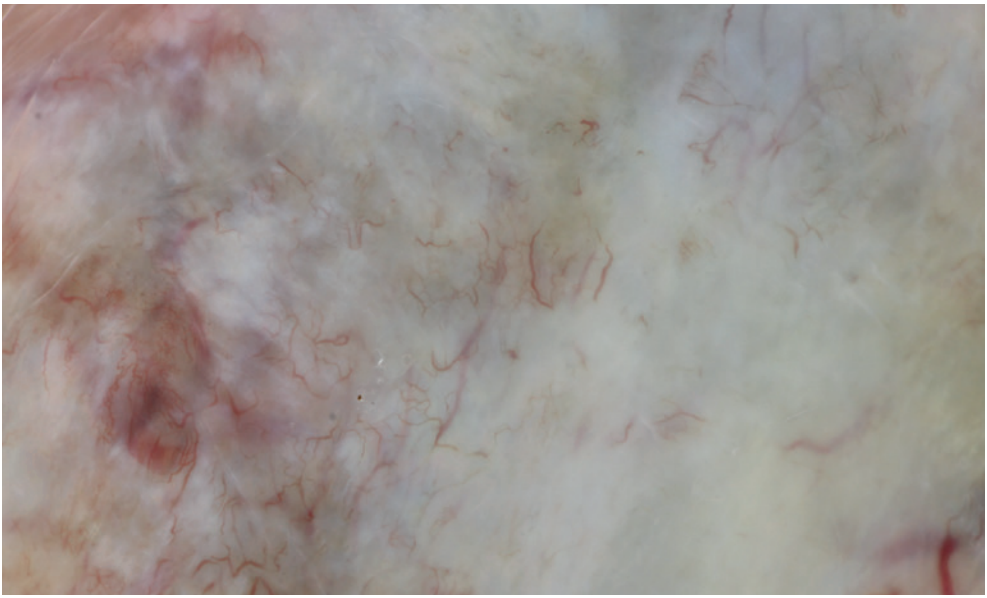


Fig. 21: Vascular polymorphism at the rim of an excision scar following metastasised melanoma. Image taken with polarisation filter, with immersion fluid (HEINE Dermatoscopy Oil) and with full illumination (4 LEDs).

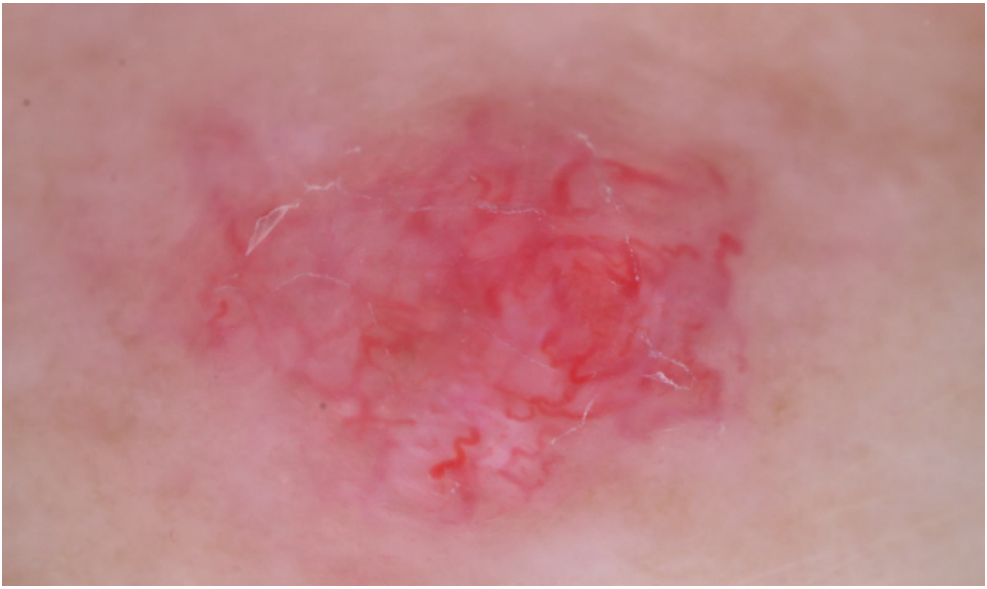


Fig. 22: Vascular polymorphism with convoluted, atypical vessels of differing calibres in a reddish, exophytic lesion of a metastatic melanoma. Image taken with polarisation filter, without immersion fluid and with full illumination (4 LEDs).

