



PÉCSI TUDOMÁNYEGYETEM  
UNIVERSITY OF PÉCS



# Dermsocopy of pigmented and non-pigmented lesions

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Eurodermexcellence, Budapest  
12-15. November 2024





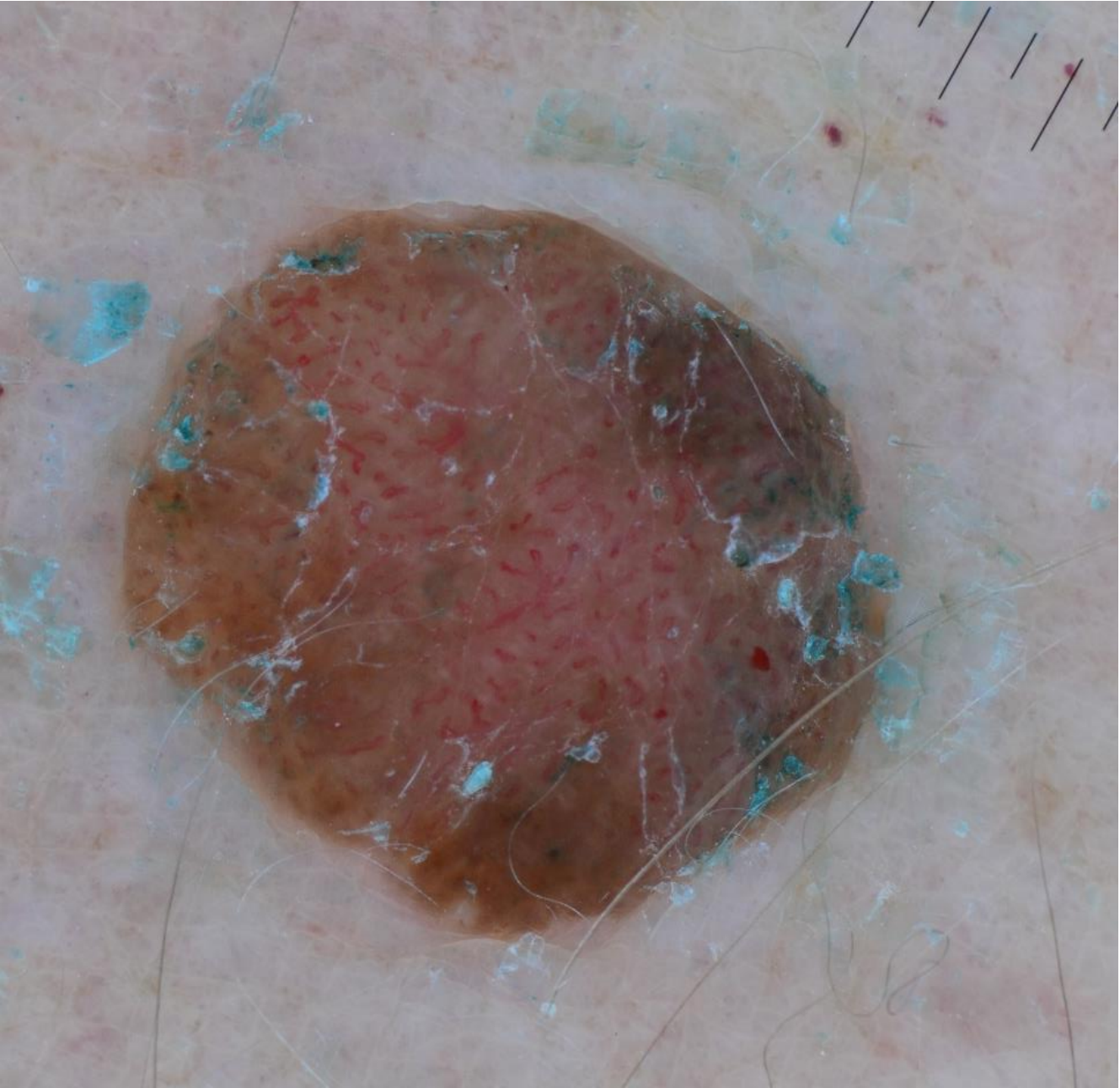


## Non-pigmented

- Hemangioma
- Actinic keratosis
- Non-melanoma skin tumors

## Pigmented

- Pigmented actinic keratosis
- Solar lentigo
- Seborrhoeic keratosis
- Lichen-planus like keratosis
- Naevus
- Pigmented BCC, pigmented Bowen disease
- Lentigo maligna
- Melanoma



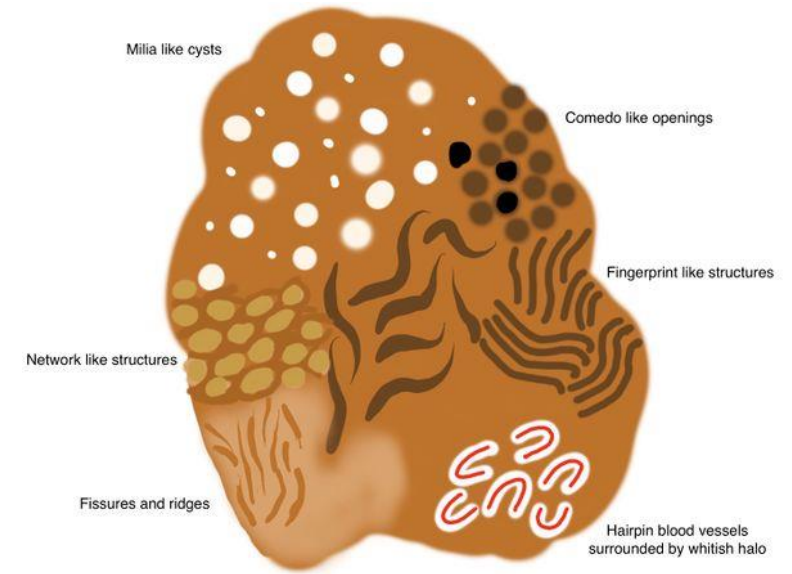
# Seborrheic keratosis (SK)

Early and matured

- Early: features of solar lentigo



- Sharp border
- Papillomatosis epidermal hyperplasia
  - Network like structures
  - Fissures and ridges
  - Cerebriform pattern
  - „Fat fingers”

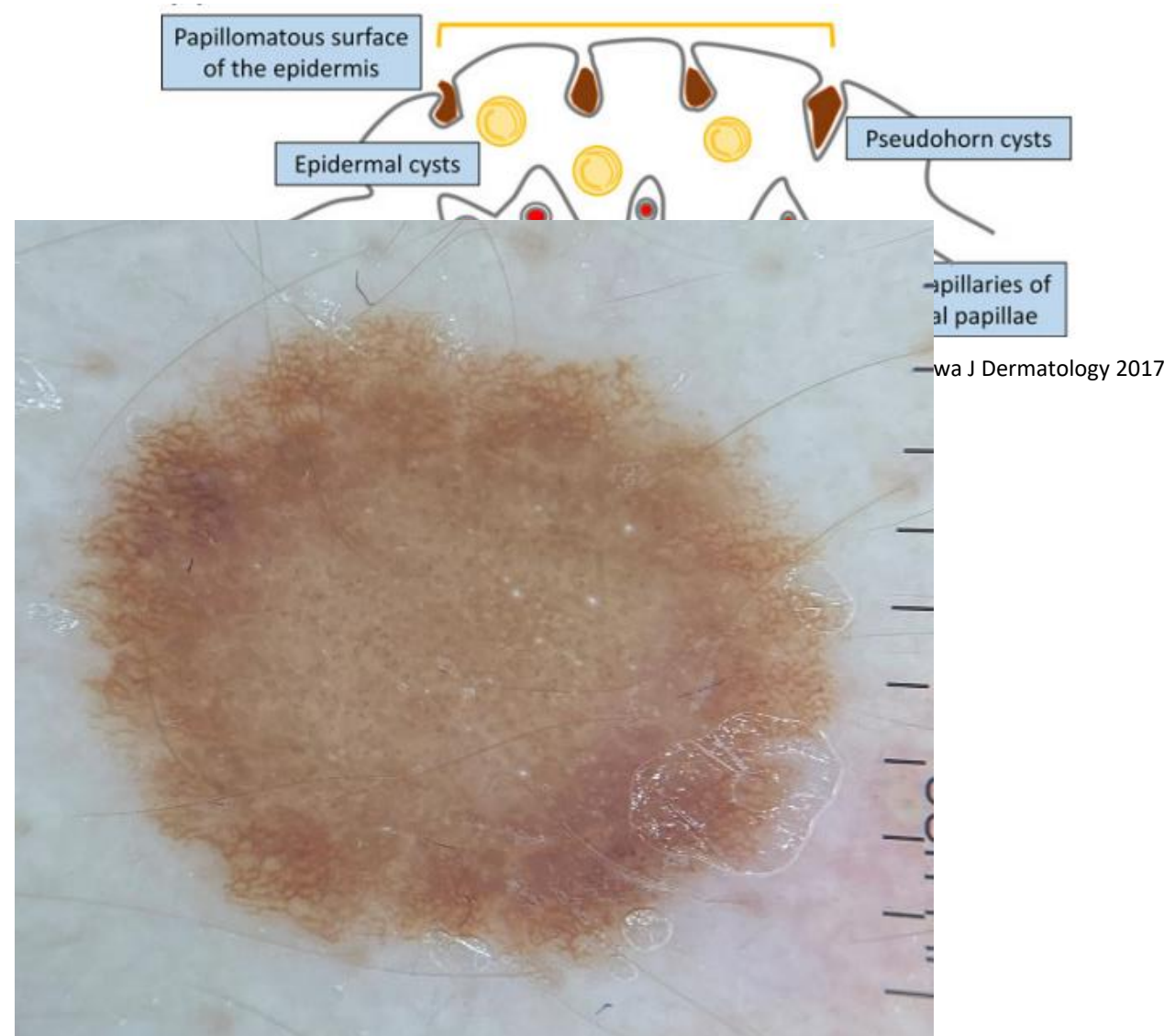
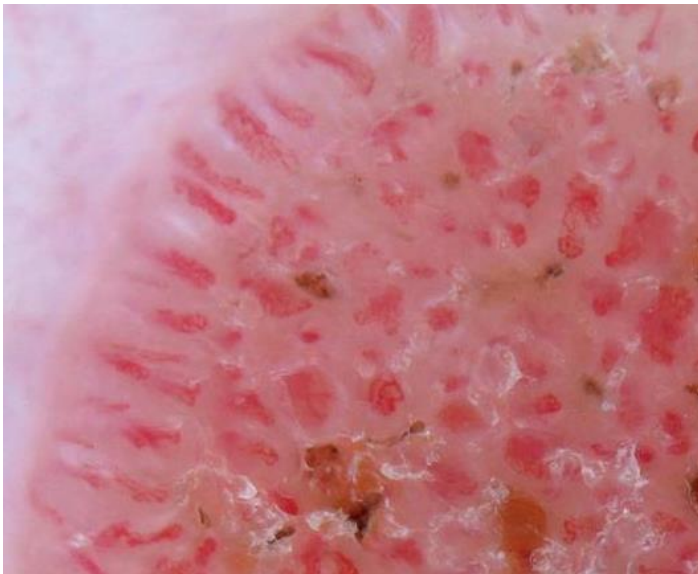


