

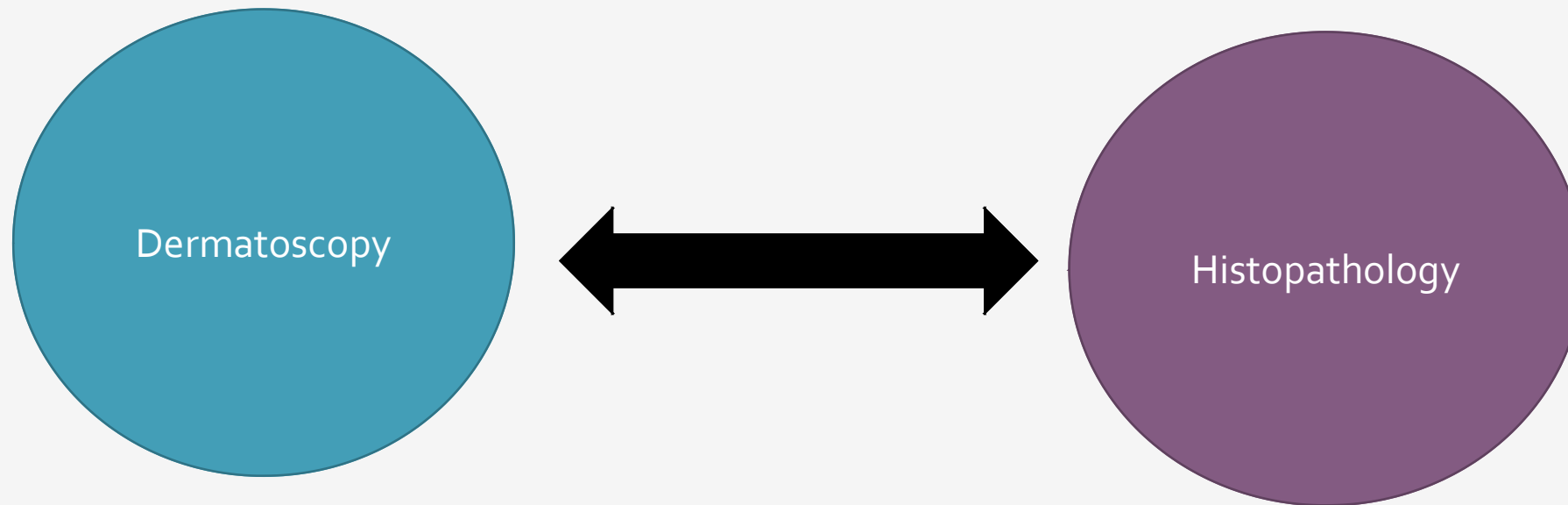
DERMOSCOPY

Tien Ming Lim

Consultant Dermatologist

MBChB, FRACP

Introduction



Black

Brown

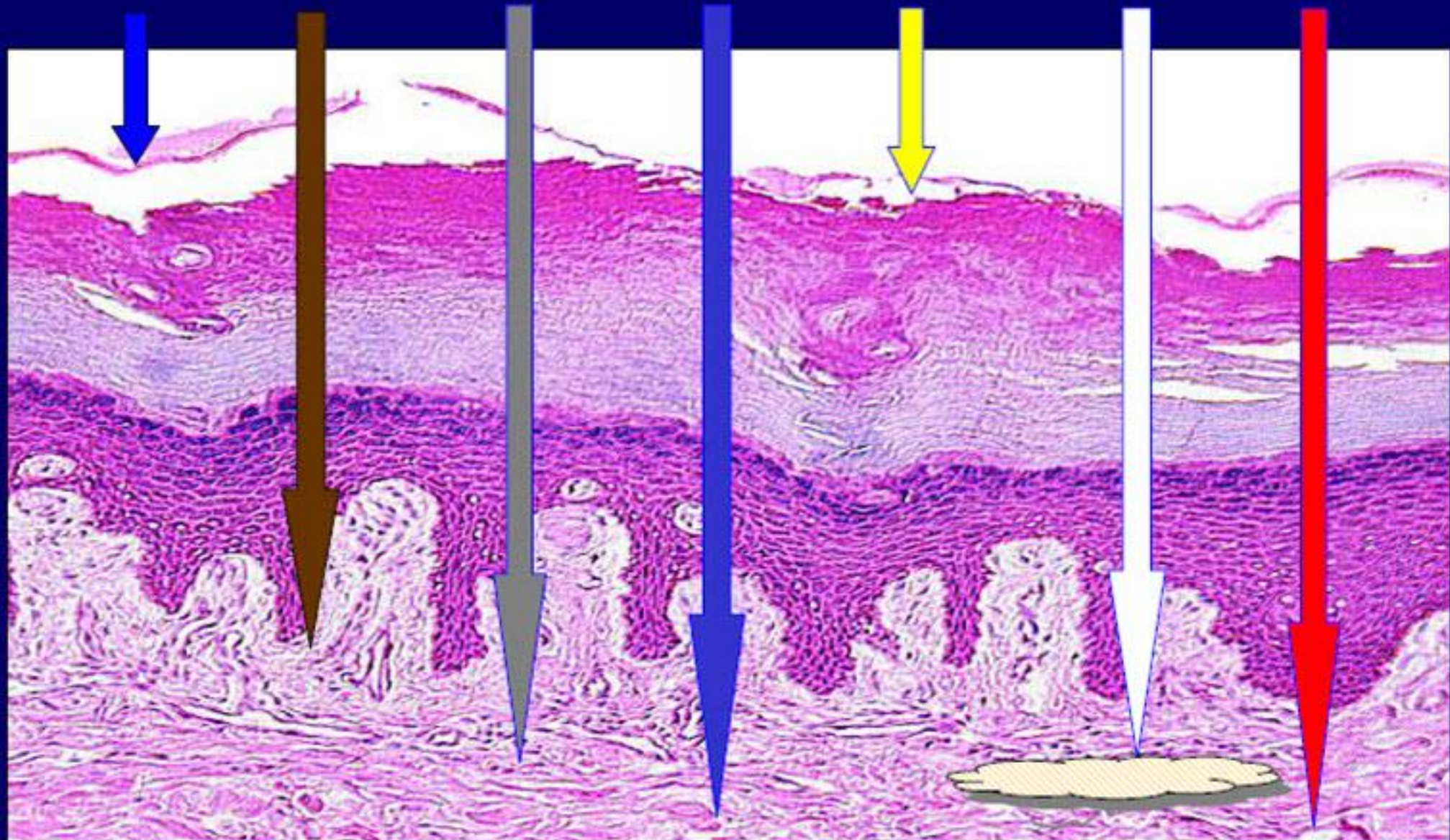
Gray

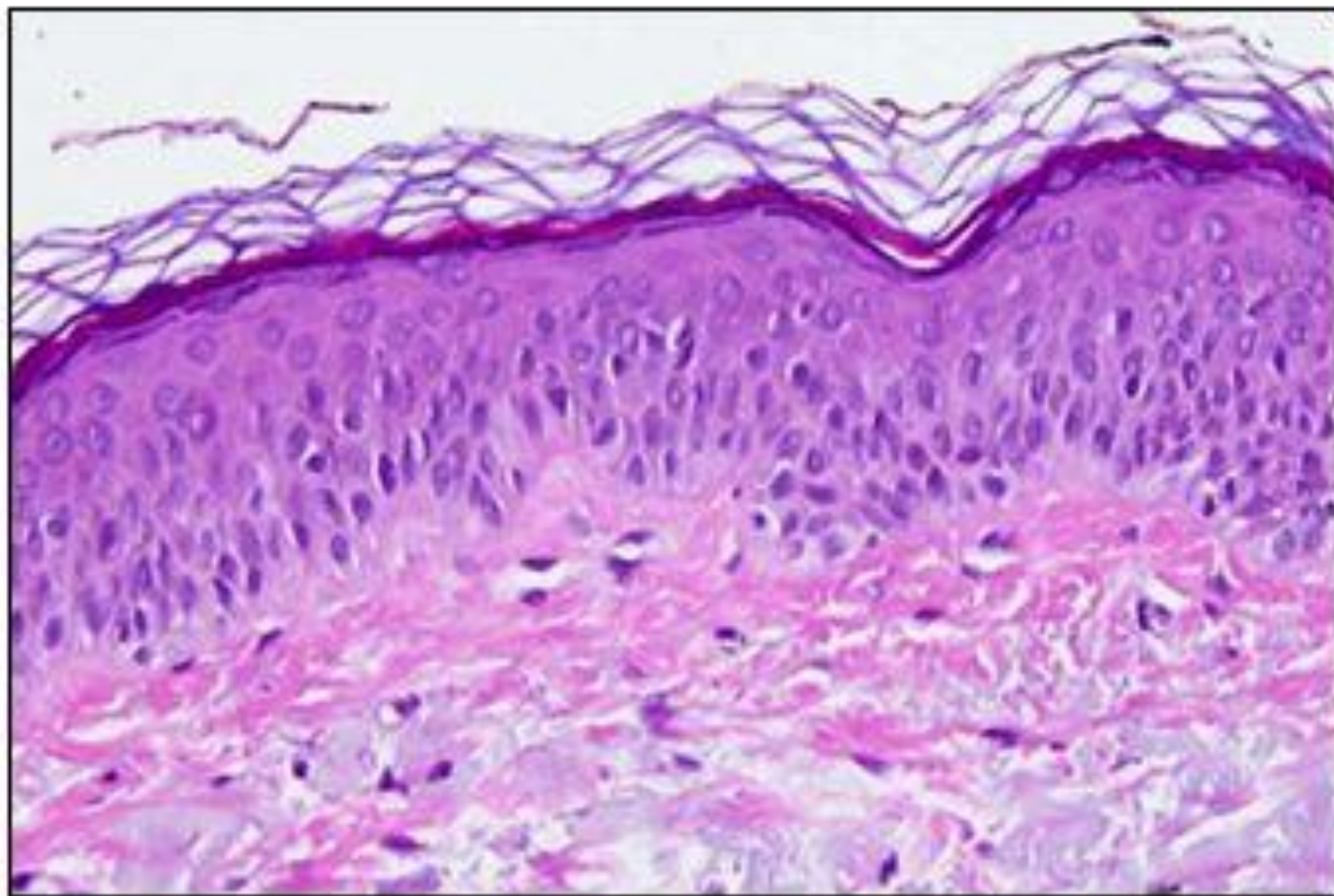
Blue

Yellow

White

Red





Yellow: Keratin.

Black: Melanin in stratum corneum, superficial layers of epidermis or throughout all layers of epidermis, with or without dermal involvement.

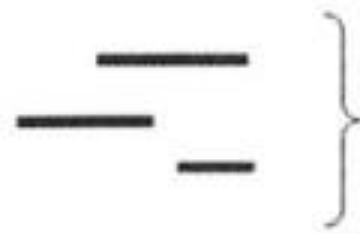
Brown: Melanin below the stratum corneum, especially if present in the dermo-epidermal junction and papillary dermis.

White: Lack of pigment (melanin), atrophy/fibrosis/collagen.

Gray: Free-melanin or melanophages in papillary dermis.

Red: Blood (thrombosed angiomas or angiokeratomas may reveal purple/black lagoons).

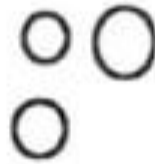
Blue: Melanin in the deep dermis (due to Tyndall effect).