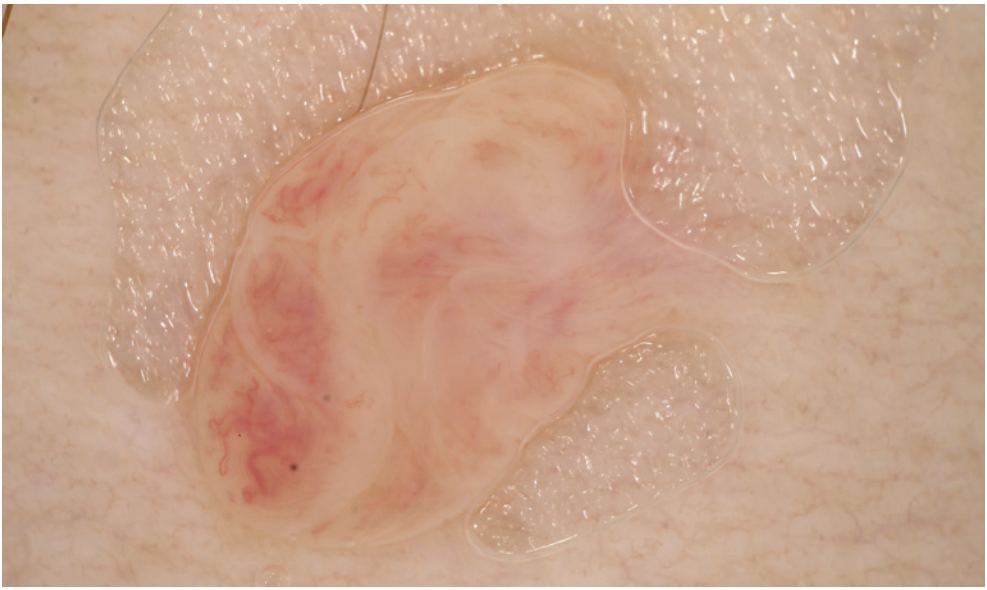


Fig. 23: Discretely atypical vessels in a structureless, exophytic lesion with a typical “wobble sign” (the lesion moves when the dermatoscope is moved) in a dermal nevus. Image taken with polarisation filter, with immersion fluid (HEINE Dermatoscopy Oil) and with full illumination (4 LEDs).

Colours

The normal epidermis can appear from whitish, yellowish to brown in the colour spectrum (Fig. 24). When the horny layer (acanthosis) becomes thicker, the colour shade can become yellow-brown to grey-brown. Melanin, the major pigment in the skin, is found in the basal membrane between the epidermis and dermis. The more melanin rises to the stratum corneum of the epidermis and therefore to the surface of the skin, the more a black colour is clearly visible. The deeper the melanin is in the skin, the more brown (basal membrane), grey (upper dermis) or steel-blue (middle dermis) colour shades are visible. The deeper the melanin is in the skin, the less distinct the colours are. This also applies to the position of vessels. Vessels in different positions and forms can appear accordingly as colours ranging from light to dark red, sometimes blue or dark blue, and in rare cases even black. The colour white can only be defined when compared with the surrounding healthy skin and is a sign of regression of the benign or malignant skin tumour.

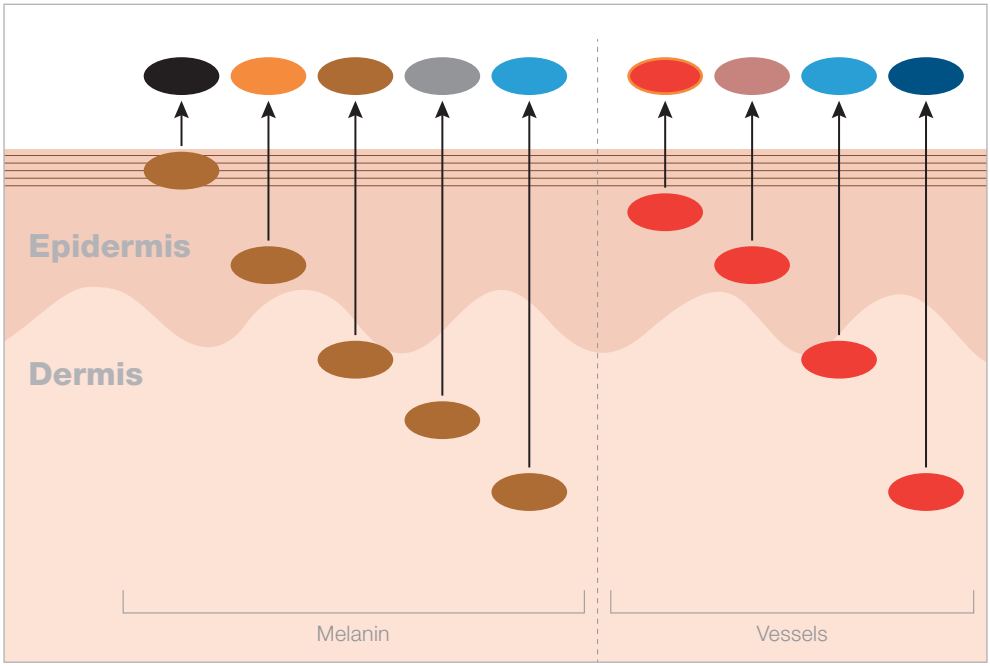


Fig. 24: Colours visible through the dermatoscope according to the position of the melanin (left) and the blood vessels (right).

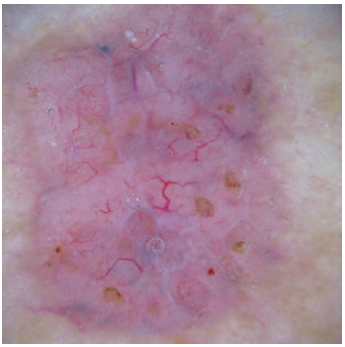
Further diagnostic criteria

Certain dermatoscopic structures are more conspicuous with non-polarised dermatoscopy (NPD), while others are more conspicuous with polarised dermatoscopy (PD). The introduction of "hybrid" dermoscopes allows the user to toggle between polarised and non-polarised light. We found that structures that are more conspicuous with either NPD or PD appear to "blink" when the observer toggles between light modes. With PD shiny white lines or crystalline structures are visible. Because they are not visible with NPD, they appear to blink when the observer toggles between NPD and PD.*

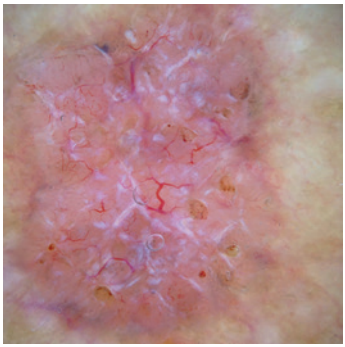
*Braun RP, Scope A, Marghoob AA. The "Blink Sign" in Dermoscopy. Arch Dermatol. 2011; 147(4):520.