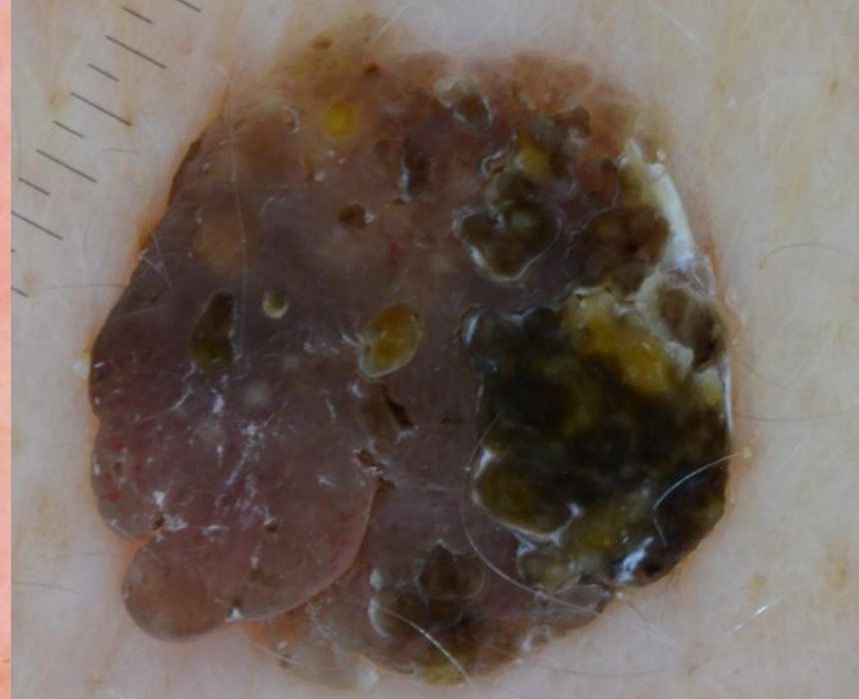
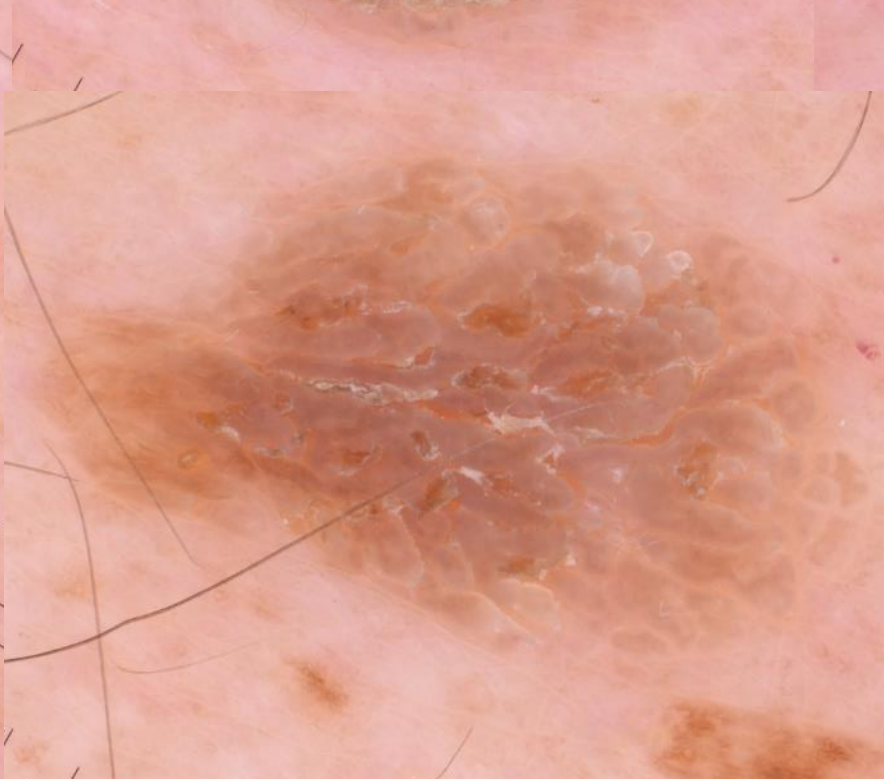
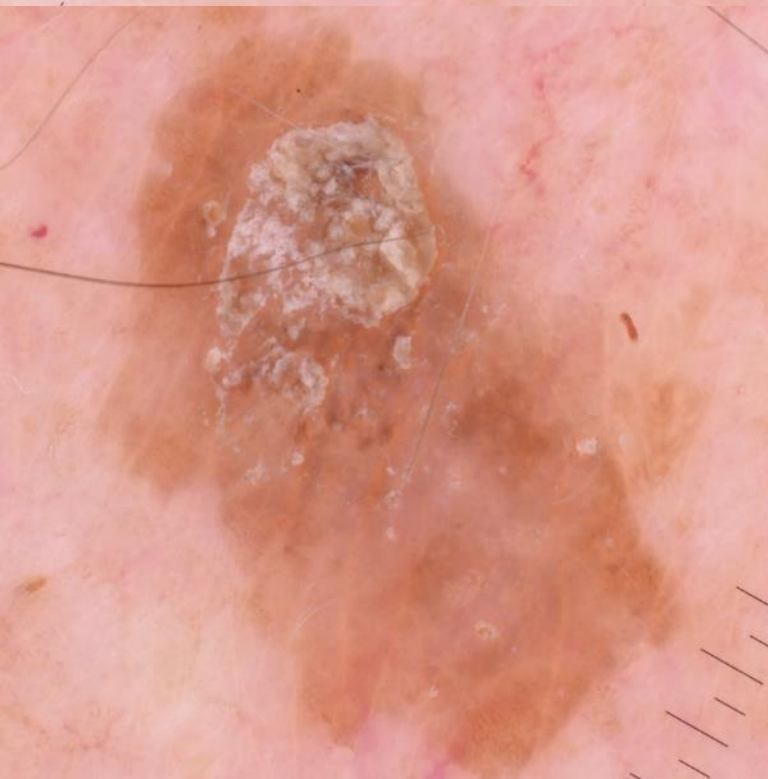
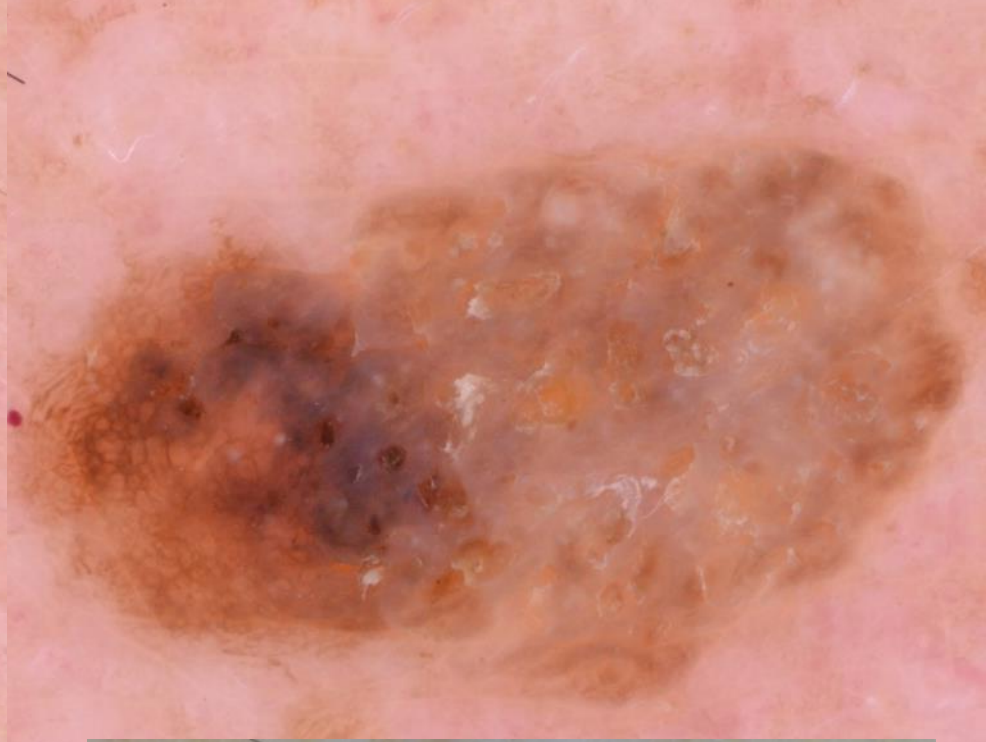
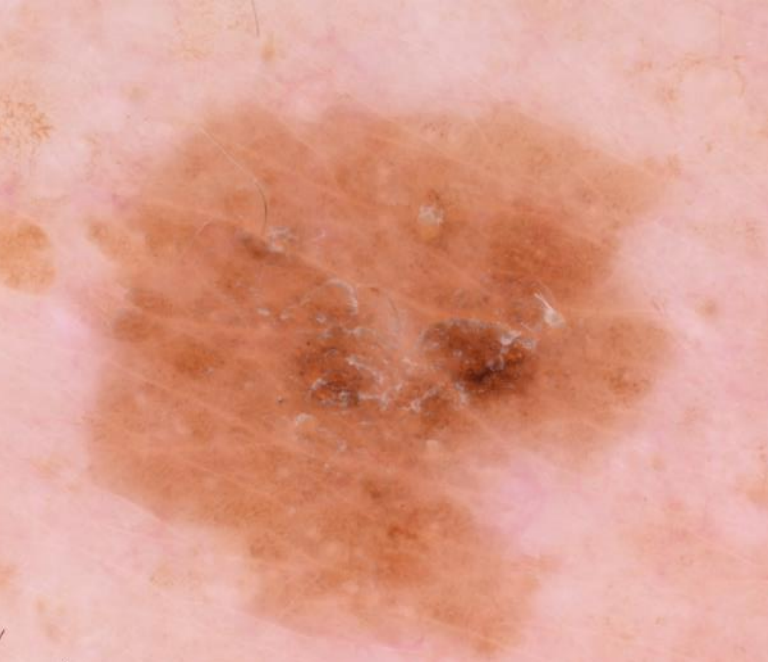
[www.ids.org](http://www.ids.org)