Lines



Pseudopods



Circles

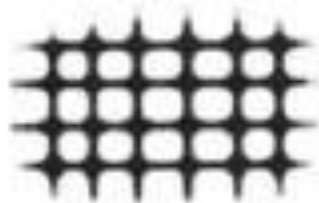


Clods



Dots

Ⓐ



Reticular lines

Ⓑ



Branched lines

Ⓒ



Parallel lines

Ⓓ



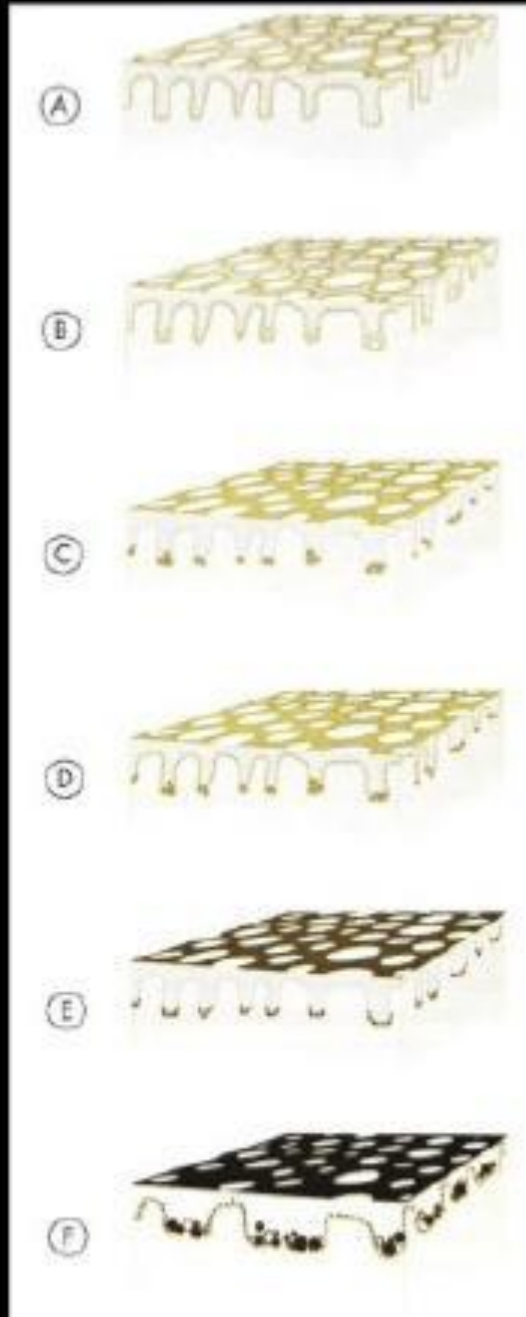
Radial lines

Ⓔ



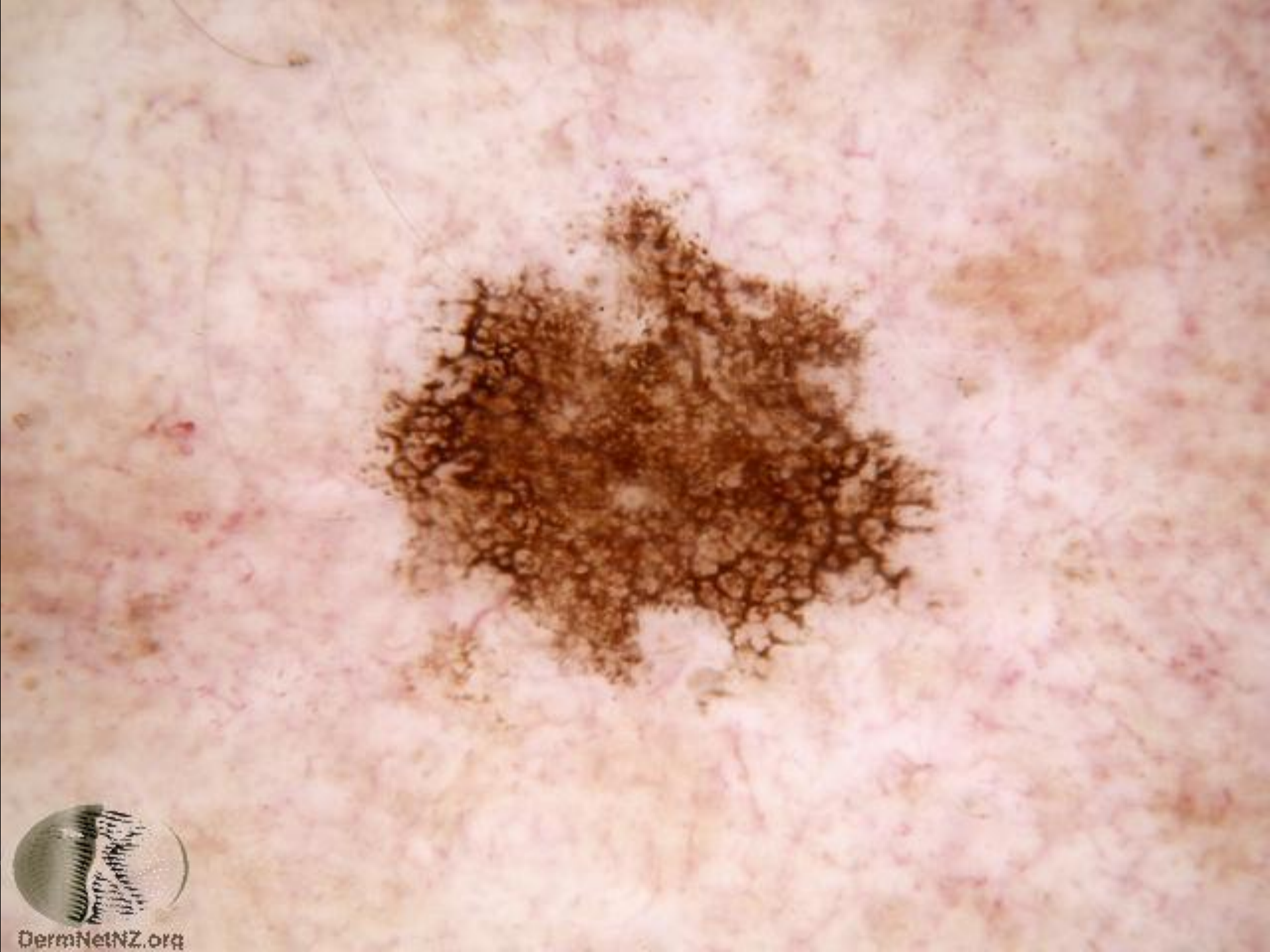
Curved lines

Kittler et al.



Basal epidermal hyperpigmentation that is diffuse (A) or confined to the tips of the rete (E), proliferations of non-pigmented (B) or pigmented (C) melanocytes within rete and combinations of these (D) produce a pattern of reticular lines.

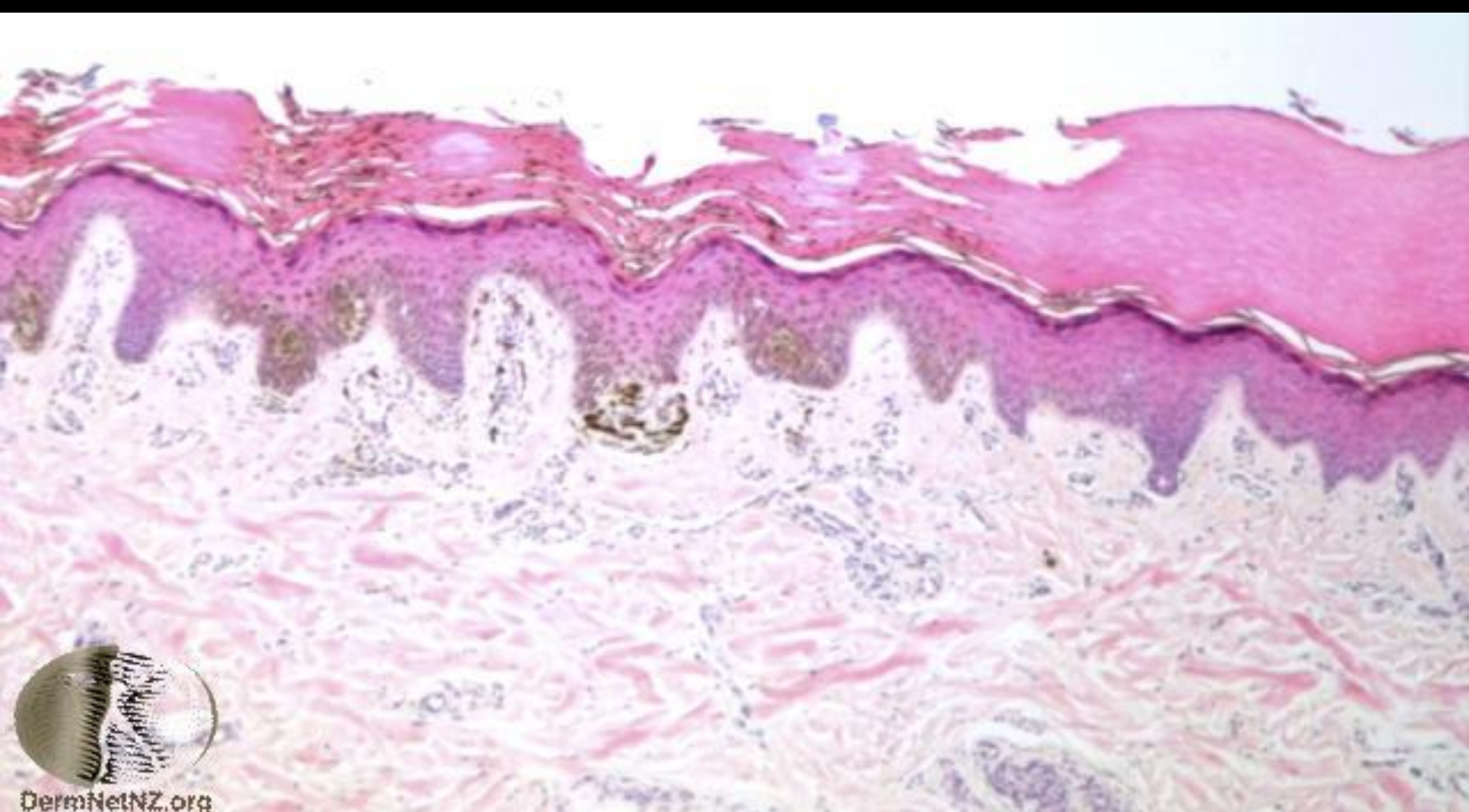
A more exuberant proliferation of pigmented melanocytes that expands the epidermal rete produces thick reticular lines (F).



