Algorithm for differentiating skin tumours

First step: is the structure clearly melanocytic?

Pigment network, branched streaks, aggregated globules, structureless brown/blue lesion? **Exception:** solar lentigo, accessory nipple

clearly melanocytic

ABCD rule of dermatoscopy

Second step: is the structure non-melanocytic?

Excerpt from the most common types of non-melanocytic lesions:



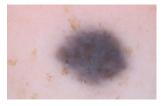
Pseudo horn cysts, comedo-like openings, fingerprint-like structures, cerebriform structures, opaque colours

Seborrhoeic keratosis



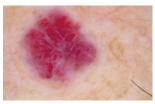
Arborizing vessels, blue-grey oval globules, ulceration, spoke-wheel areas, leaf-like structures

Basal-cell carcinoma



Homogeneous, blue pigmentation

Blue Nevus



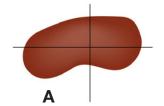
Red to almost black globules

→ Haemangioma

Third step: all other lesions are classified as melanocytic.

ABCD rule of dermatoscopy

Fourth step: ABCD rule of dermatoscopy



Asymmetry:

Asymmetric in one or two axis

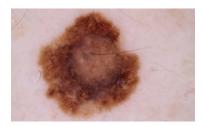


В

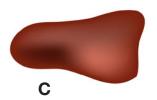
Border:

Irregular or blurred

Examples:

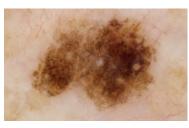


Asymmetrical lesion with atypical network, stripes, and dots with brown, grey, and blue colours. Image without polarisation filter with immersion fluid and full lighting (4 LEDs).

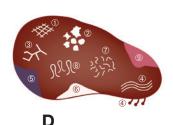


Colour:

Differently coloured pigmentation Polychromatism (white, red, light brown, dark brown, black, and blue-grey)



Asymmetric lesion with clumps, points, and a network of an invasive melanoma (< 0.5 mm tumour thickness) with brown and grey colours. Image with polarisation filter with immersion fluid and full lighting (4 LEDs).



Dermatoscopic structure:

Pigment network: irregular mesh and or pigmentation (1) Clumps and globules: irregular size and distribution (2) Branched strips: modified pigment network, abrupt discontinuation (3)

Strips: non-parallel, irregular strips (4)

Structureless areas: no recognisable structures (5),

milky veil

Regression structures: whitish, scar-like depigmentation (6) Atypical vascular patterns: irregular polymorphous vascular pattern (7), hairpin vessels (8), milky red areas (9)

If one or more of these criteria correspond to a pigment spot, a suspicious or malignant lesion may be involved.

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