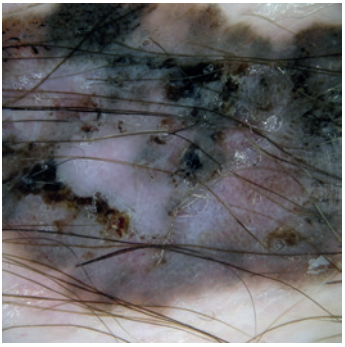
"Blink Sign" observable in a basal cell carcinoma

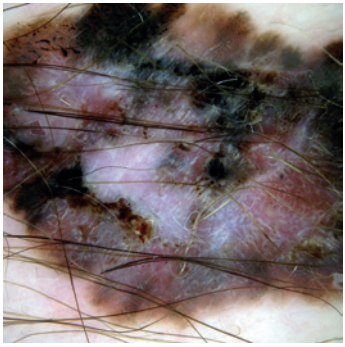
Basal cell carcinoma
non-polarised illumination



Basal cell carcinoma
polarised illumination







Differentiating between benign and malignant skin tumours

Even if the diagnosis as to whether the tumour is benign or malignant has been clinically confirmed, it is very useful to start by looking at the tumour through the dermatoscope. Look at the tumour's overall structures, colours and patterns. Look at the rim and how the tumour appears to be growing, irrespective of its grade. Familiarize yourself with these structures, colours and patterns to learn how to identify very small, early malignant tumours of the skin with a favourable prognosis.

Which pattern does the pigmented or non-pigmented skin lesion show you? There are many international studies relating to pattern analysis. This pattern analysis has been and continues to be the basis for creating a variety of scores that are used to differentiate between melanocytic and non-melanocytic, benign and malignant skin tumours. So as not to complicate matters, we will not address all of these scores and algorithms here, but will instead show you a straightforward method and rule to help you to accurately detect melanomas, in addition to basal-cell and squamous-cell carcinomas. During this process, you will find that you will also diagnose a very small number of benign skin tumours as malignant, and thus remove these "unnecessarily" – however, this happens to even the "best" dermatoscopy specialists and serves to ensure that absolutely no melanoma is missed.

The AC rule

The clinical and dermatoscopic rule is the AC rule, which stands for asymmetry and colour variations (Table 1). A malignant skin tumour, particularly a melanoma, grows chaotically. This means asymmetry occurs in both the external form and in the internal structures (i.e. the tumour is no longer mirrored in the main axes layered vertically on top of one another), and the variety of colour increases over time as the tumour grows. Visible jet-black or blue-grey colours are a clear sign of a melanoma. Not all melanomas follow this rule. For example, there can be clinically and dermoscopically symmetrical melanomas which are purely red in colour and amelanotic. In addition, purely nodular and sometimes predominantly black or purely red melanomas can occur. In general the Ugly Duckling rule helps here: an individual tumour which is completely different to the patient's other tumours, should undergo a highly critical clinical and, above all, dermatoscopic examination.

Asymmetry-Colour-Variation-Rule (The AC rule)

Asymmetry	Form and internal structures
Colour variations	Jet-black, blue, grey, brown, red, white

Table 1

When analysing symmetry or asymmetry, be aware that there is actually very rarely a symmetrical skin tumour. Nature is not perfect in this sense, and therefore symmetry can be evaluated with a bit of generosity. With this AC rule described above, medical laypersons achieved an accuracy rate of 91% in the detection of melanomas in a clinical assessment, and 94% if a dermatoscope was used.

The AC rule and other clues

The following clues can also be used alongside the AC rule to help analyse unclear skin tumours and rule out malignant skin tumours (Table 2): peripheral black dots, radial lines or pseudopods (= thickened radial lines) in only a segmental and partial arrangement, polymorphic vessels, thickened atypical network or branched lines, unknown nodular structure. Just one of these patterns is needed in addition to the AC rule to suspect a melanoma or basal-cell carcinoma.

The AC rule and clues

AC rule	Asymmetry and colour variations
Clues	☒ radial lines or pseudopods (= thickened radial lines) in only a segmental and partial arrangement (Fig. 29, 30) ☒ polymorphic vessels (Fig. 35) ☒ thickened atypical network or branched lines (Fig. 29, 30) ☒ unknown nodular blue, black or red tumour (Fig. 32, 33, 34)

Table 2

Dermatoscopy can also be used on the palms of the hands, soles of the feet and on (non-varnished) nails. However, on these surfaces the structures and colours are not quite as visible as on normal skin. Nevertheless, both the AC rule and AC rule and clues can still be applied.

Our personal rule

Finally, we have our additional, personal rule on detecting melanomas or other malignant skin tumours:

☒ Have I seen something like this before?

☒ Do I know of a benign skin tumour that could look like this?

☒ Would I want to leave this skin tumour on my own skin and live with it?