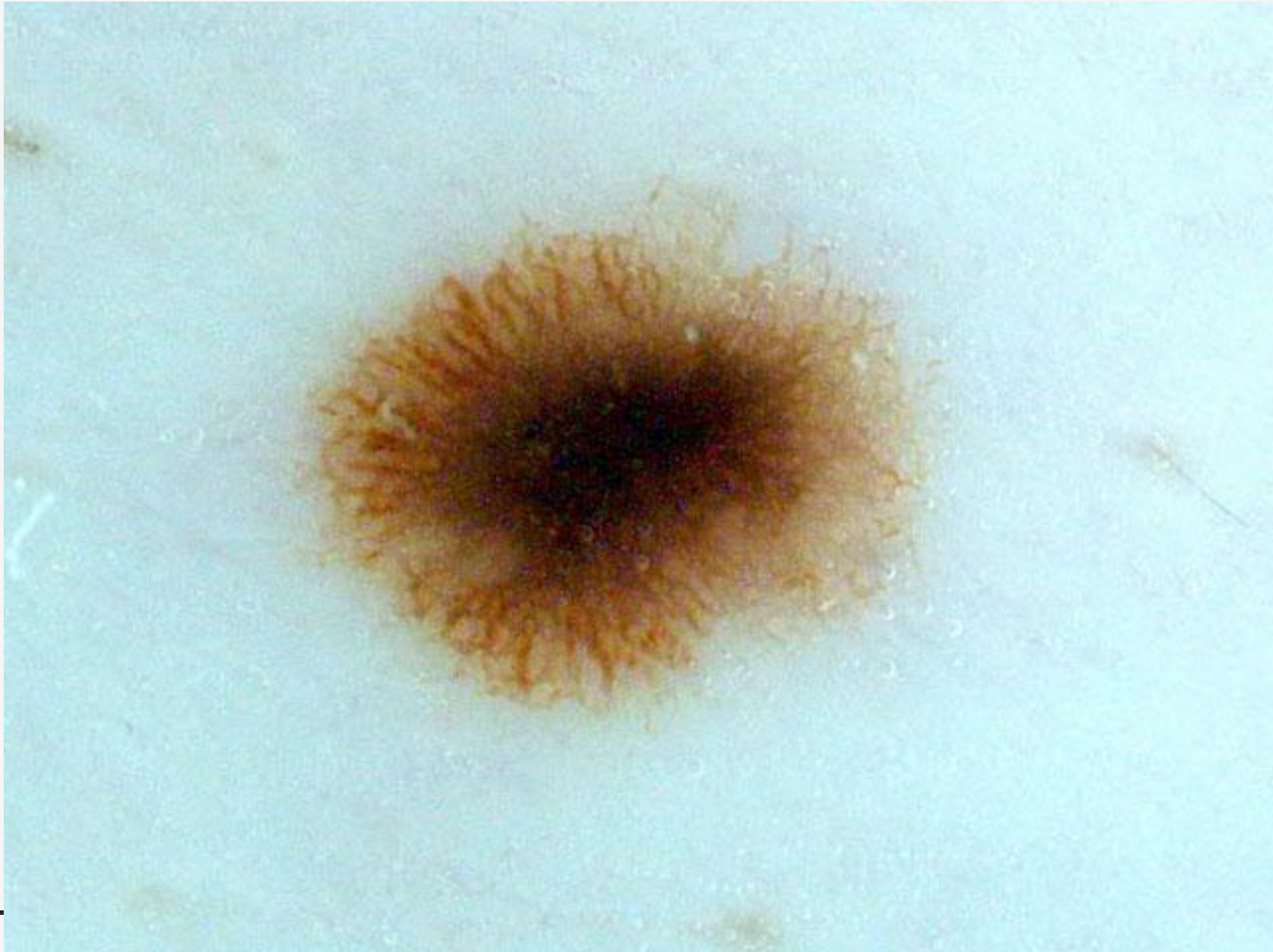
DermNetNZ.org

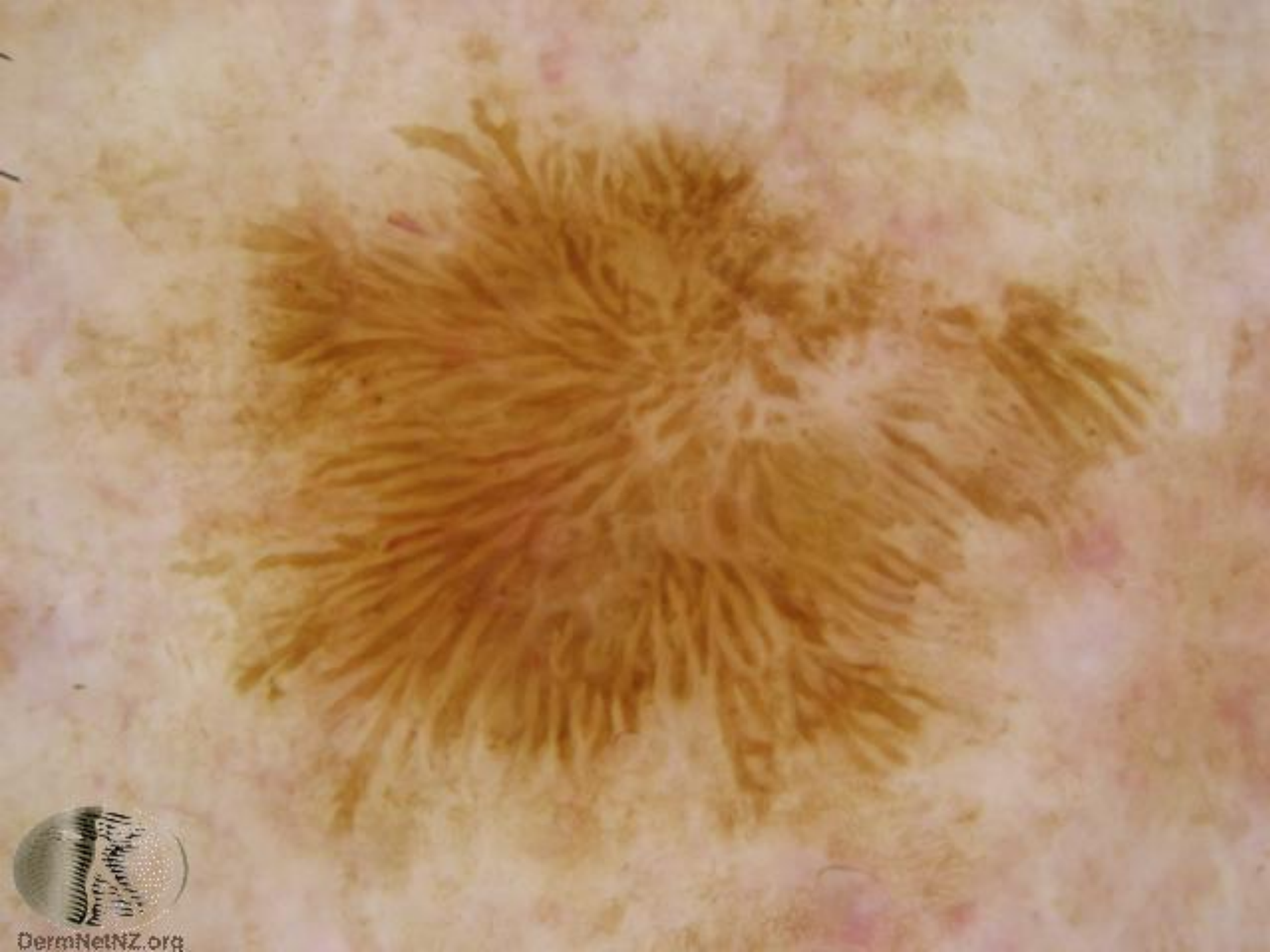


DermineNZ © 2010

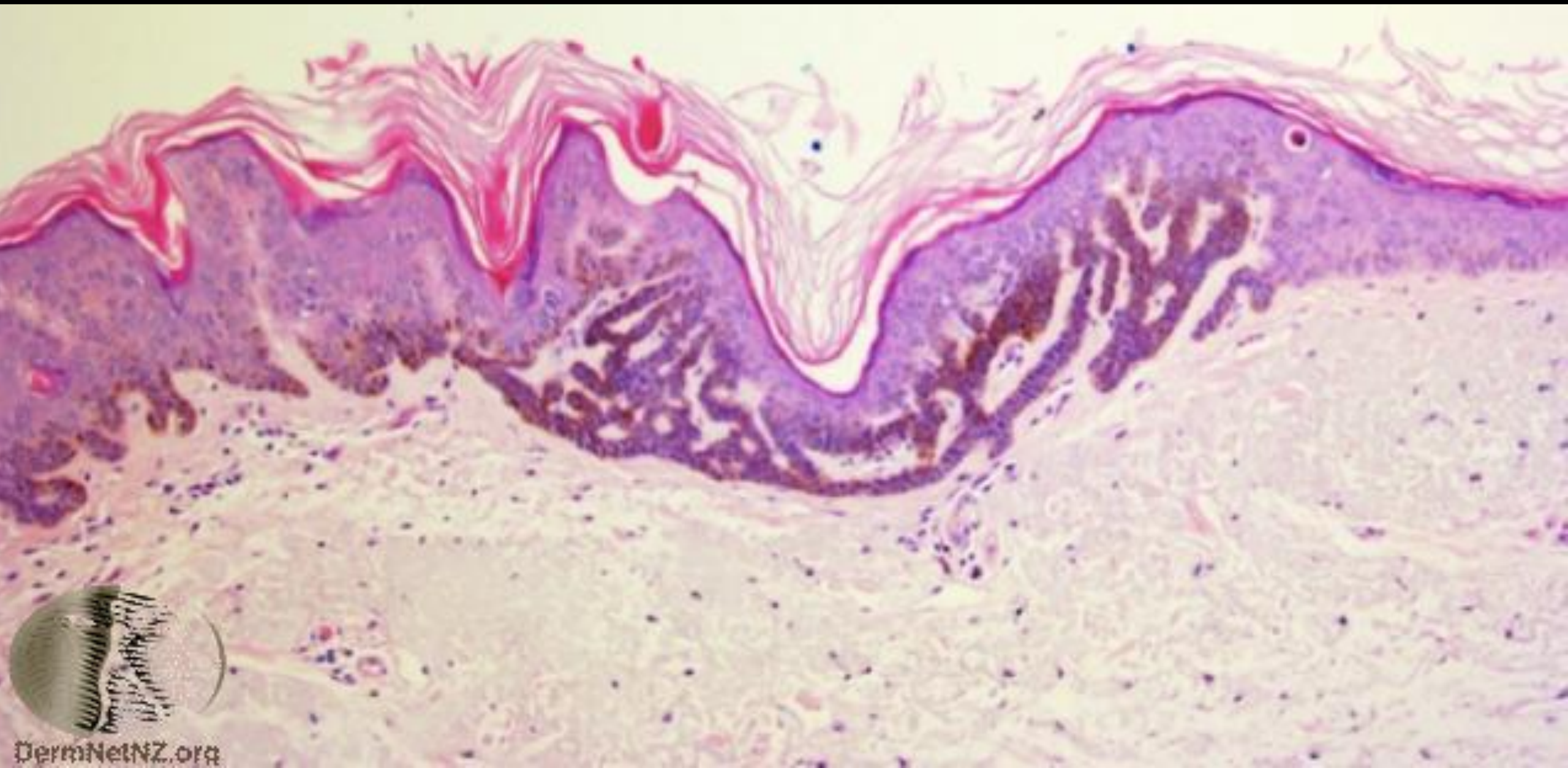






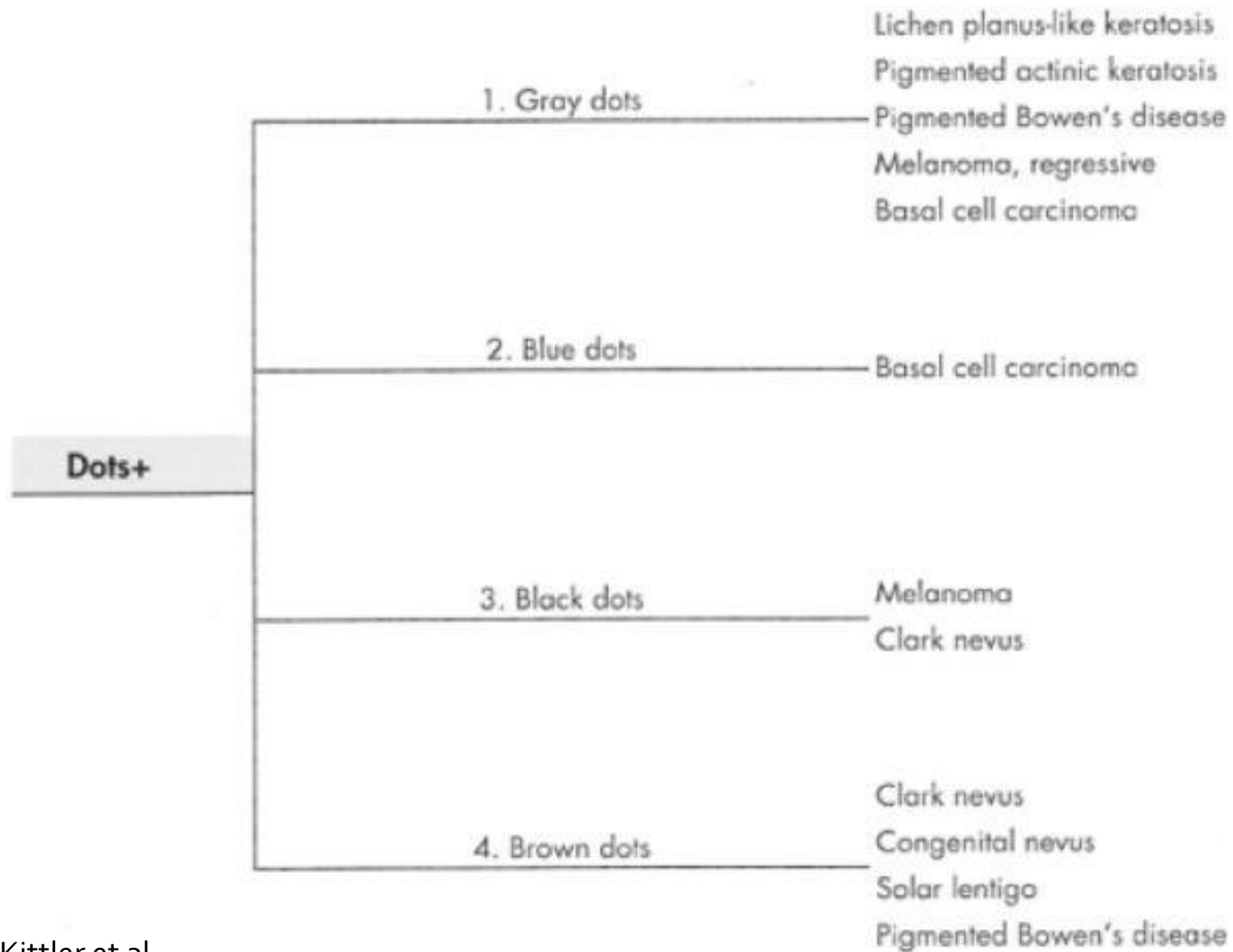


DermNetNZ.org



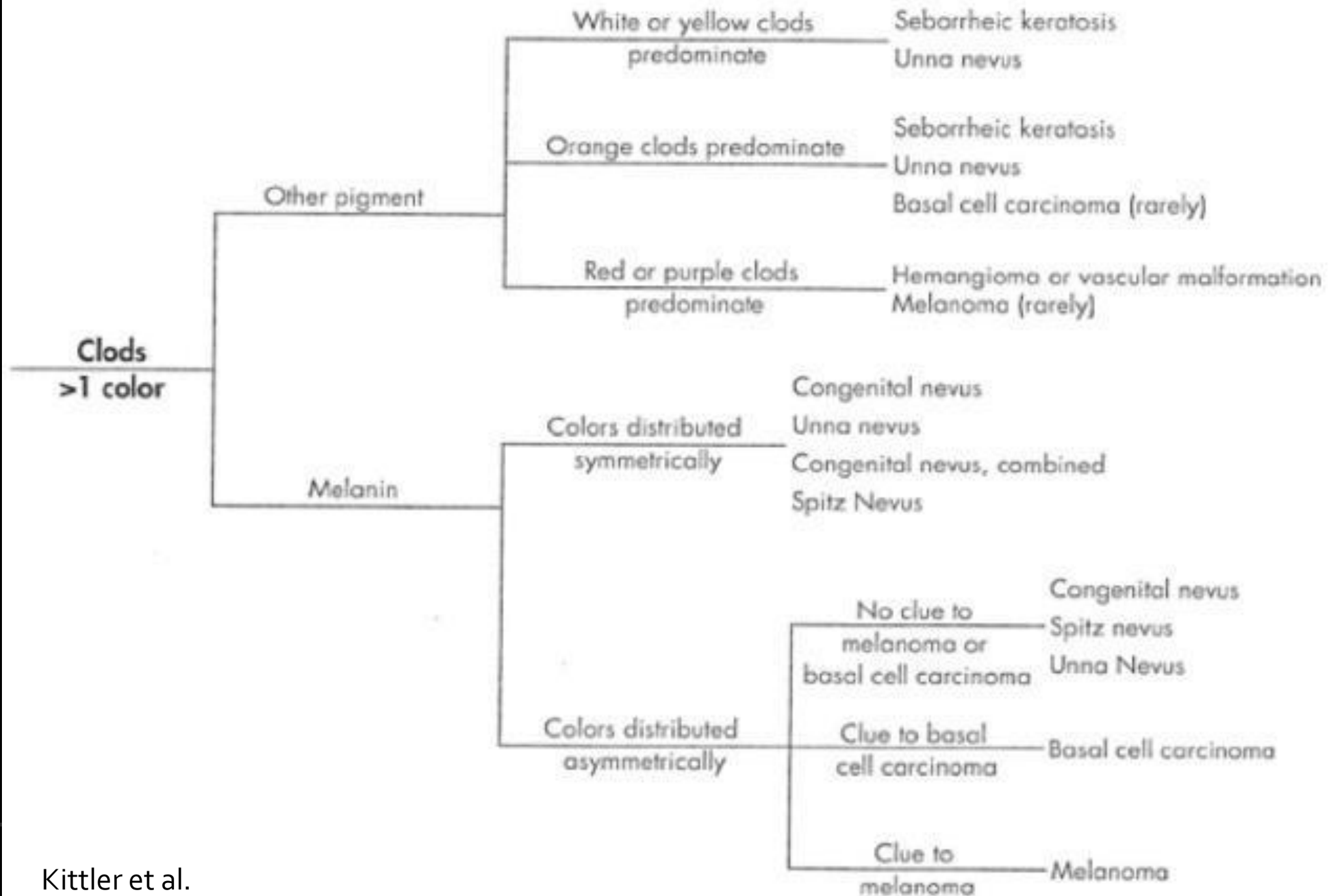
Thick lines





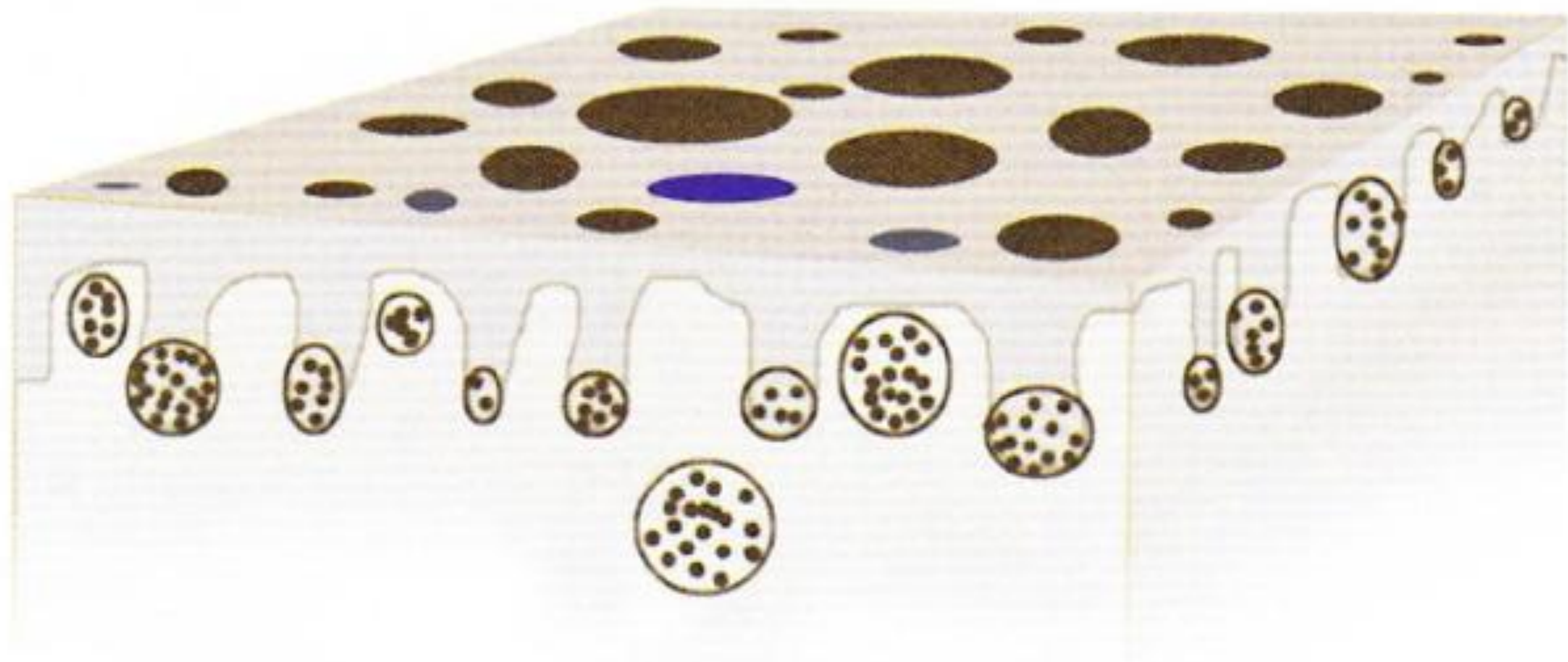
Clods 1 color	Red	Hemangioma/vascular malformation Hemorrhage
	Purple	Hemangioma/vascular malformation
	Orange	Seborrheic keratosis Basal cell carcinoma
	Yellow/white	Seborrheic keratosis, Sebaceous gland hyperplasia
	Skin colored	Congenital nevus (Unna or Miescher nevus) Seborrheic keratosis
	Brown	Congenital nevus, "superficial" or "superficial and deep" Spitz nevus, Congenital nevus (Unna or Miescher nevus)
	Black	Hemangioma, thrombosed, Hemorrhage
	Blue	Basal cell carcinoma