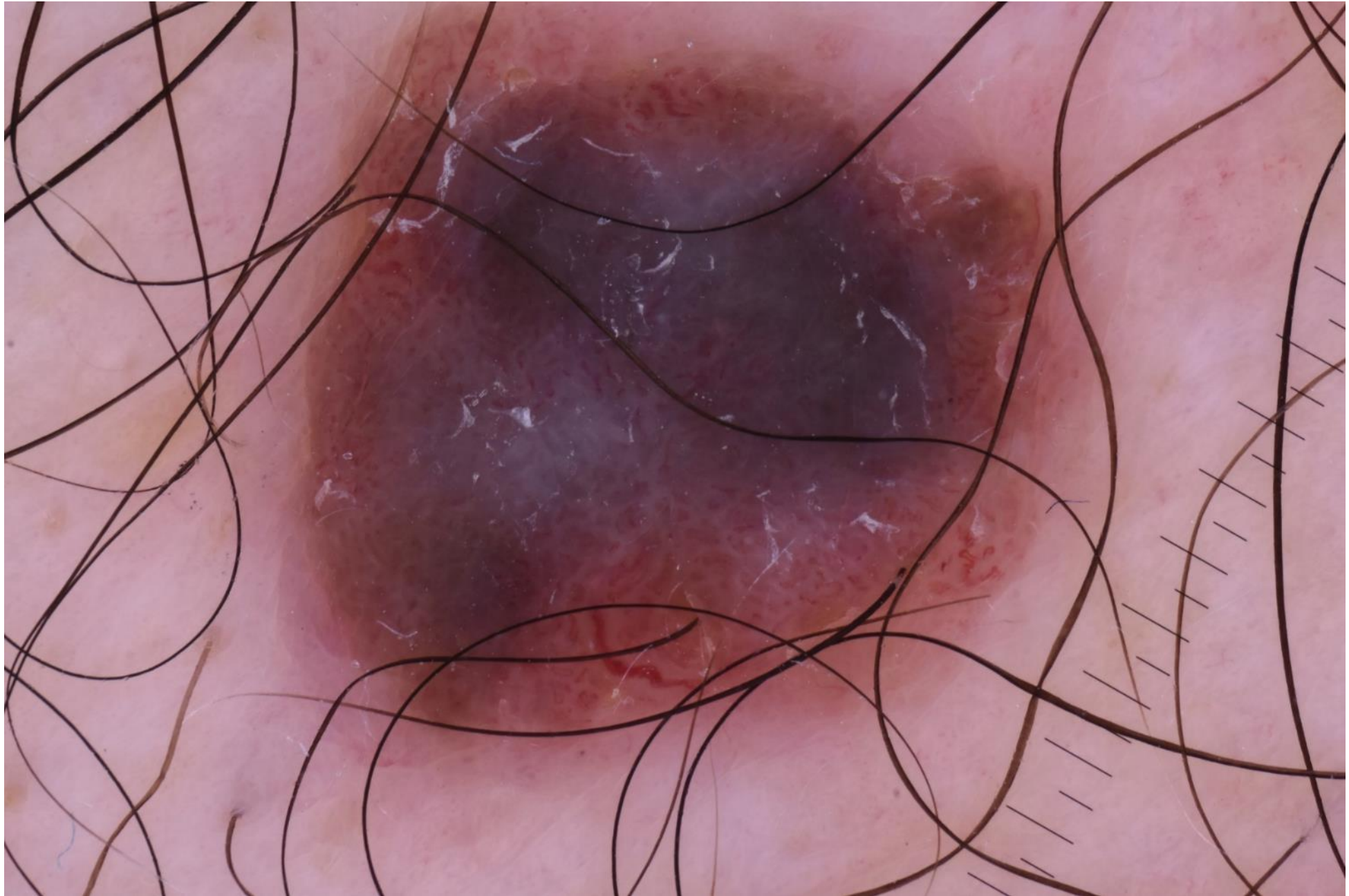
# Seborrhoeic keratosis

- Milia-like cysts
- Comedo-like openings
- Hairpin vessels (whitish halo around)