☒ I am curious what that is (according to Jürgen Kreusch).

In general the following rule applies: in case of doubt, an excision or at least a biopsy is always the best option if you cannot guarantee, to the patient and yourself, that the skin tumour you have examined is not a melanoma or other malignant skin tumour.

For many years, our best continued dermatoscopic training has been the clinical and dermatoscopic photography of skin tumours prior to surgery and their subsequent comparison with the histology results. This is a method that we would highly recommend to everyone. We have learnt much from doing this and we know that every week we will discover something new, as melanomas are precisely extremely varied in their appearance. This knowledge and respect for this forms the basis for our daily work.

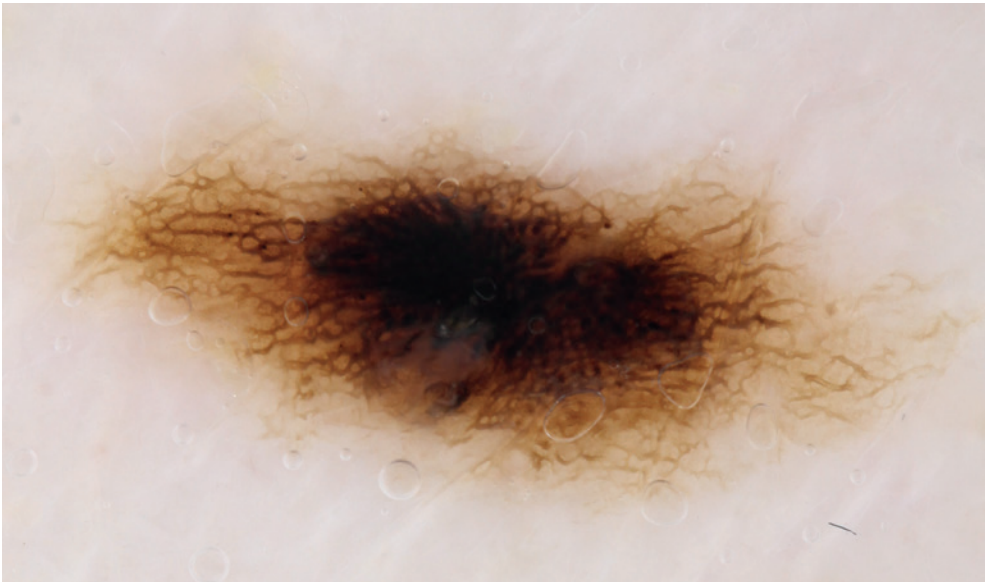


Fig. 25: Normal streaks and network arranged almost symmetrically and central hyperpigmentation of a lentiginous melanocytic nevus with brown and black colouring. Image taken with polarisation filter, with immersion fluid (HEINE Dermatoscopy Oil) and with full illumination (4 LEDs).

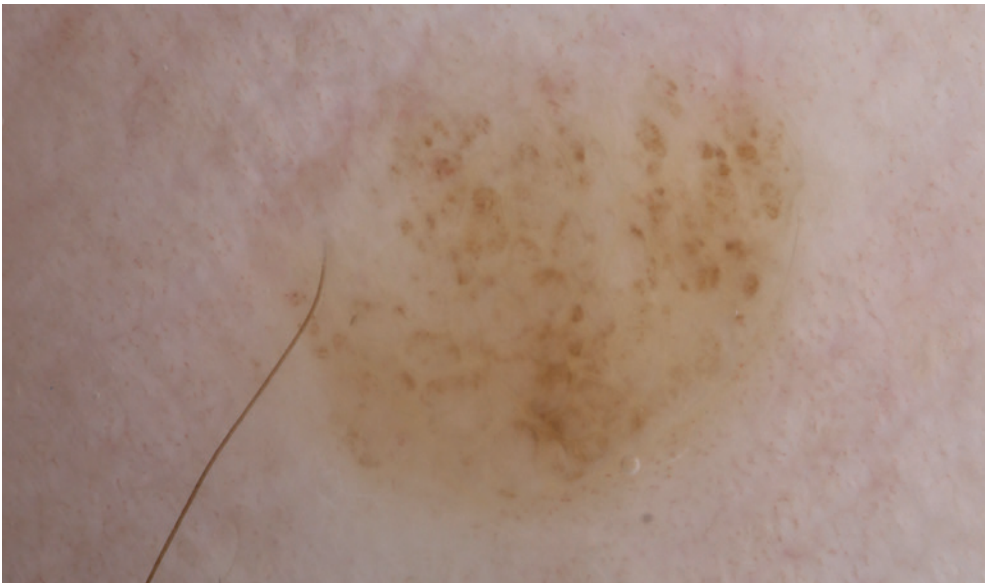


Fig. 26: Slightly asymmetrical lesion with normal globules of a compound nevus brown in colour. Image taken with polarisation filter, with immersion fluid (HEINE Dermatoscopy Oil) and with reduced light intensity (2 LEDs).