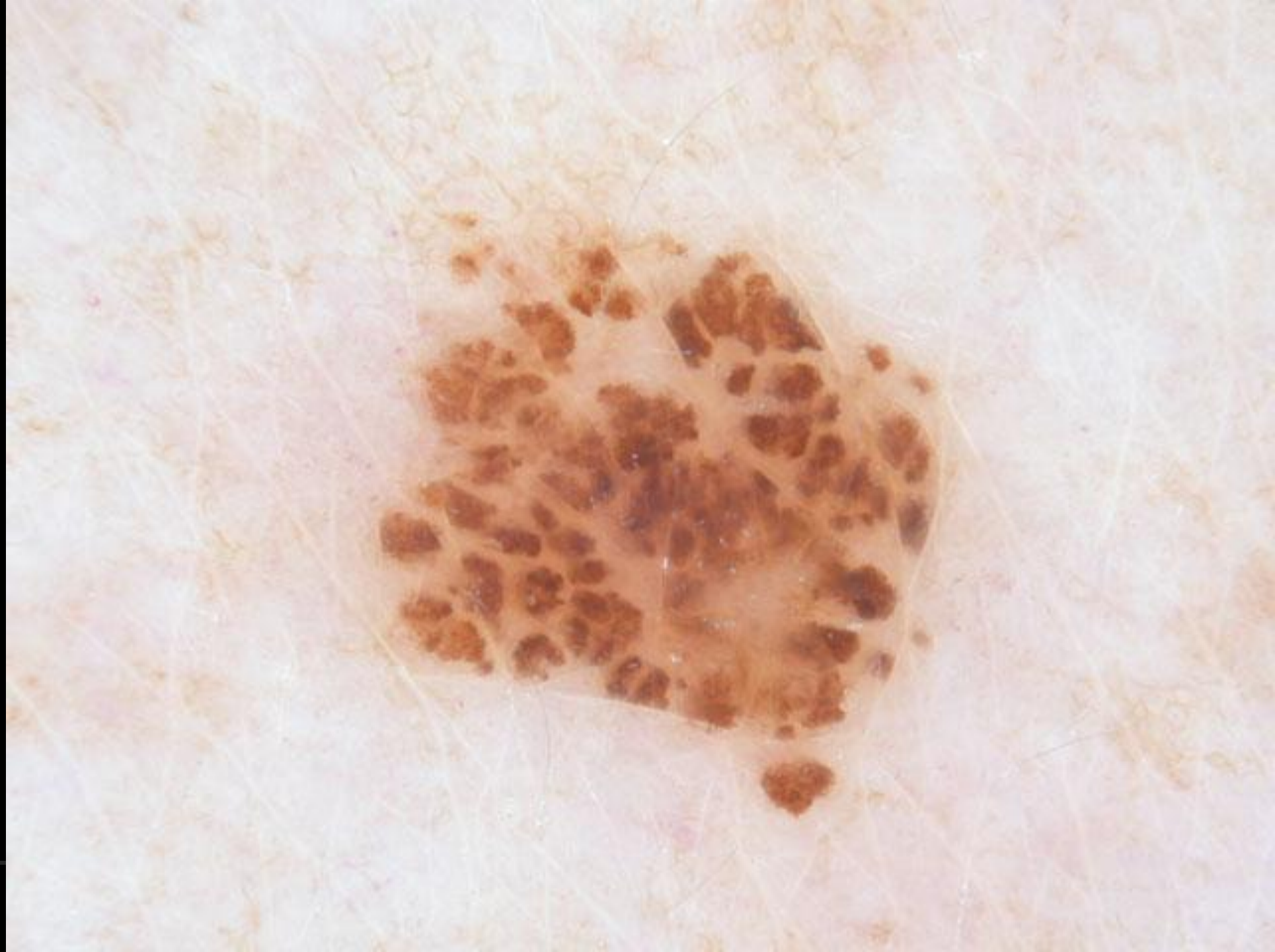






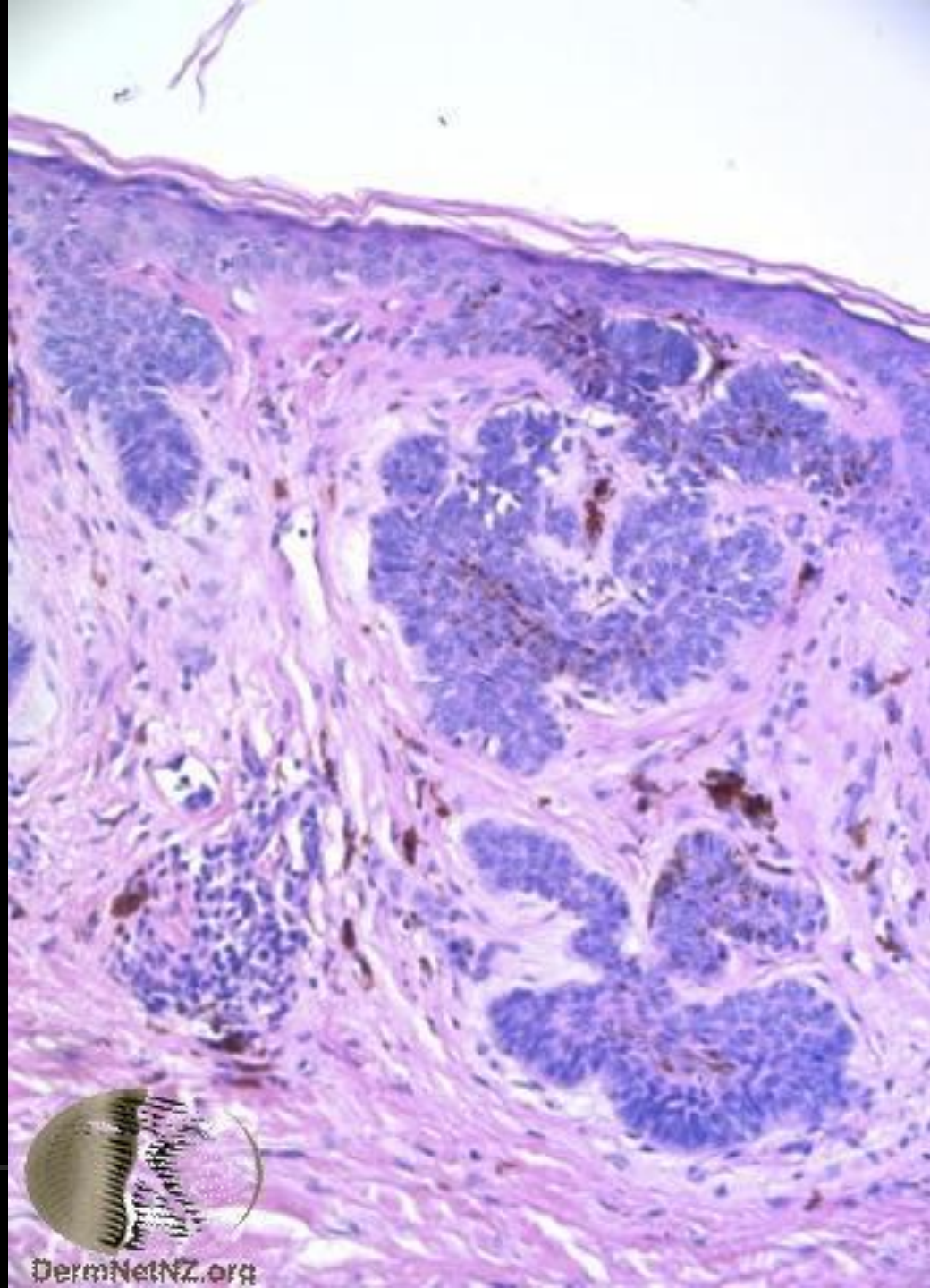
DermNetNZ.org







DermNetNZ.org

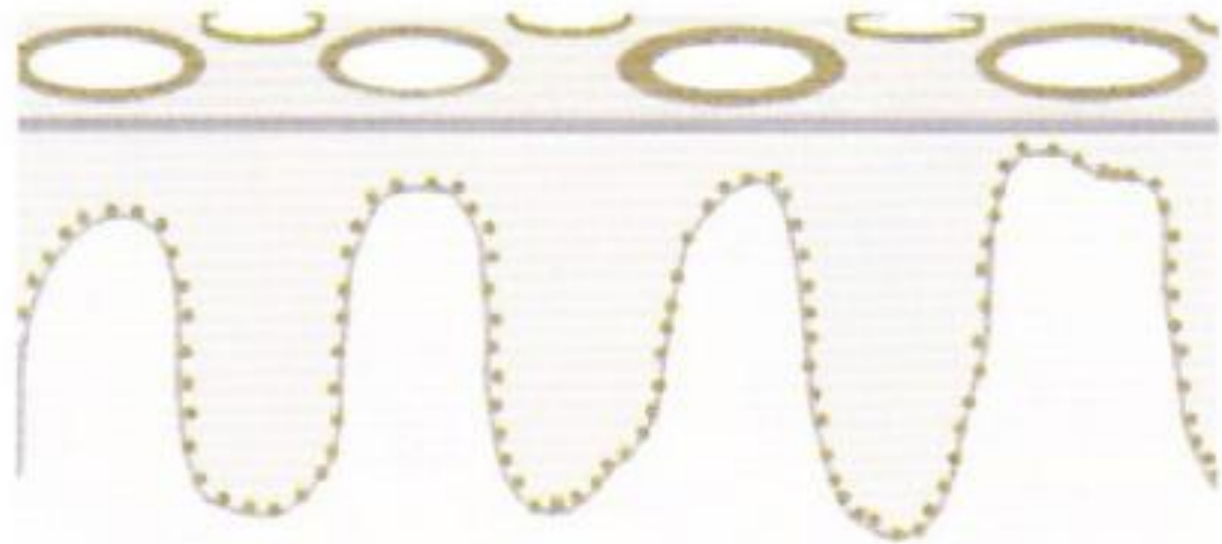


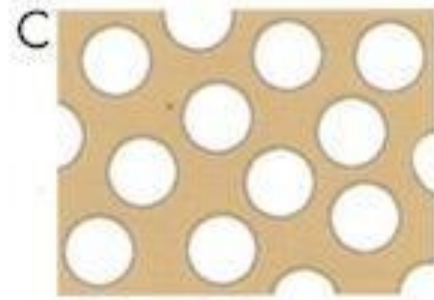
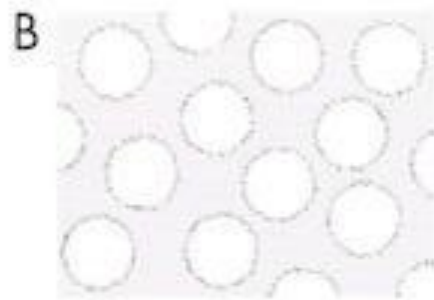
DermNetNZ.org