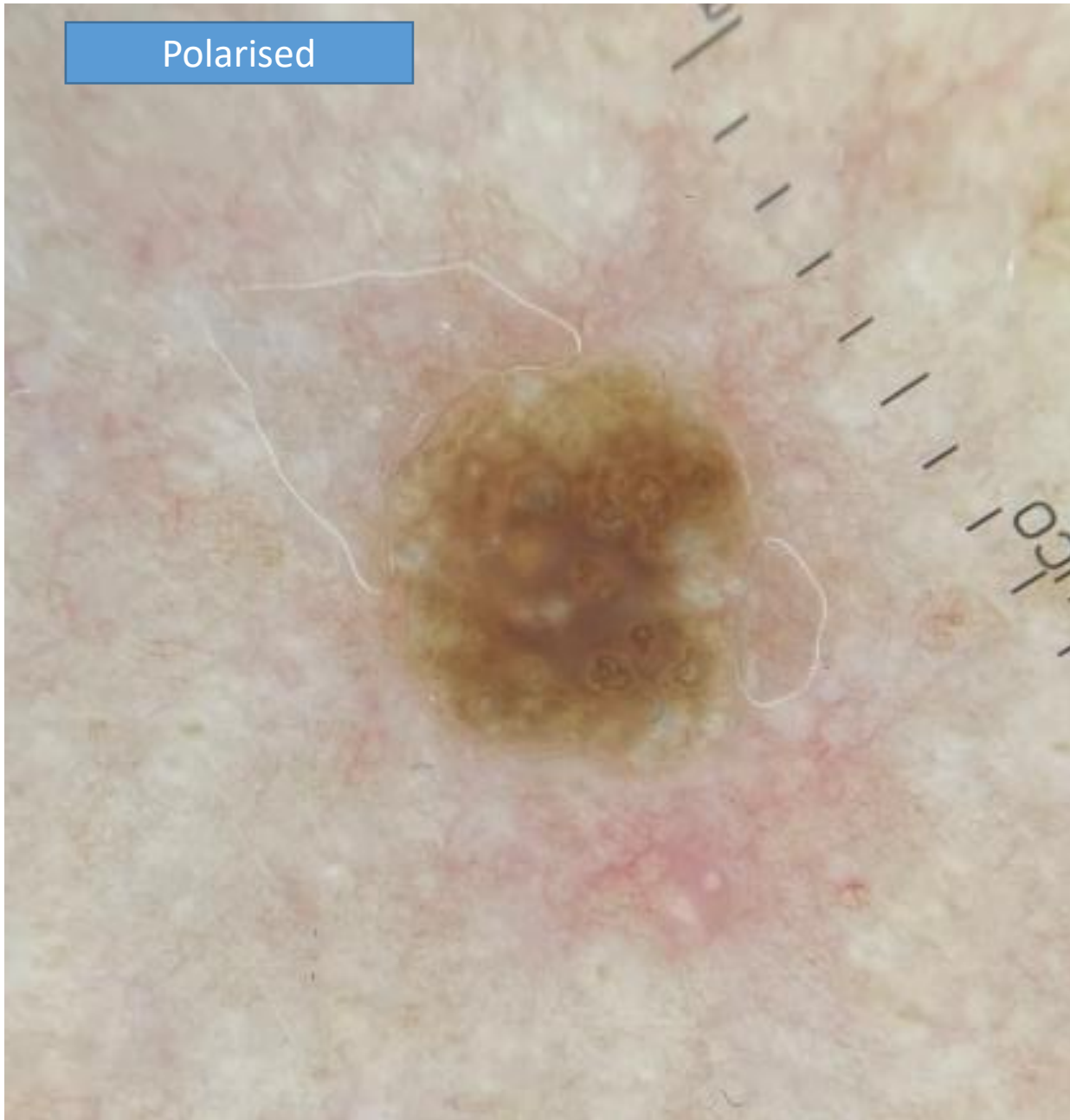




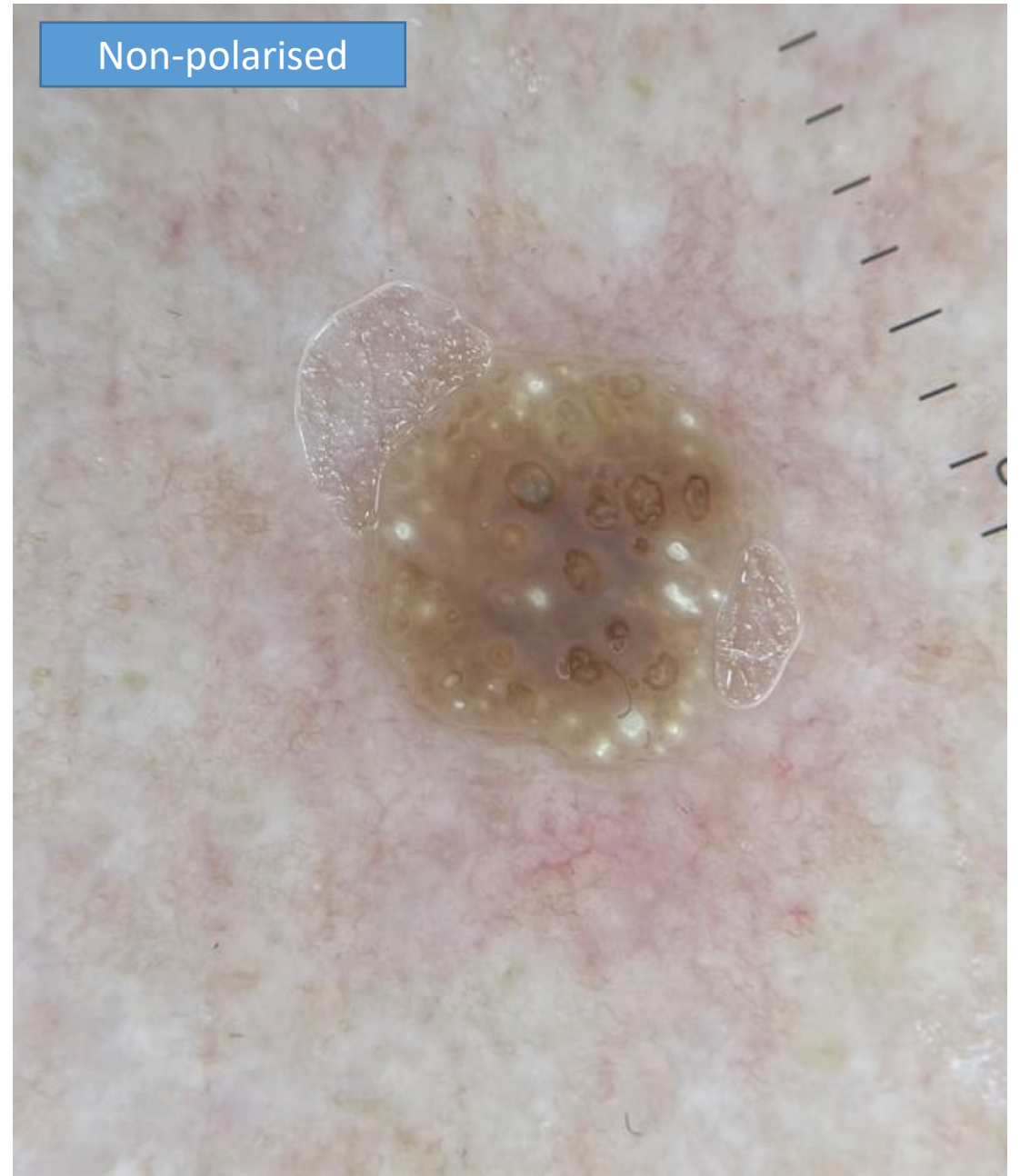




Polarised

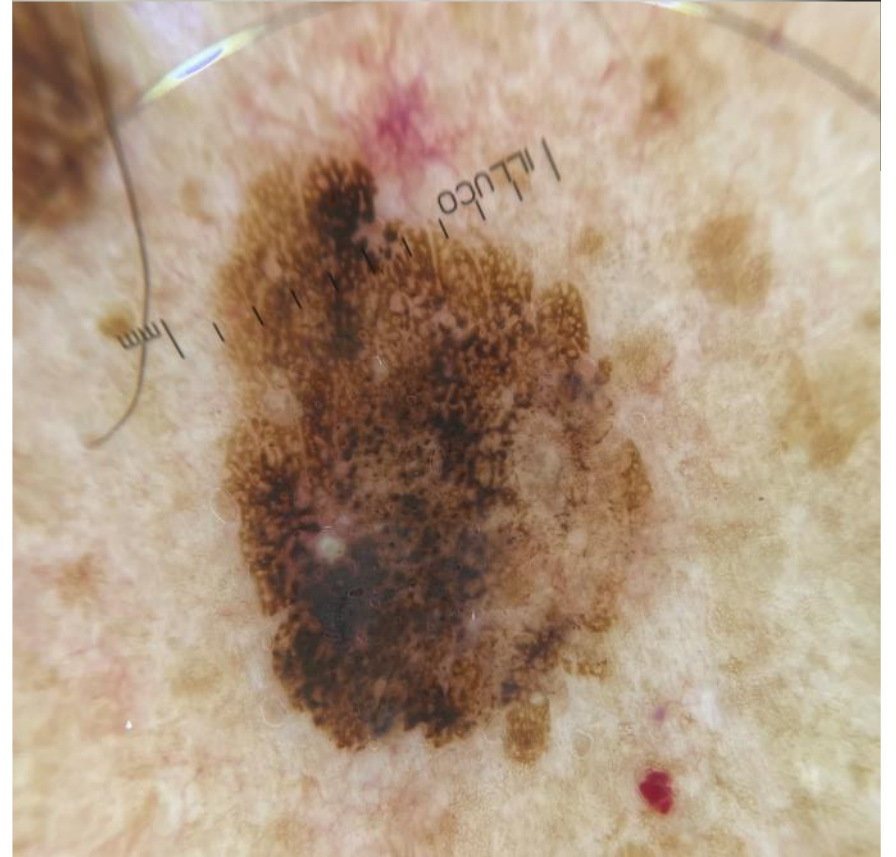


Non-polarised

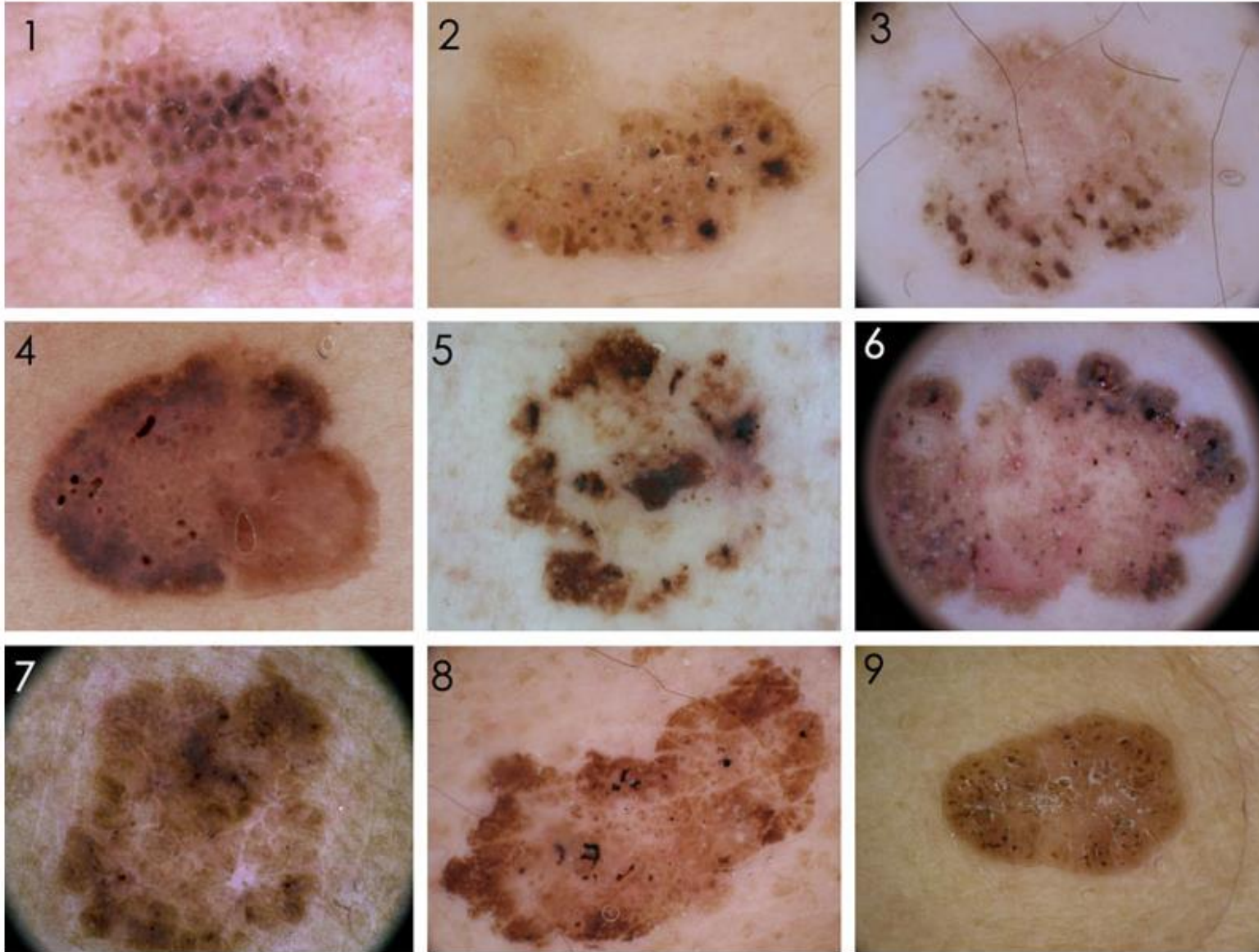


# Types of seborrheic keratosis

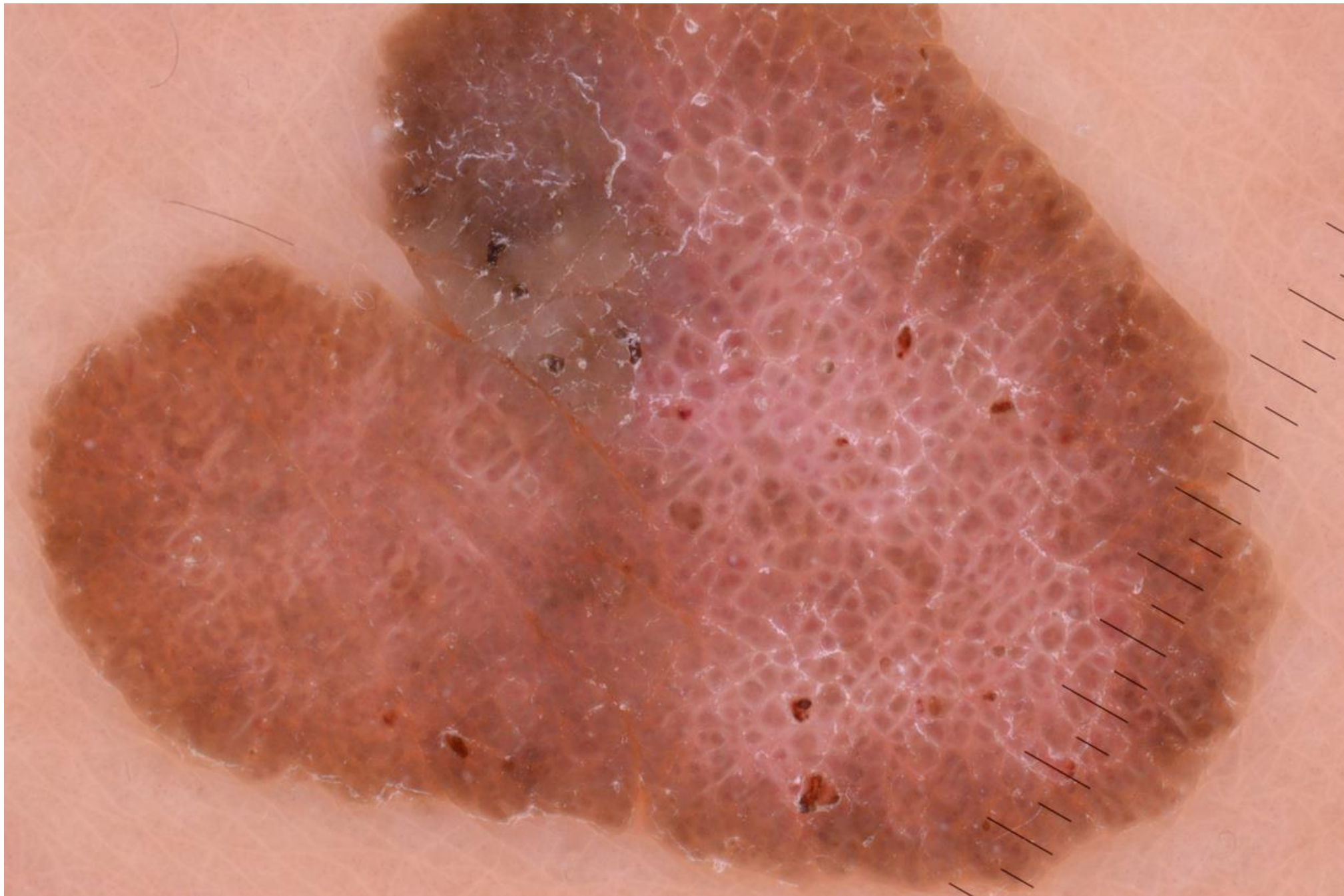
- Acanthotic
- Hyperkeratotic
- Verrucosus
- Reticular
- Clonal
- Irritant
- Regressiv
- Melanoacanthoma