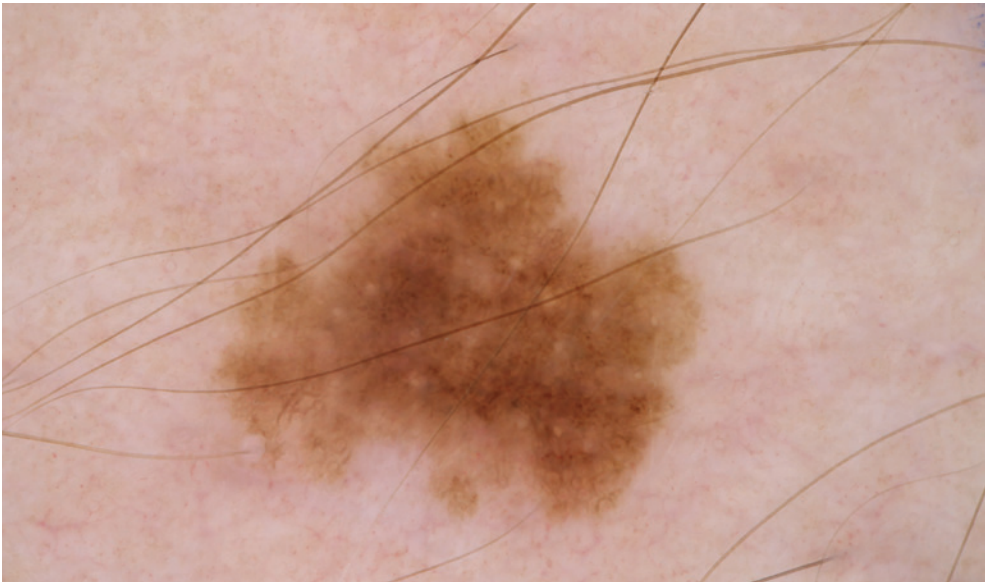


Fig. 27: Slightly asymmetrical lesion with normal network and globules of a lentiginous melanocytic nevus brown in colour. Image taken with polarisation filter, with immersion fluid (HEINE Dermatoscopy Oil) and with full illumination (4 LEDs).

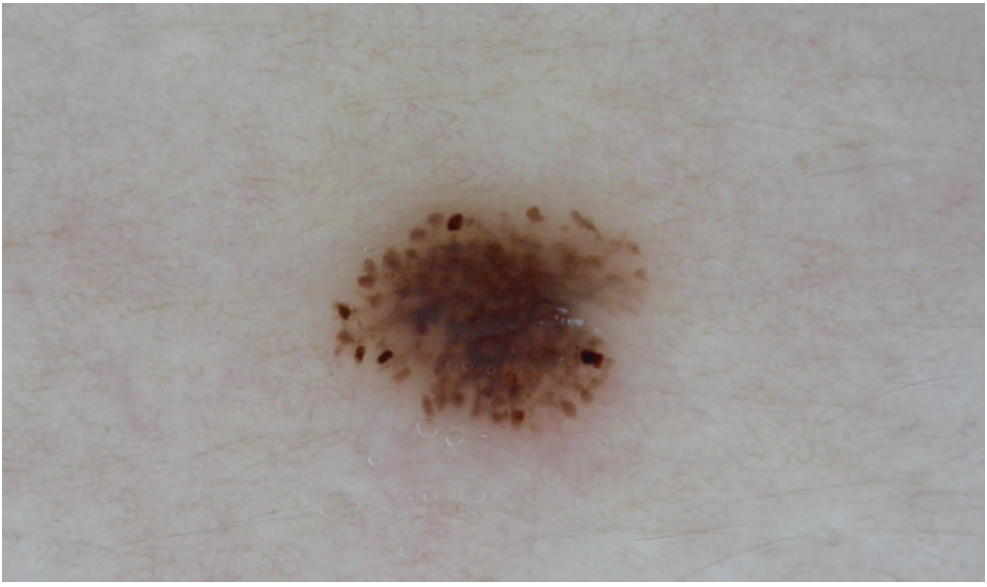


Fig. 28: Slightly asymmetrical lesion with prominent network and peripheral globules (starburst pattern) of a Reed nevus brown in colour. Image taken with polarisation filter, with immersion fluid (HEINE Dermatoscopy Oil) and with full illumination (4 LEDs).

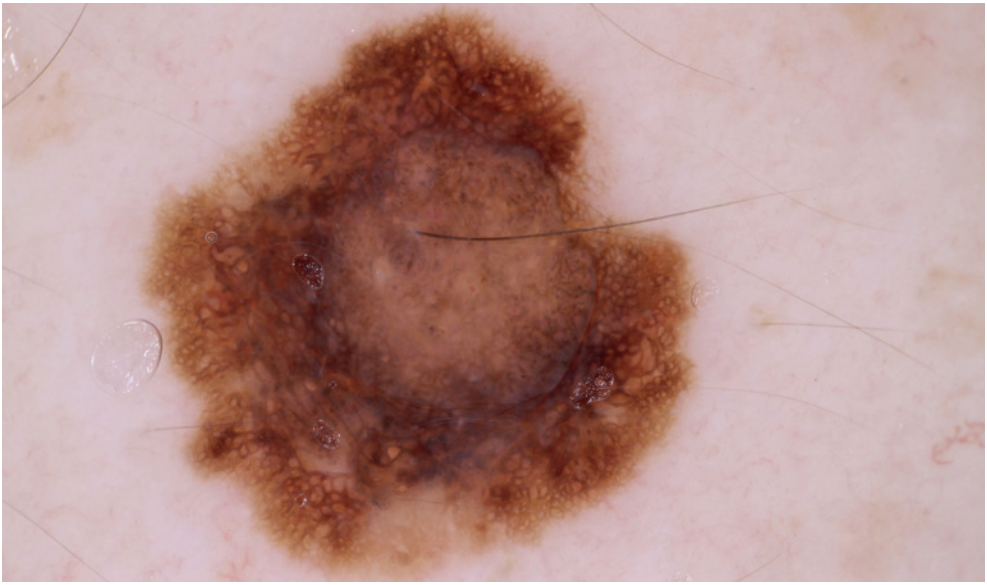


Fig. 29: Asymmetrical lesion with atypical network, streaks and dots of an atypical compound nevus brown, grey and blue in colour. Image taken without polarisation filter, with immersion fluid (HEINE Dermatoscopy Oil) and with full illumination (4 LEDs).