A



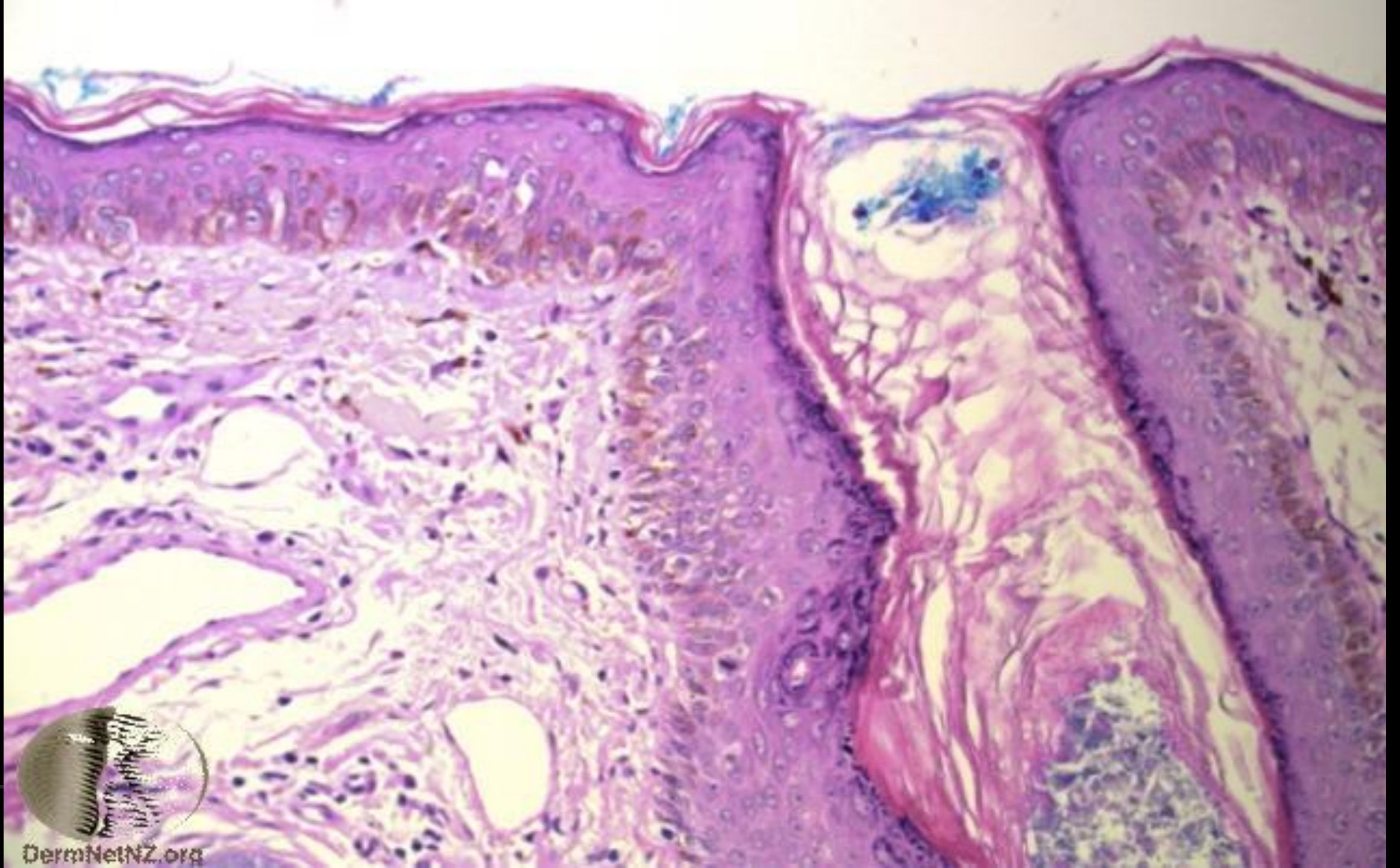
B



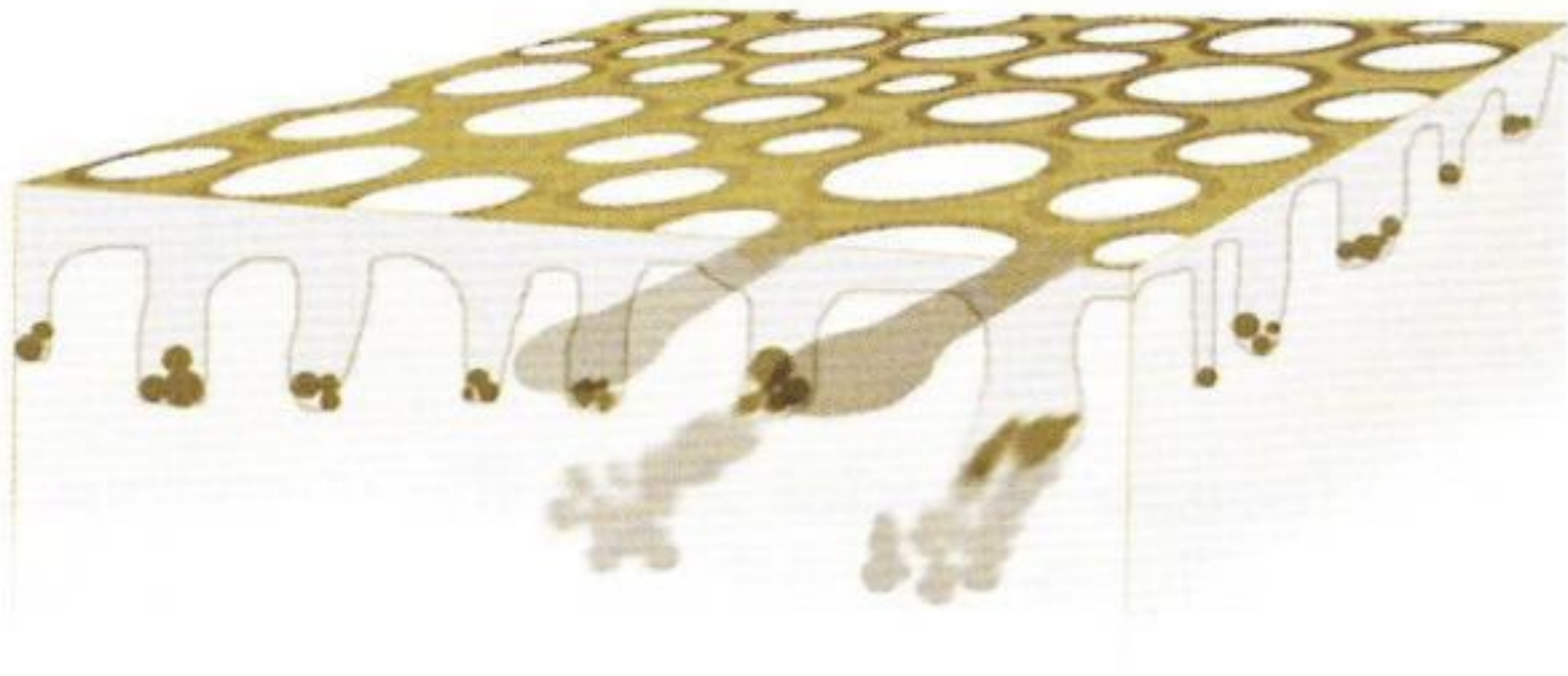




DermNetNZ.org







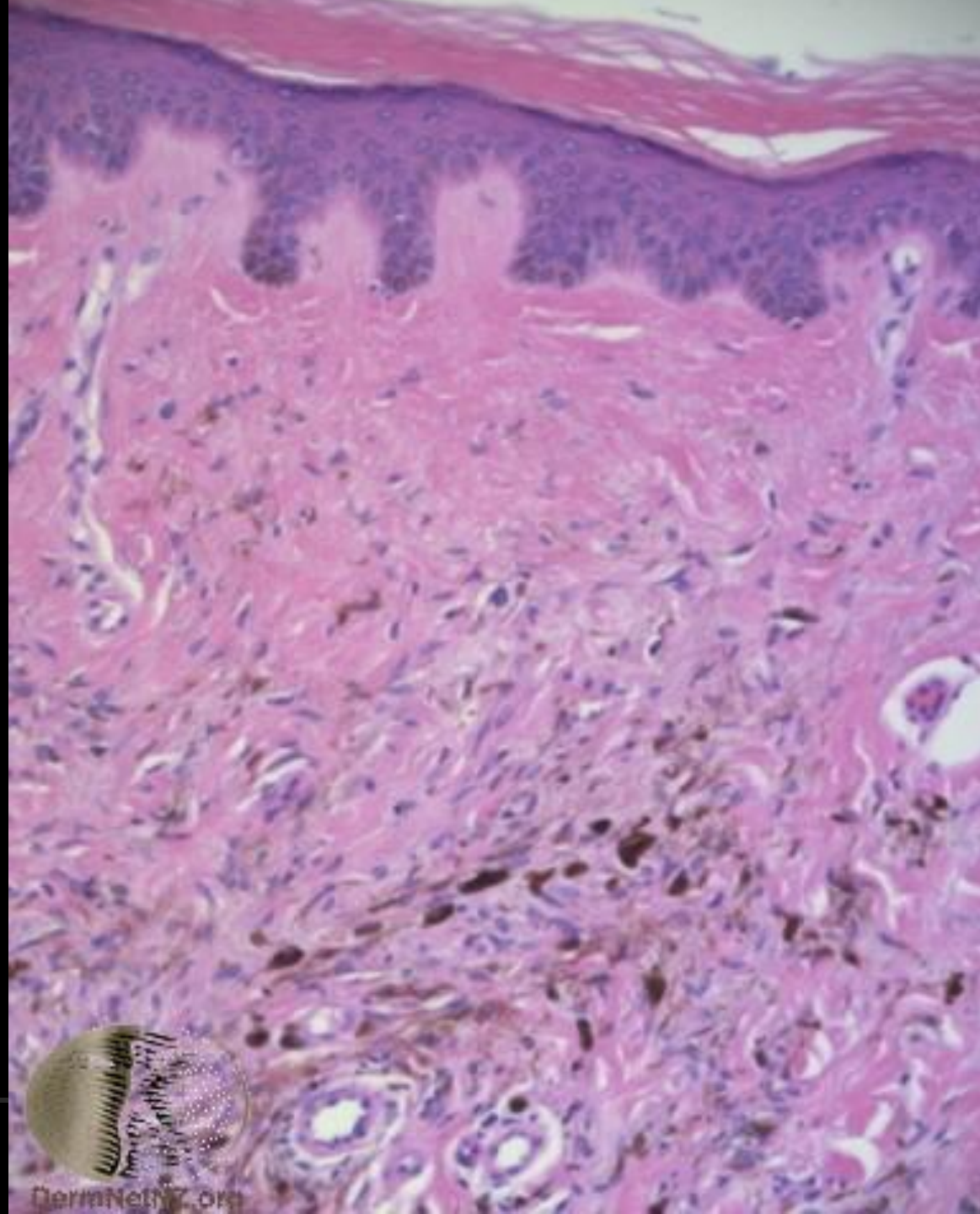
Structureless areas

- Pigment has no relationship to the normal epidermal architecture
- When epidermis is effaced or rete are absent



Structureless 1 color	Black	Hemorrhage Hemangioma, thrombosed (Reed nevus) (Melanoma)
	Blue	Blue nevus (Melanoma metastasis)
	Brown	Solar lentigo/seborrheic keratosis Bowen's disease, pigmented Congenital nevus (Clark nevus)
	Red	Hemorrhage





DermNet NZ .org

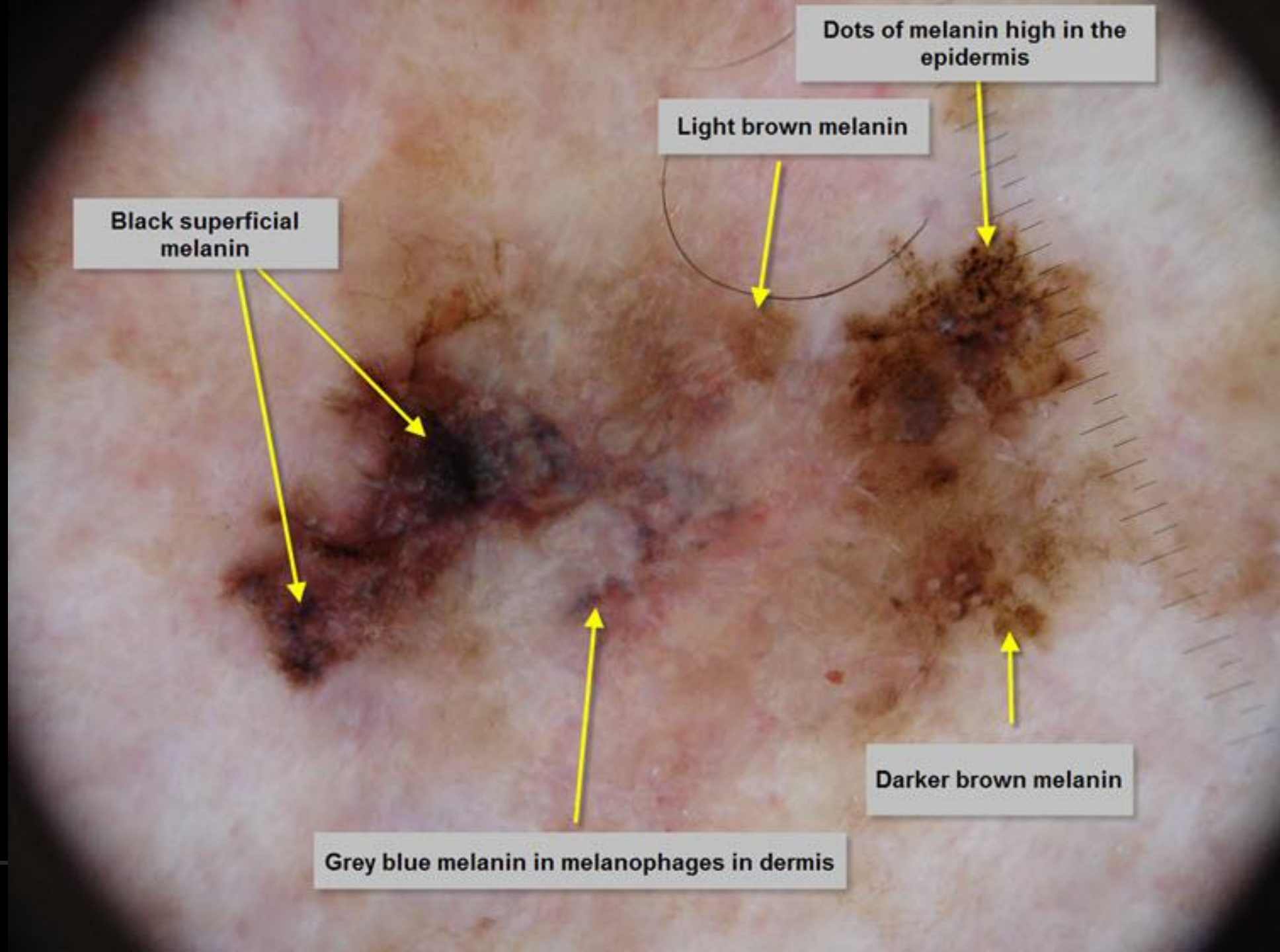
Clues to diagnosis in dermatoscopy

- Analysis of pattern and colour to arrive at a differential diagnosis
- Pattern recognition
 - Pattern,
 - Arrangement of a pattern/colour,
 - A feature too localised to form a pattern,
 - Absence of a feature,
 - Vascular pattern



What colours do you see?