# Clonal seborrheic keratosis

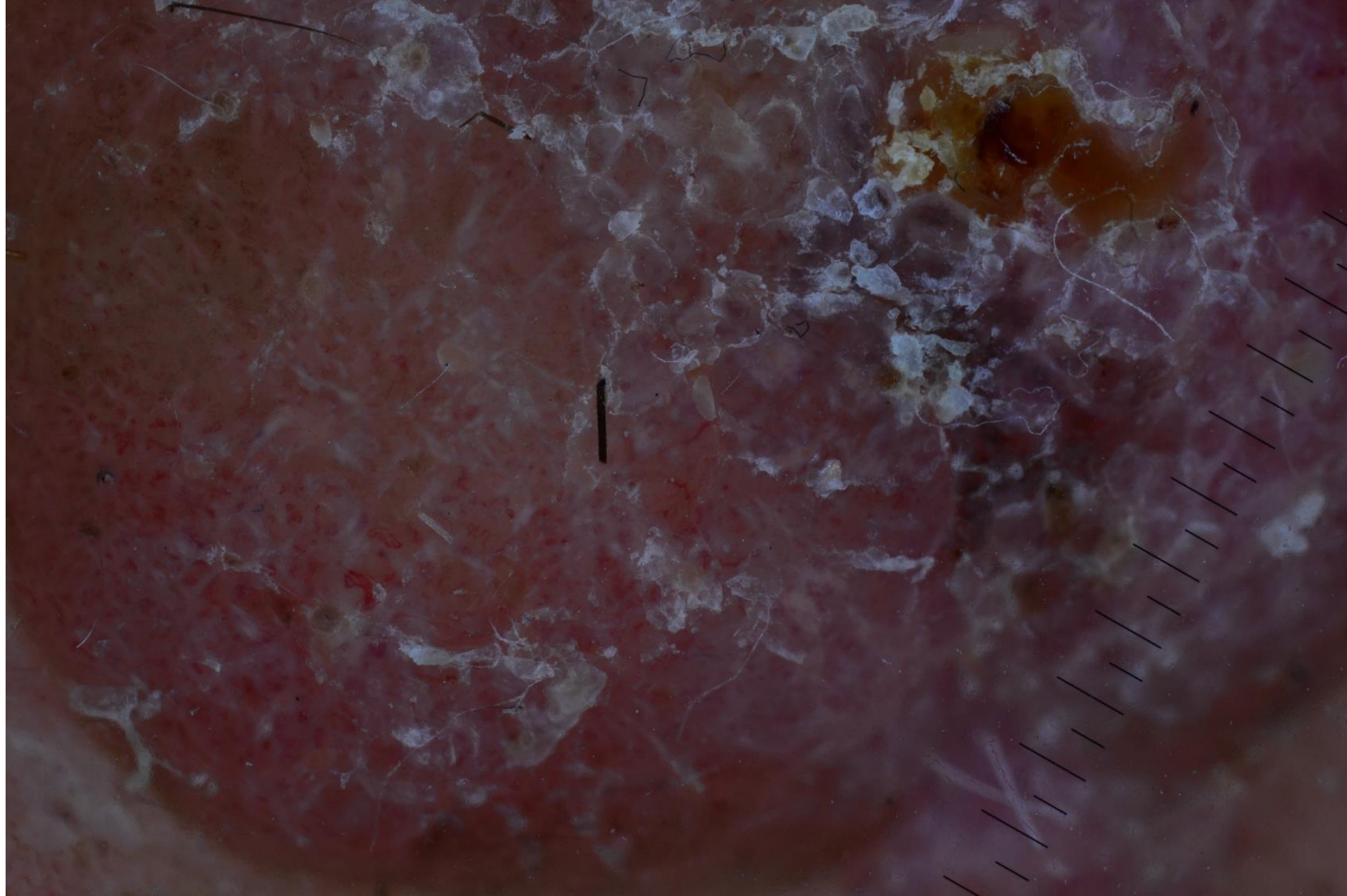






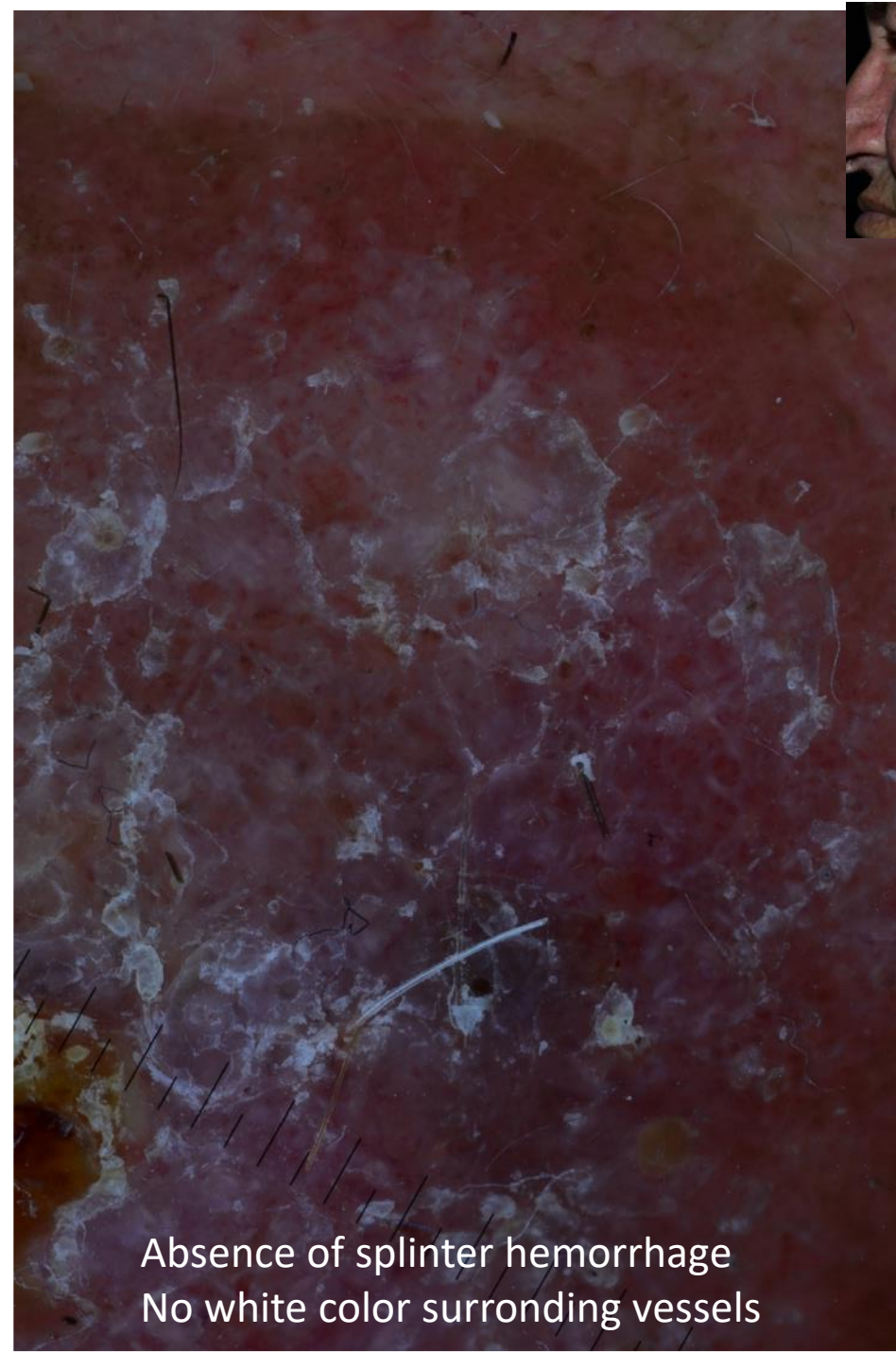
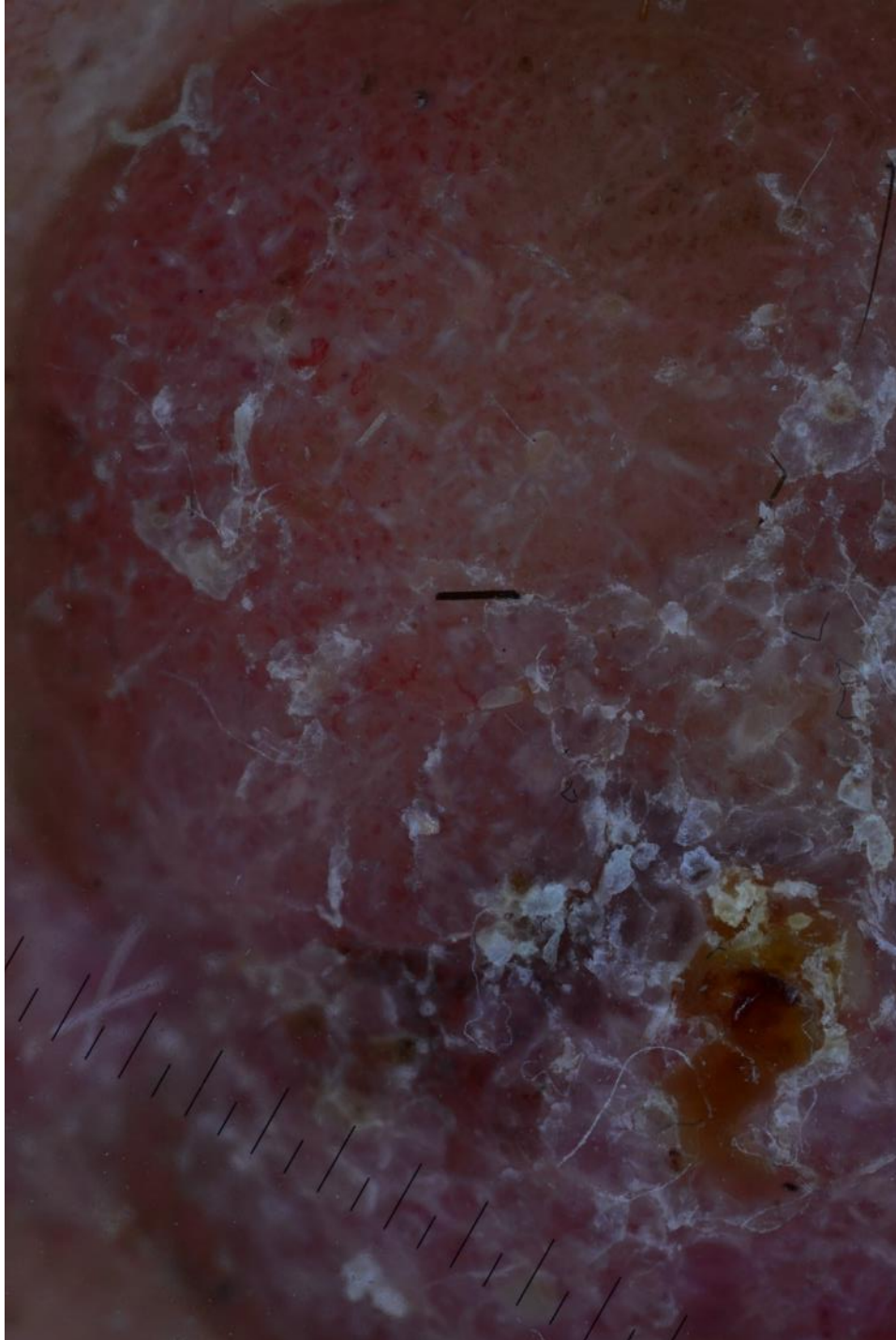