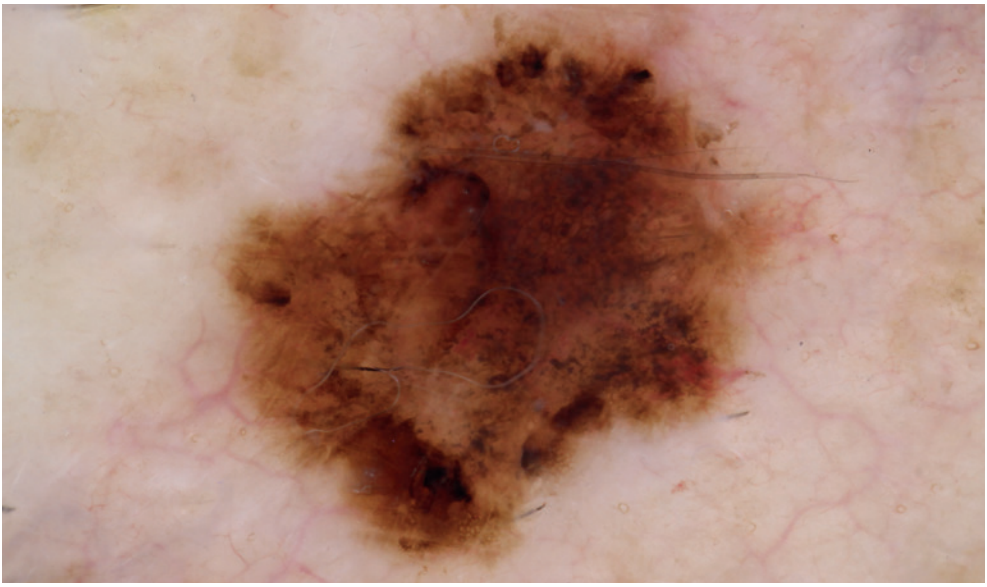


Fig. 30: Asymmetrical lesion with atypical network, streaks, pseudopods and dots of a melanoma in-situ brown and black in colour. Image taken with polarisation filter, with immersion fluid (HEINE Dermatoscopy Oil) and with full illumination (4 LEDs).

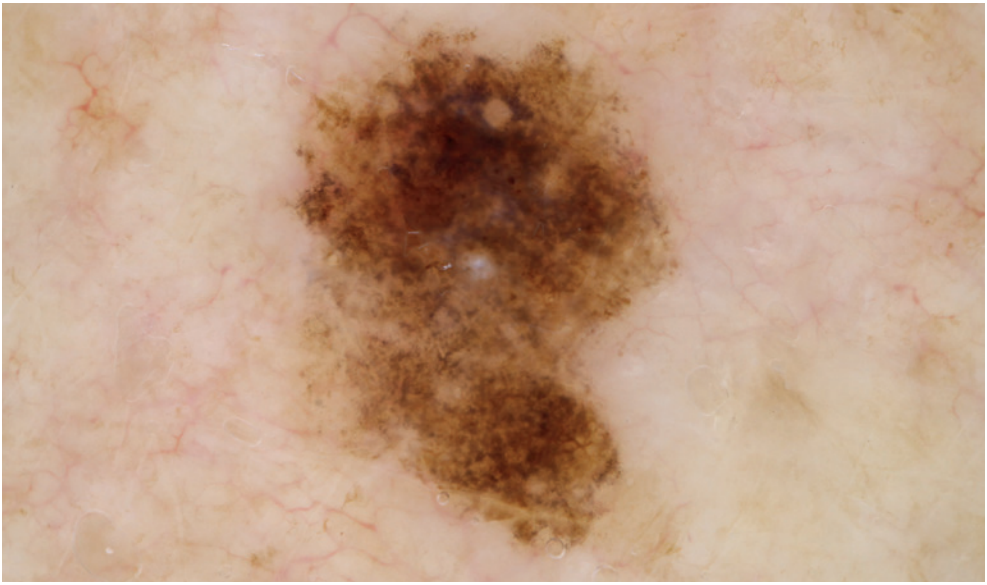


Fig. 31: Asymmetrical lesion with atypical globules, dots and network of an invasive melanoma (< 0.5 mm tumour thickness) brown and grey in colour. Image taken with polarisation filter, with immersion fluid (HEINE Dermatoscopy Oil) and with full illumination (4 LEDs).

Fig. 32: Asymmetrical, exophytic hyperkeratotic lesion of a regressive invasive melanoma blue-grey, white and yellow in colour. Image taken with polarisation filter, with immersion fluid (HEINE Dermatoscopy Oil) and with full illumination (4 LEDs).