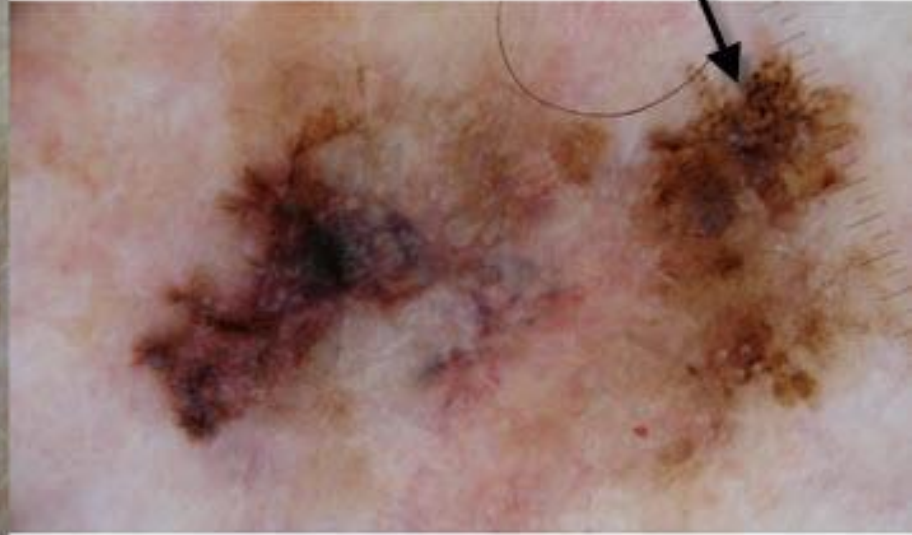


**Melanocytes
invading the
epidermis = black**

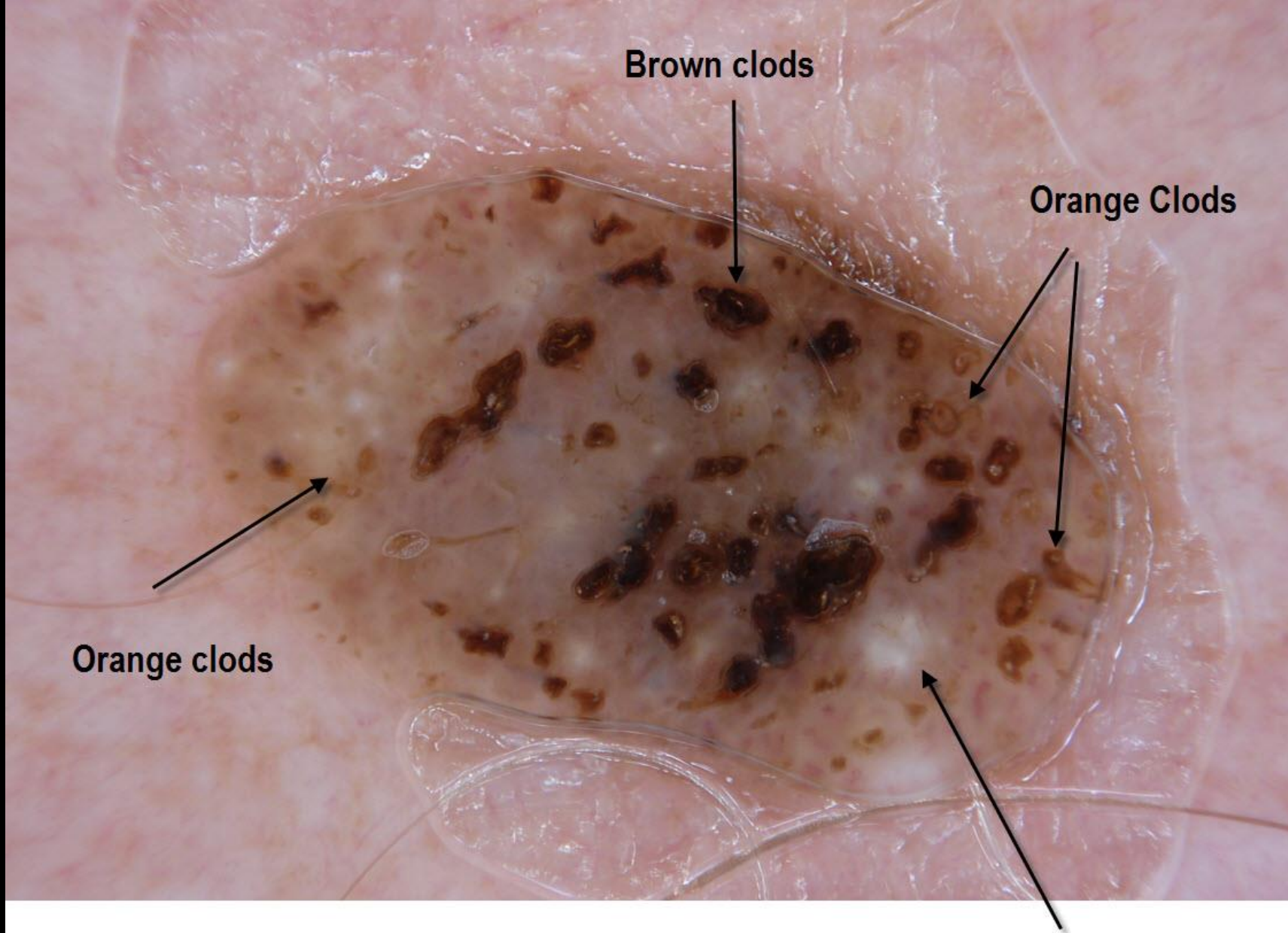


**Regression
clinically = Grey
dots**

**Nests of melanocytes on the
rete ridges = brown**

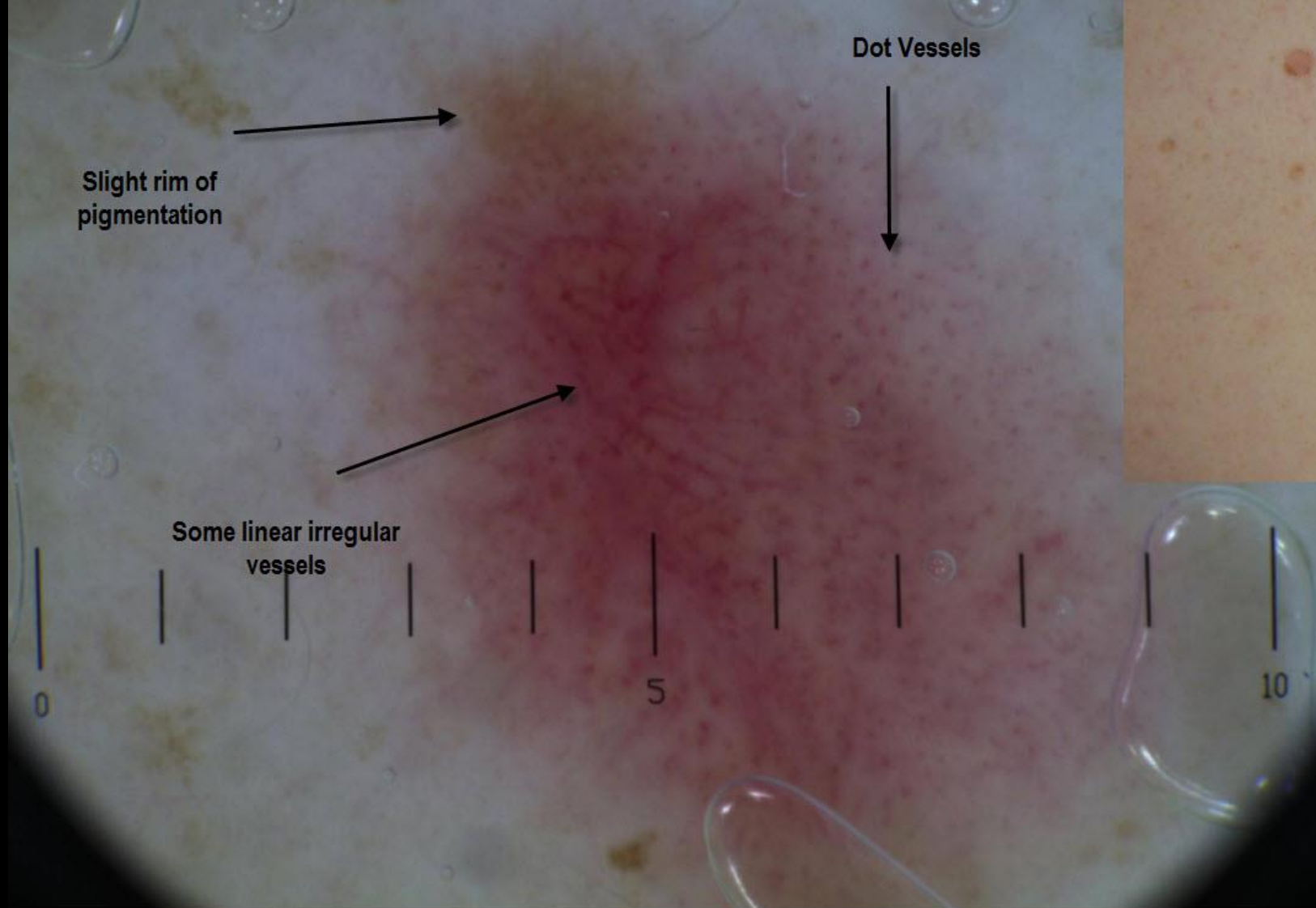


**Invasive melanoma 0.4 mm
thick with regression**



Seborrheic Keratosis

White clods

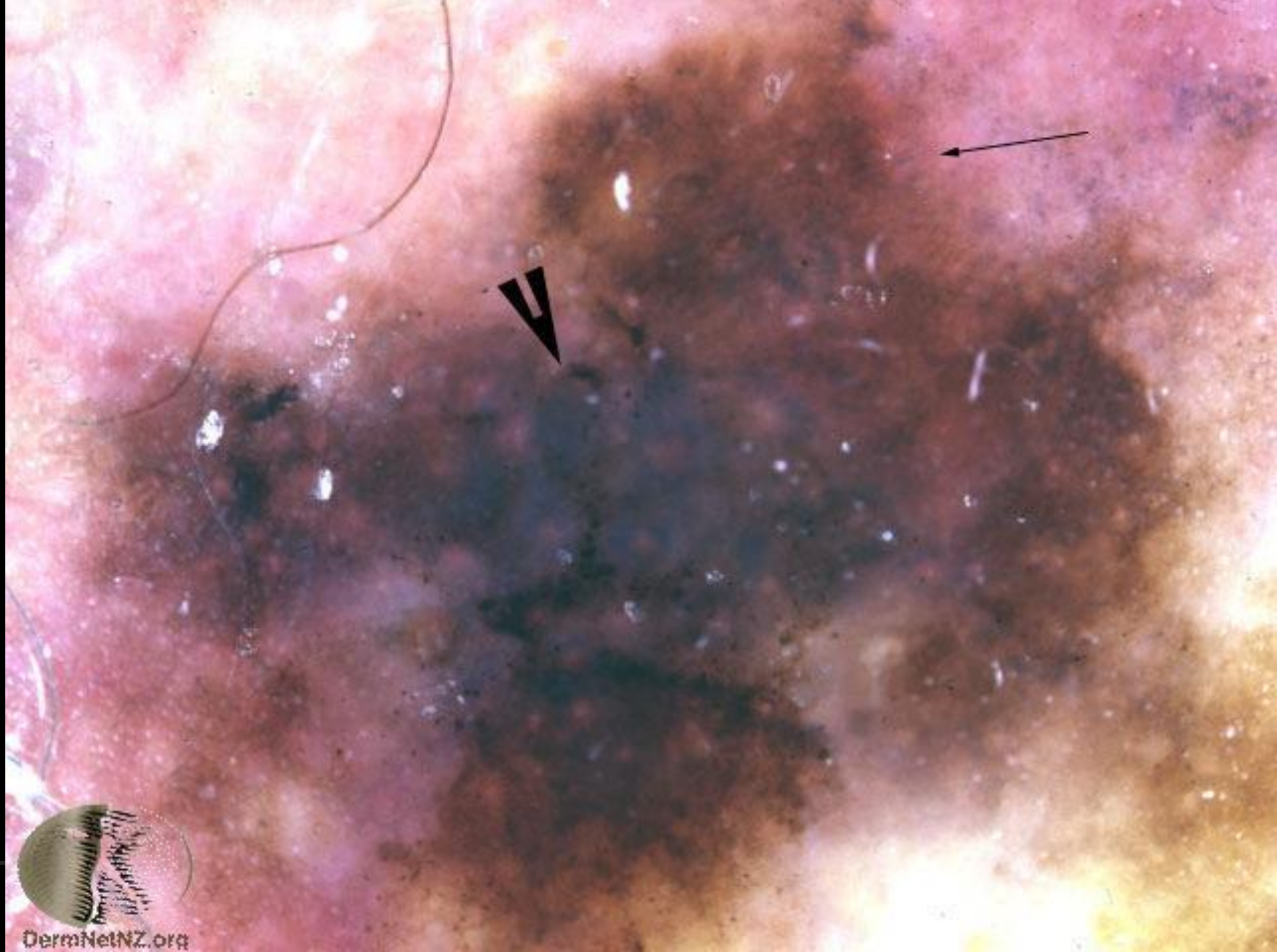