- A. seborrheic keratosis
- B. melanoma
- C. basal cell carcinoma
- D. cSCC
- E. viral wart





Absence of splinter hemorrhage  
No white color surrounding vessels

# Amelanotic/hypomelanotic melanoma: dermoscopic features



## Dermoscopic Features of Amelanotic and Hypomelanotic Melanomas: a Review of 49 Cases

Sarah Dawood<sup>1</sup>, Alla Altayeb<sup>1</sup>, Ausama Atwan<sup>1</sup>, Caroline Mills<sup>1</sup>

Dermoscopic criteria	AHM ≤ 1mm in thickness (n = 10)		AHM > 1 mm in thickness (n = 36)		AHM in situ (n = 3)		Total AHM (n = 49)	
	n	%	n	%	n	%	n	%
Dotted vessels	9	90.0	16	44.4	3	100	28	57.1
Linear vessels	5	50.0	23	63.9	3	100	31	63.2
Looped vessels	3	30.0	26	72.2	2	66.7	31	63.3
Granular structures	5	50.0	16	44.4	1	33.3	22	44.9
Short white lines	8	80.0	28	77.8	3	100	39	79.6
Lacuna structures	3	30.0	10	27.8	0	0	13	26.5
Milky-red areas	7	70.0	23	63.9	3	100	33	67.3
Remnant pigment	7	70.0	18	50.0	2	66.7	27	55.1
Polymorphous vessels	6	60.0	22	61.1	3	100	31	63.2

**Table 7. Simple Dermoscopic Model for the Diagnosis of Melanoma Lacking Significant Pigment<sup>a</sup>**

Negative feature (if present, nonmelanoma)

>3 Milialike cysts

Positive features (if any 1 present, then melanoma)

Irregularly sized or distributed brown dots/globules

Multiple blue/gray dots

Irregularly shaped depigmentation

Blue-white veil

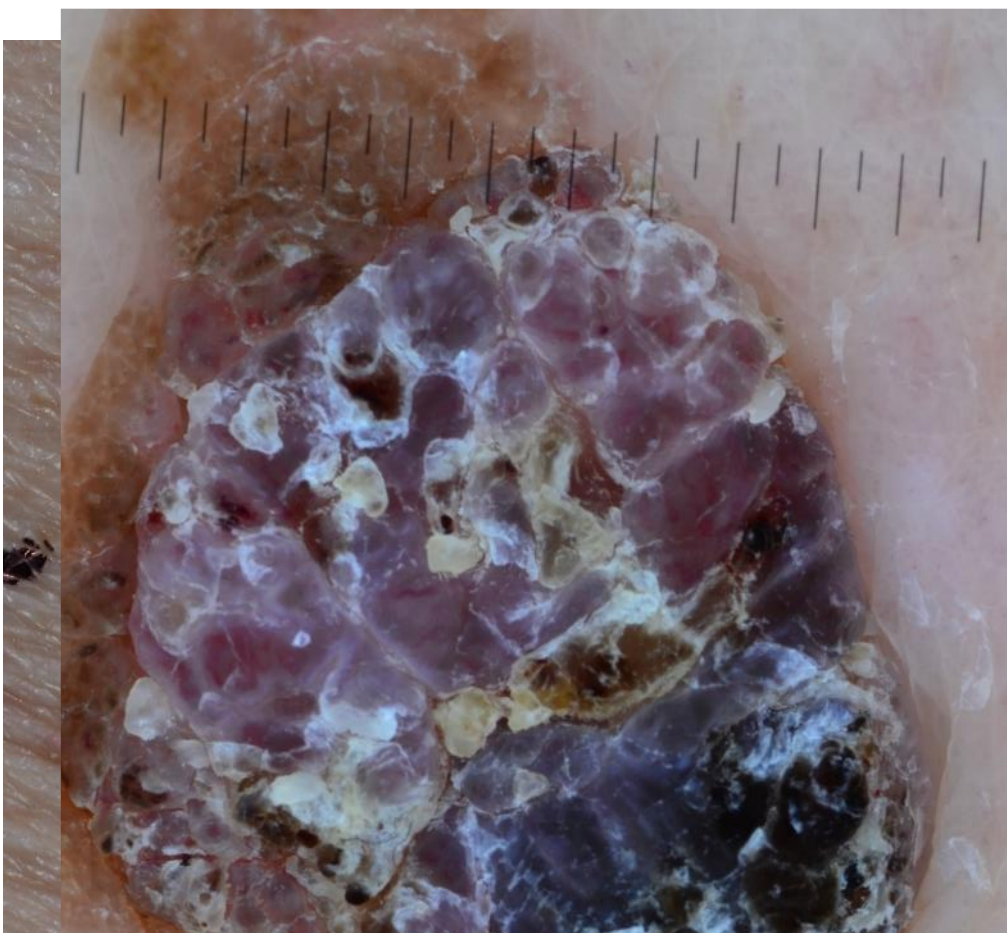
>1 Shade of pink

Predominant central vessels

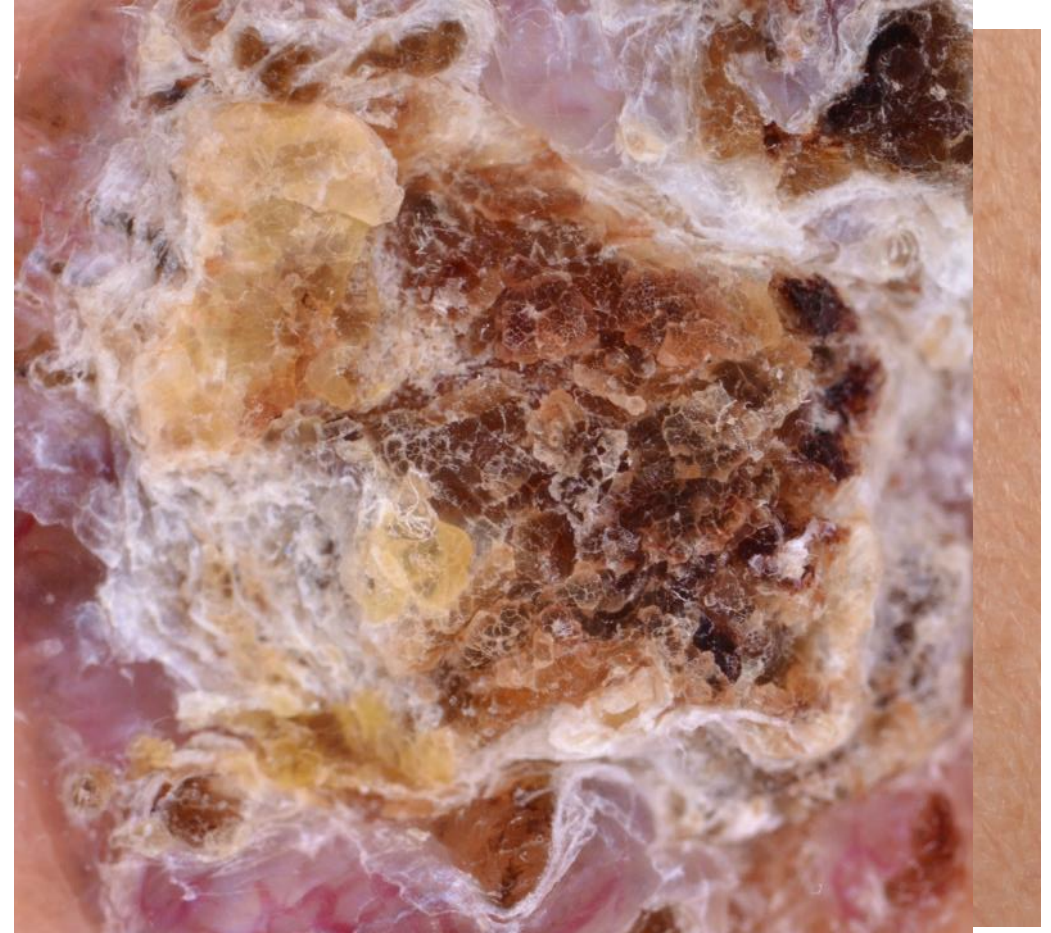
Dotted and linear irregular vessels

<sup>a</sup>In the training set, sensitivity was 75% and specificity was 66% for the diagnosis of melanoma (area under the receiver operating characteristic curve, 0.74; SE, 0.03). In the independent test set, sensitivity was 70% and specificity was 56% (area under the receiver operating characteristic curve, 0.69; SE, 0.07).