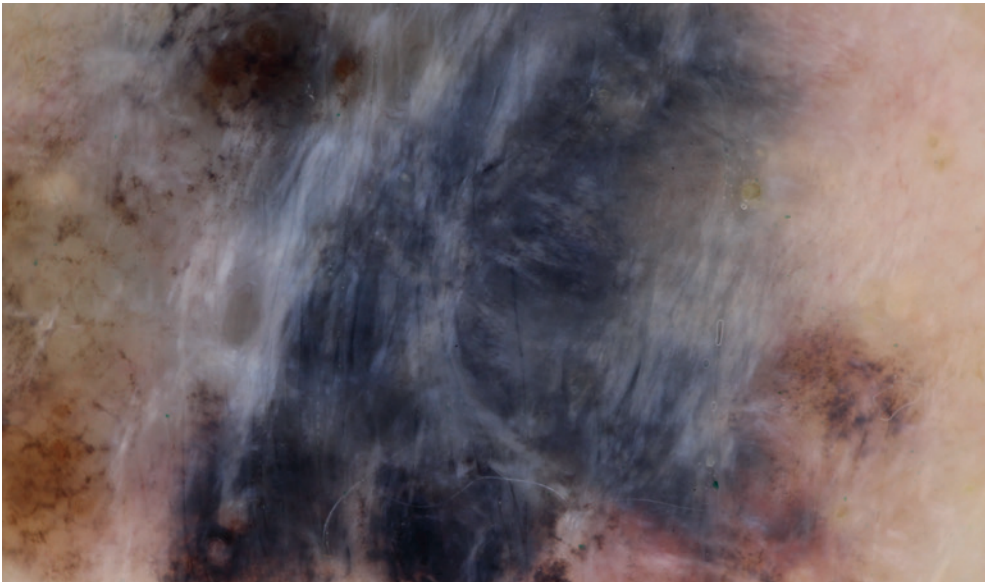


Fig. 33: Central structureless blue-white area in an invasive melanoma (3.7 mm tumour thickness) (image taken with polarisation filter, with immersion fluid (HEINE Dermatoscopy Oil) and with full illumination (4 LEDs).

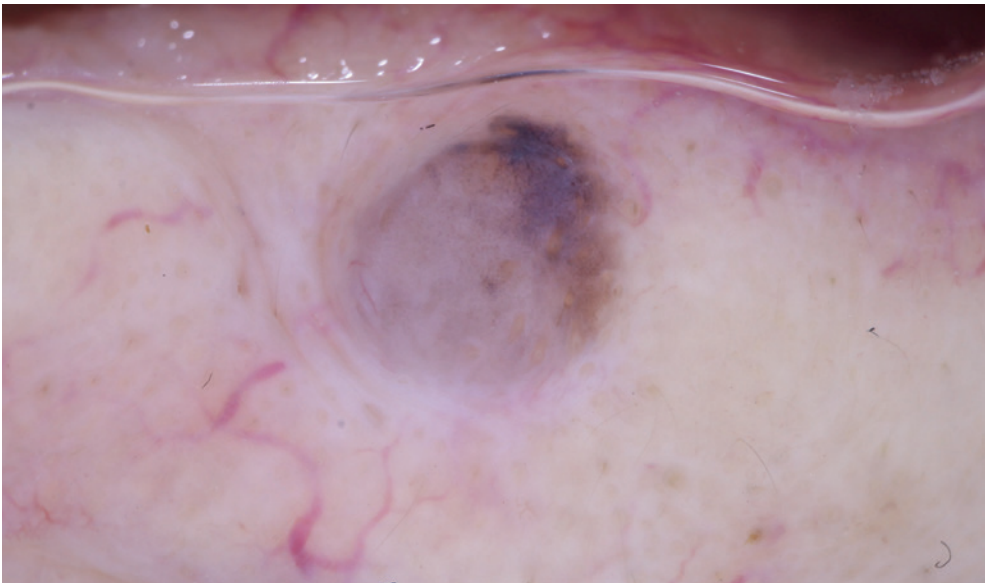


Fig. 34: Asymmetrical, predominantly hypopigmented structureless lesion of a metastatic melanoma with grey-blue, off-centre peripheral area of colour. Image taken without polarisation filter, with immersion fluid (HEINE Dermatoscopy Oil) and with full illumination (4 LEDs).