This was a Clark level 2 , 0.3mm thick virtually amelanotic melanoma

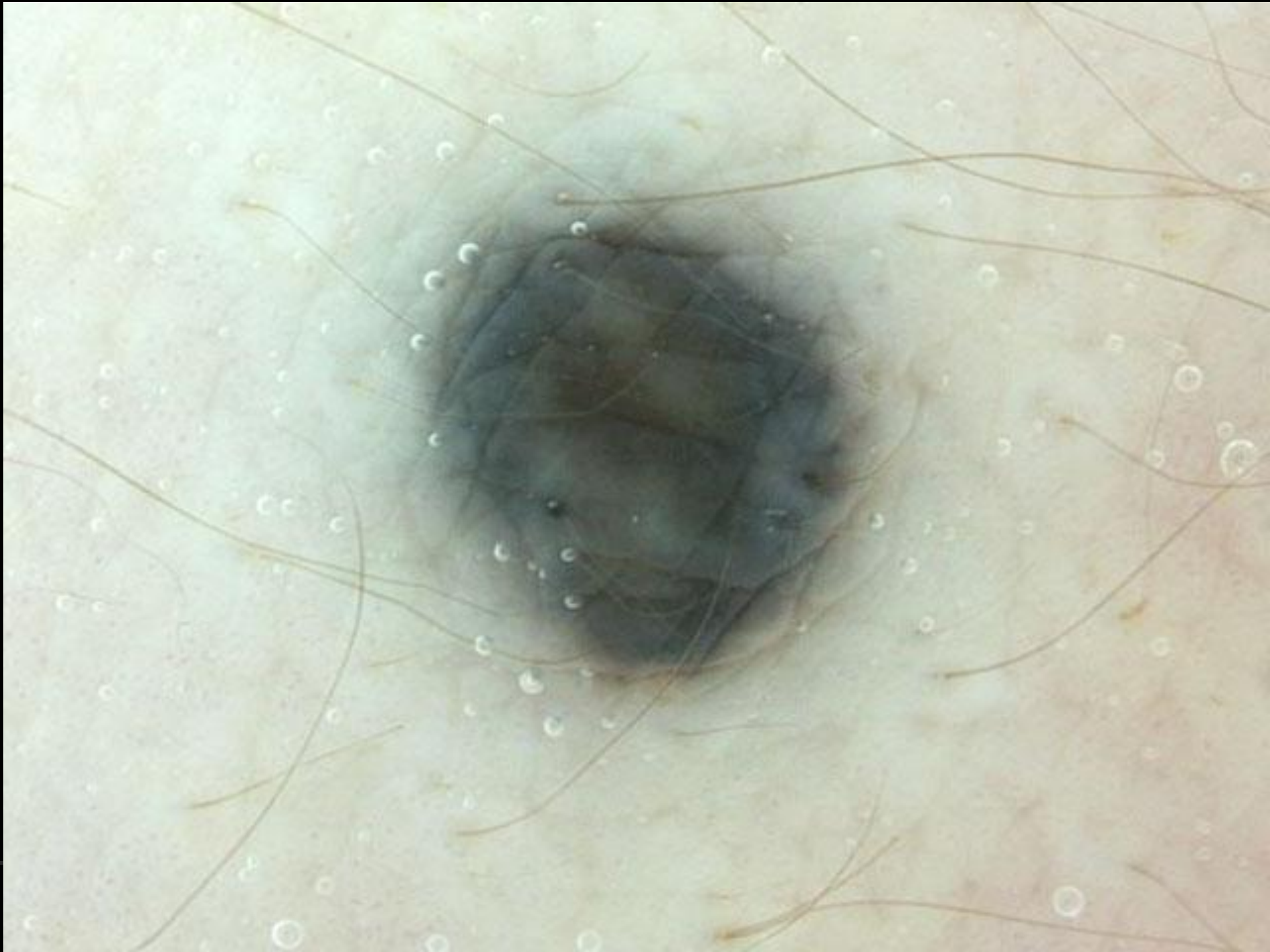




DermNetNZ.org

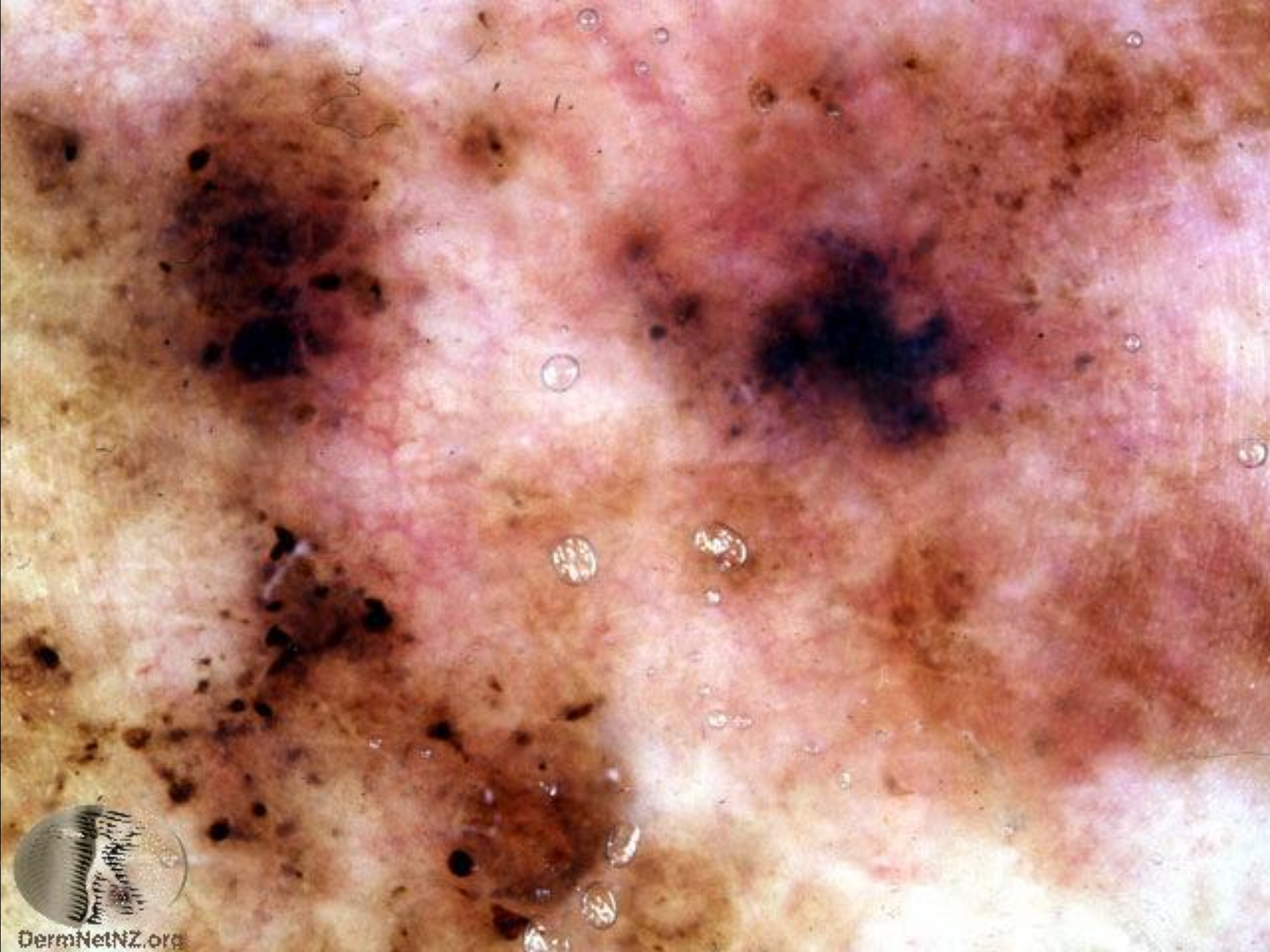


DermNetNZ.org





DermNetNZ.org



DermNetNZ.org



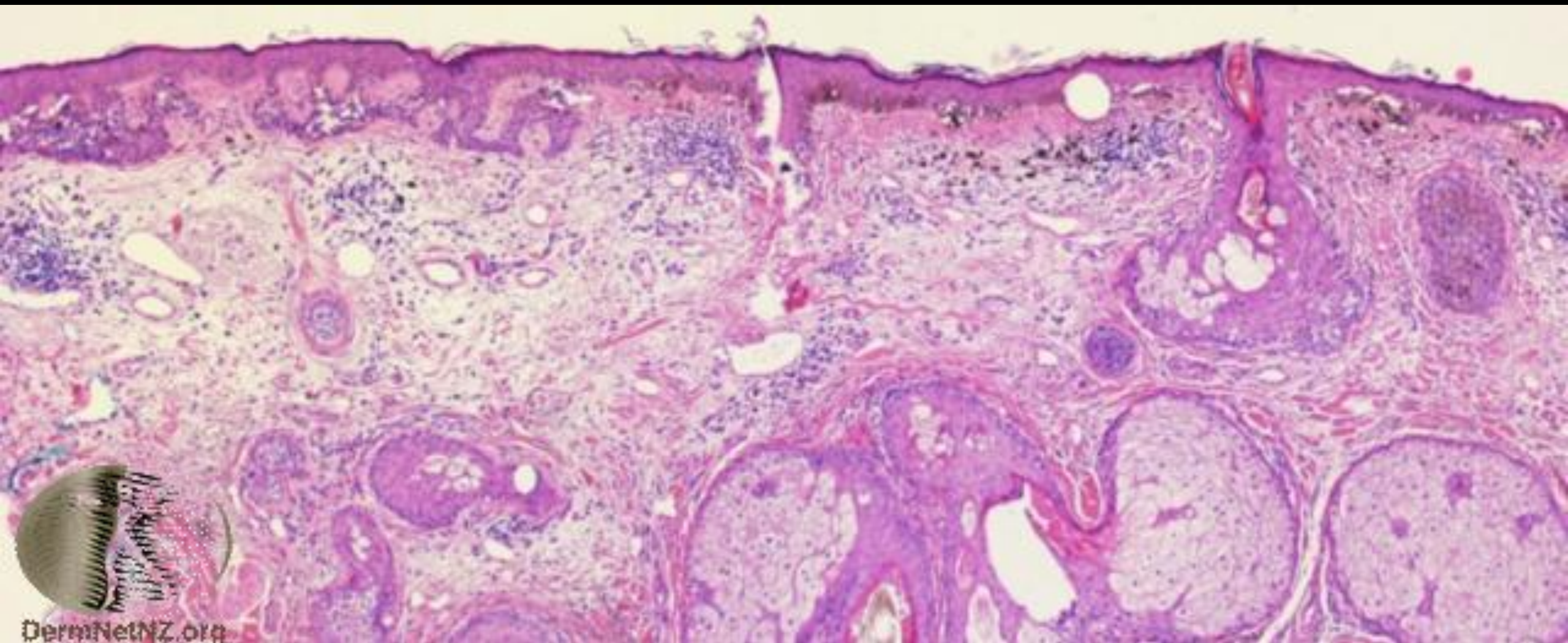


DermNetNZ.org



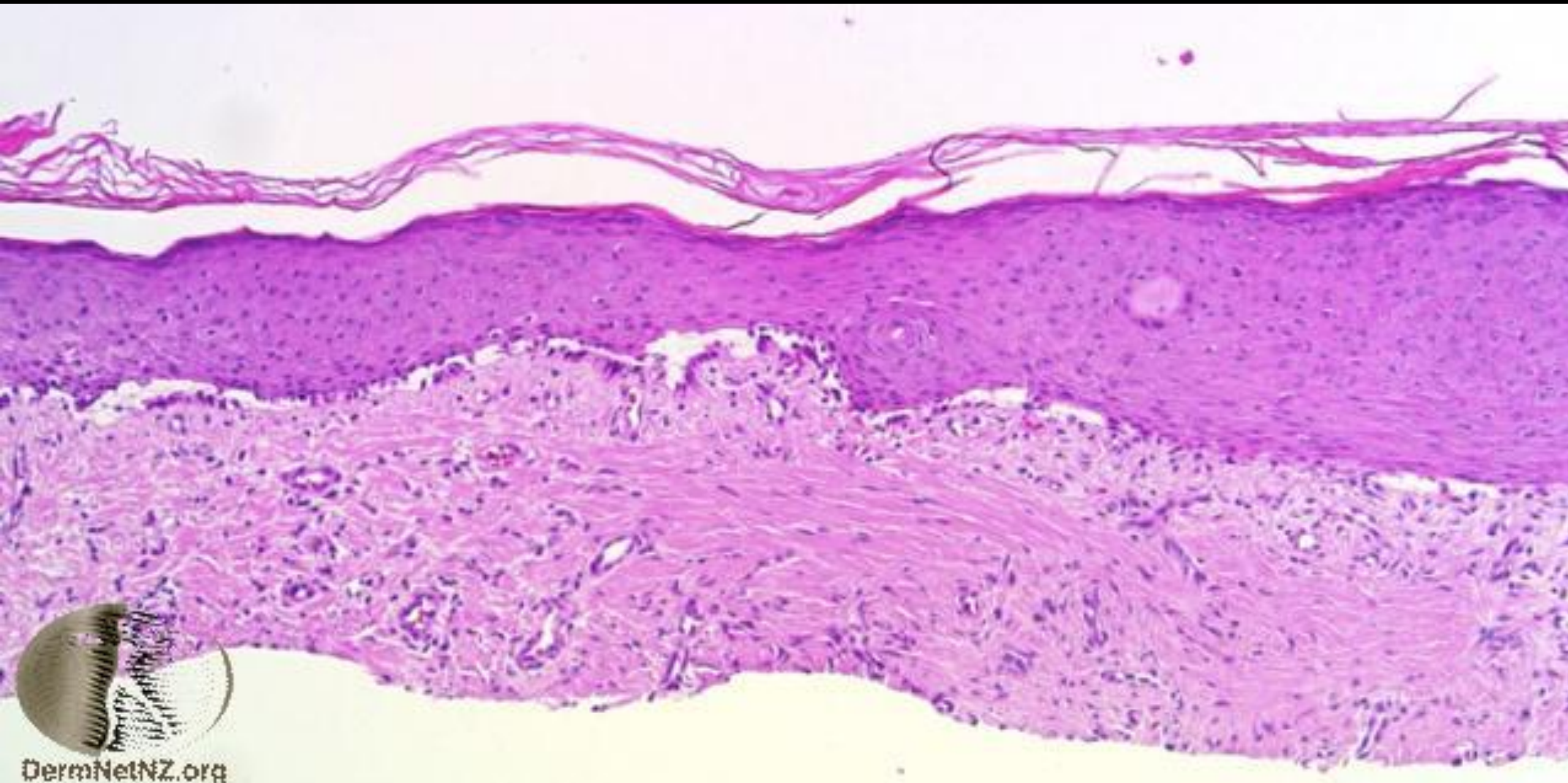


DermNetNZ.org





DermNetNZ.org





"I don't know what these dots are ...
but ya mind if I connect 'em?"