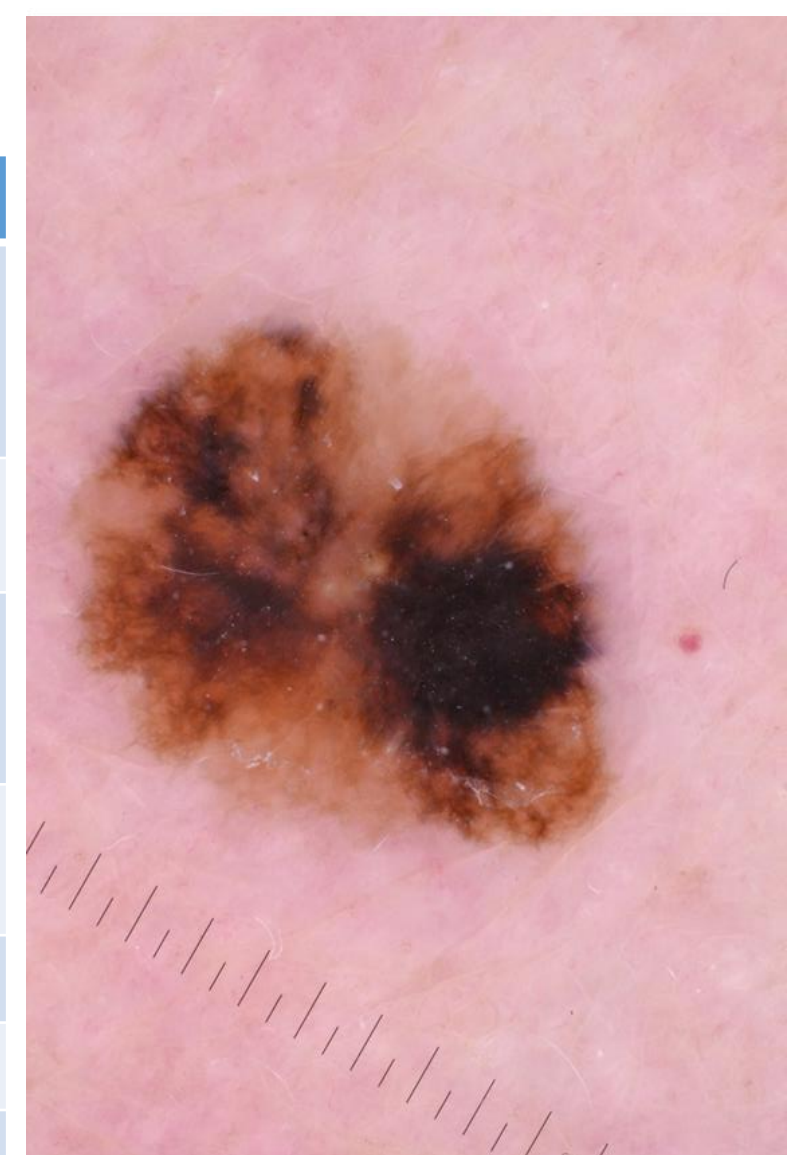


In situ SCC +seborrhoic keratosis



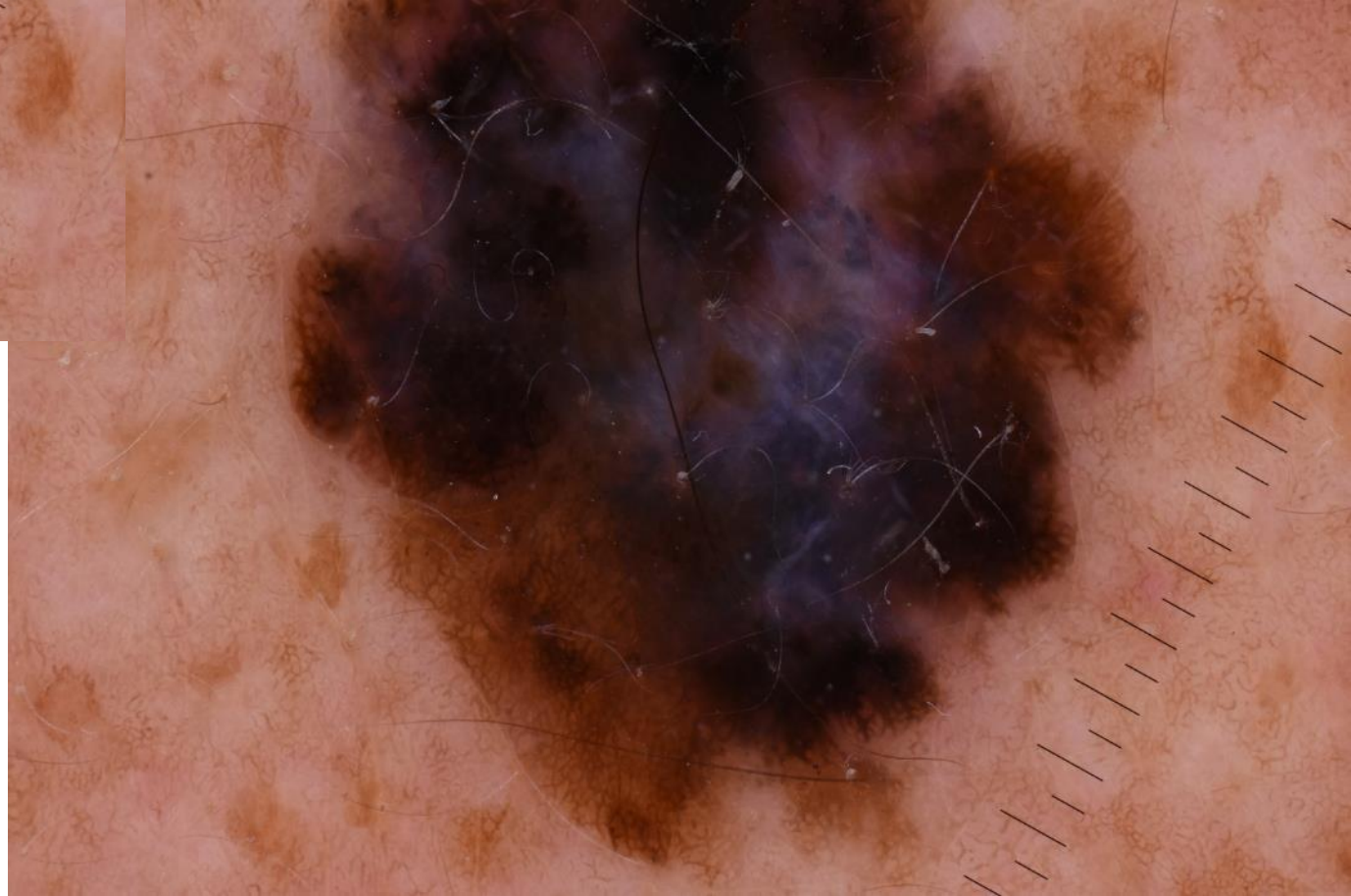
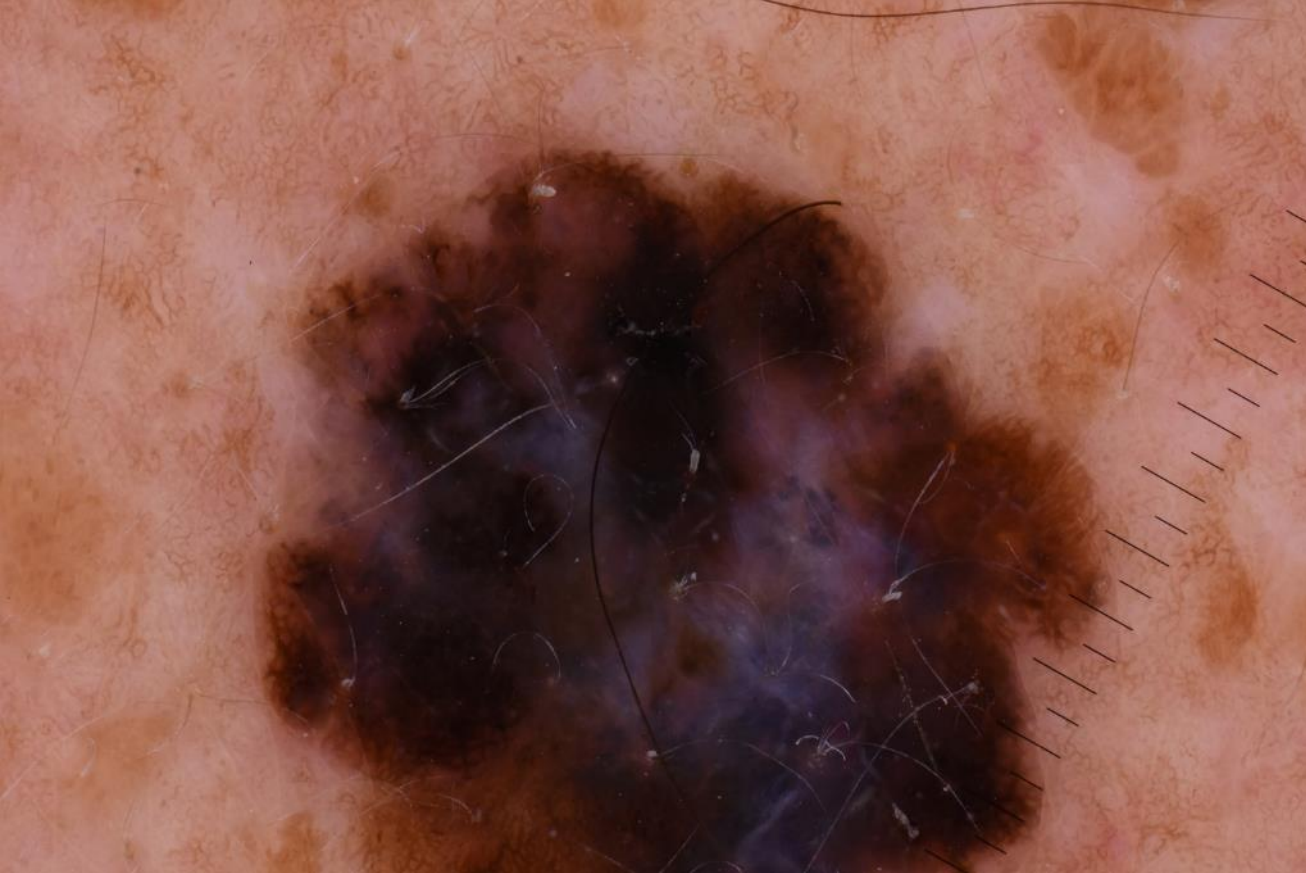
Basal cell carcinoma

SK subtype	Dermatoscopy	Diff. dg
Acanthotic	Milia like cysts and comedo-like openings, cerebriform surface	In case of pigmented form –melanoma
Hyperkeratotic	Crusts and scales and cerebriform surface	Viral wart, SCC
Reticulated	Sharply demarcated borders and brown network	
Irritated	Scales, crusts, erosions, hairpin vessels	SCC
Regressive/lichenoid	Peppering	
Clonal	Blue-grey nests	BCC, MM
Melanoacanthoma	Intense black pigmentation, at times pigmented streaks at the periphery of the lesion	