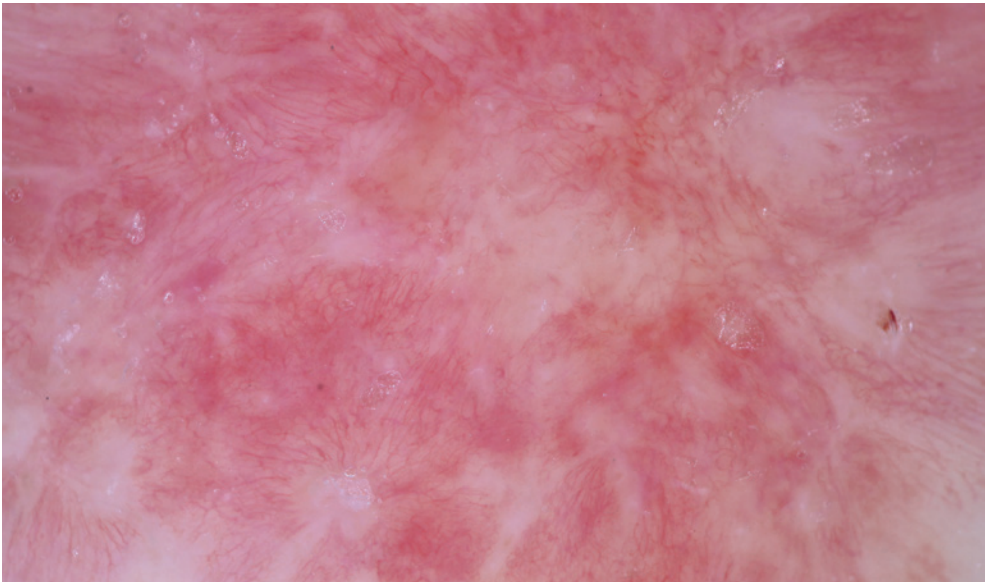


Fig. 35: Asymmetrical, non-pigmented, structureless lesion with arborizing horizontal vessels of superficial basal-cell carcinoma red in colour. Image taken without polarisation filter, with immersion fluid (HEINE Dermatoscopy Oil) and with full illumination (4 LEDs).

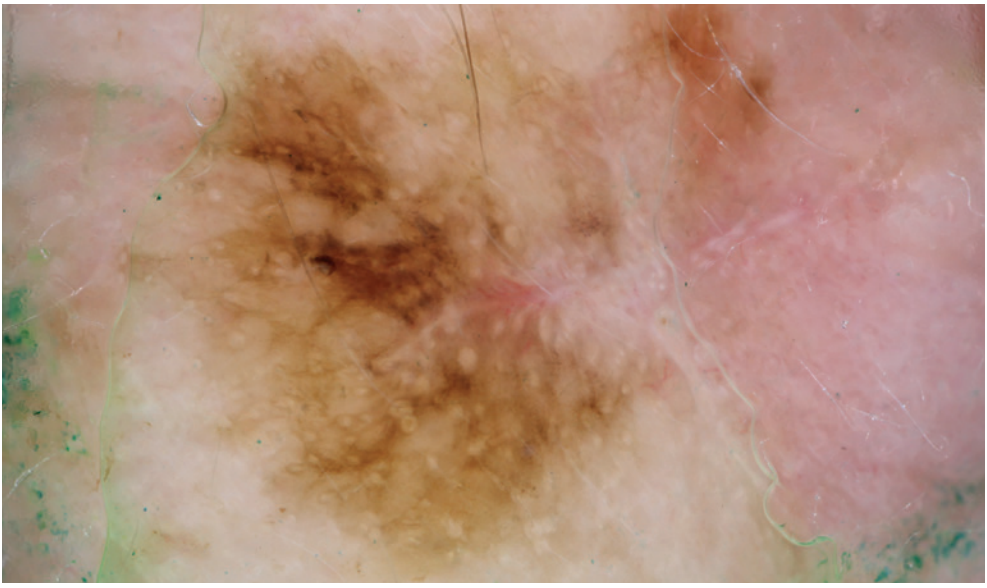


Fig. 36: Asymmetrical lesion with pigmentation outside the scar and “circles in the circles” of a recurrent lentigo maligna on the face with various brown shades. Image taken with polarisation filter, with immersion fluid (HEINE Dermatoscopy Oil) and with full illumination (4 LEDs).

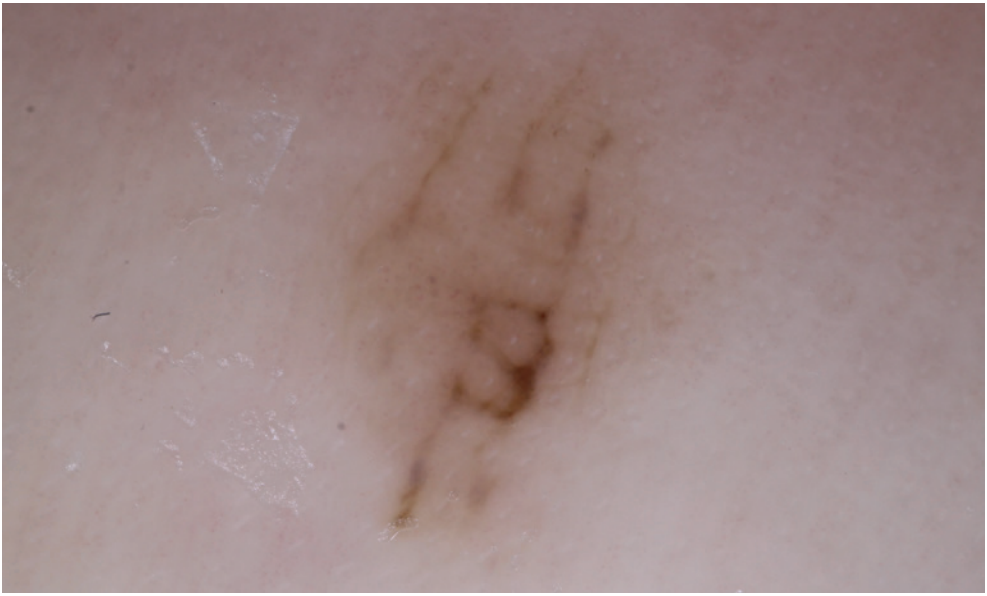


Fig. 37: Slightly asymmetrical lesion with parallel pigmentation in the sulci of the hairless skin of a melanocytic nevus on the heel with brown shades. Image taken with polarisation filter, with immersion fluid (HEINE Dermatoscopy Oil) and with full illumination (4 LEDs).

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