Confocal microscopy can be helpful  
Total body examination










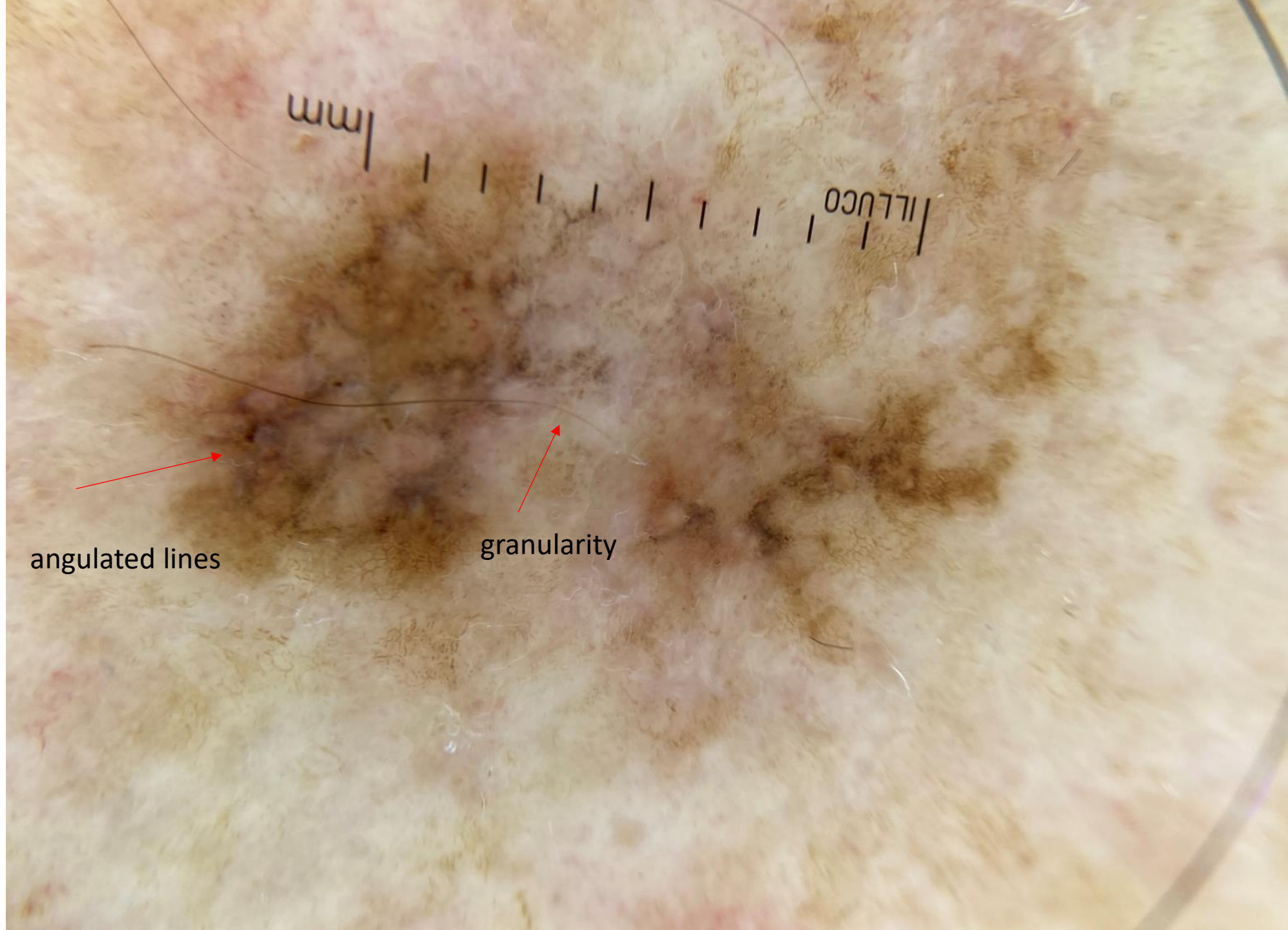
SSM, Breslow 0.6 mm

# Extrafacial sun-damaged skin



- Chronic sun-damaged skin
- BRAF mutation ↓
- C-kit mutation ↑
- Frequent solar lentiges

	Arising from Skin Without Chronic Sun Damage	→	~50% BRAF ~20% NRAS
	Arising from Skin With Chronic Sun Damage	→	~10% BRAF ~10% NRAS ~2% KIT
	Arising from Mucosal Surfaces	→	~5% BRAF ~15% NRAS ~20% KIT
	Arising from Acral Surfaces	→	~15% BRAF ~15% NRAS ~15% KIT
	Uveal Melanoma	→	~32% GNA11 ~50% GNAQ <1% BRAF

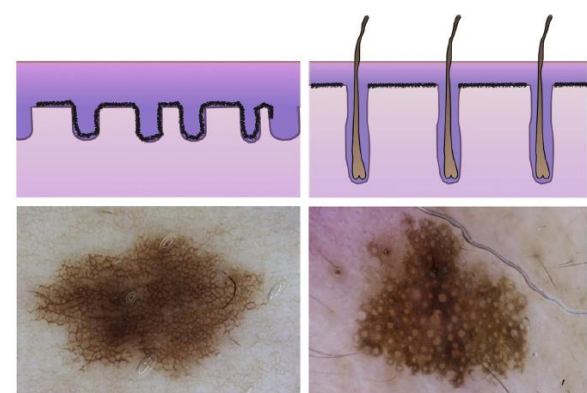


mm

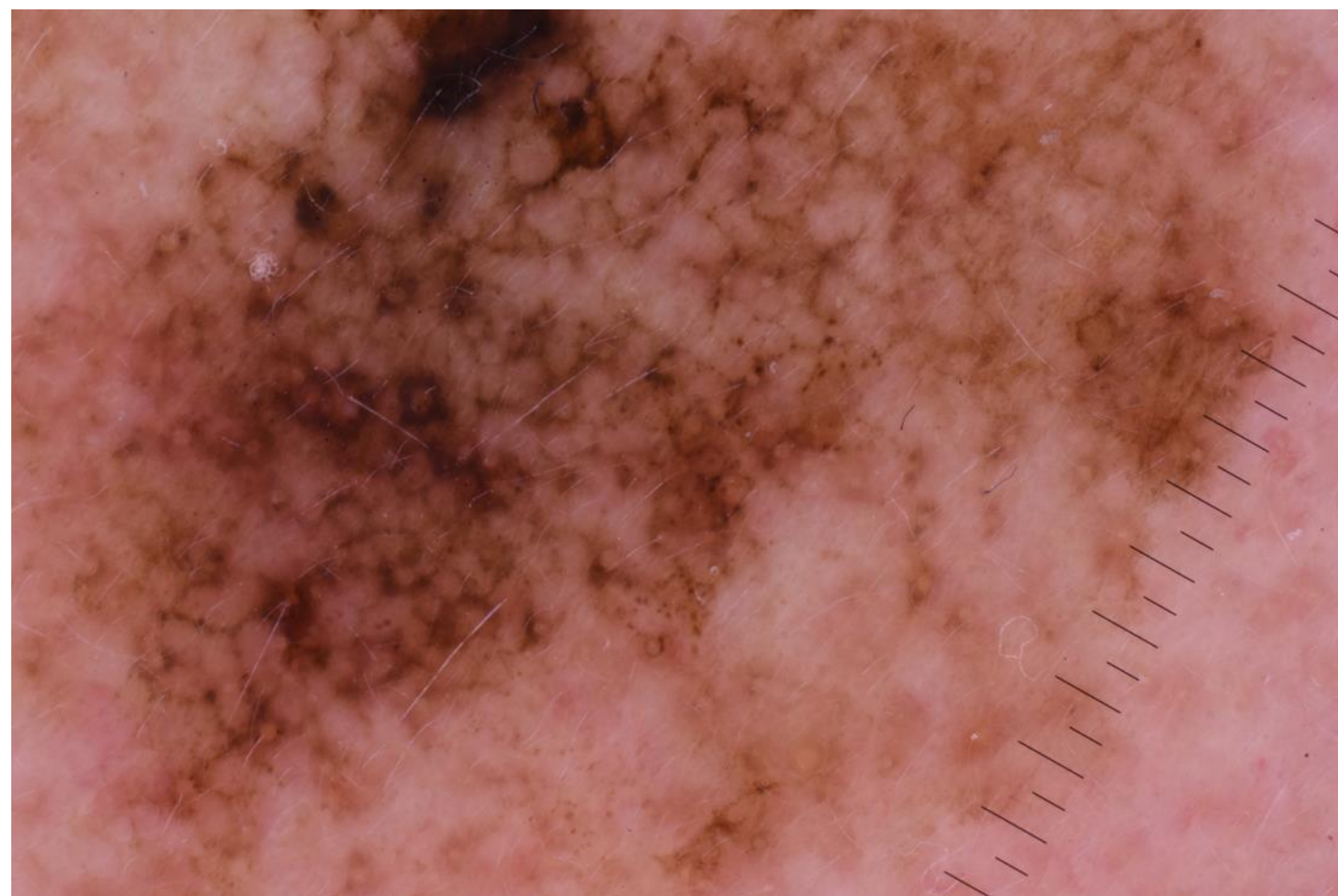
LILUCO

angulated lines

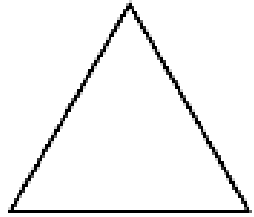
granularity



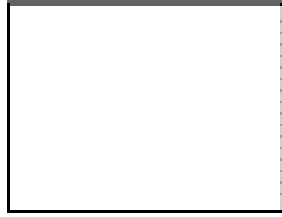
Lallas et al. 2014



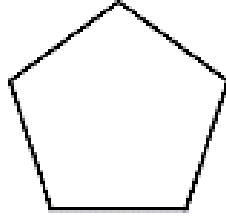
# Large polygons



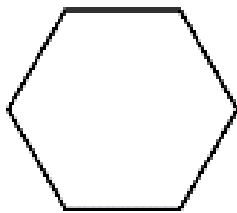
Triangle  
3 sided polygon



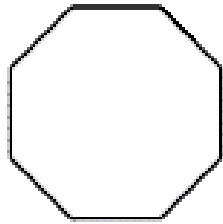
Quadrilateral  
4 sided polygon



Pentagon  
5 sided polygon



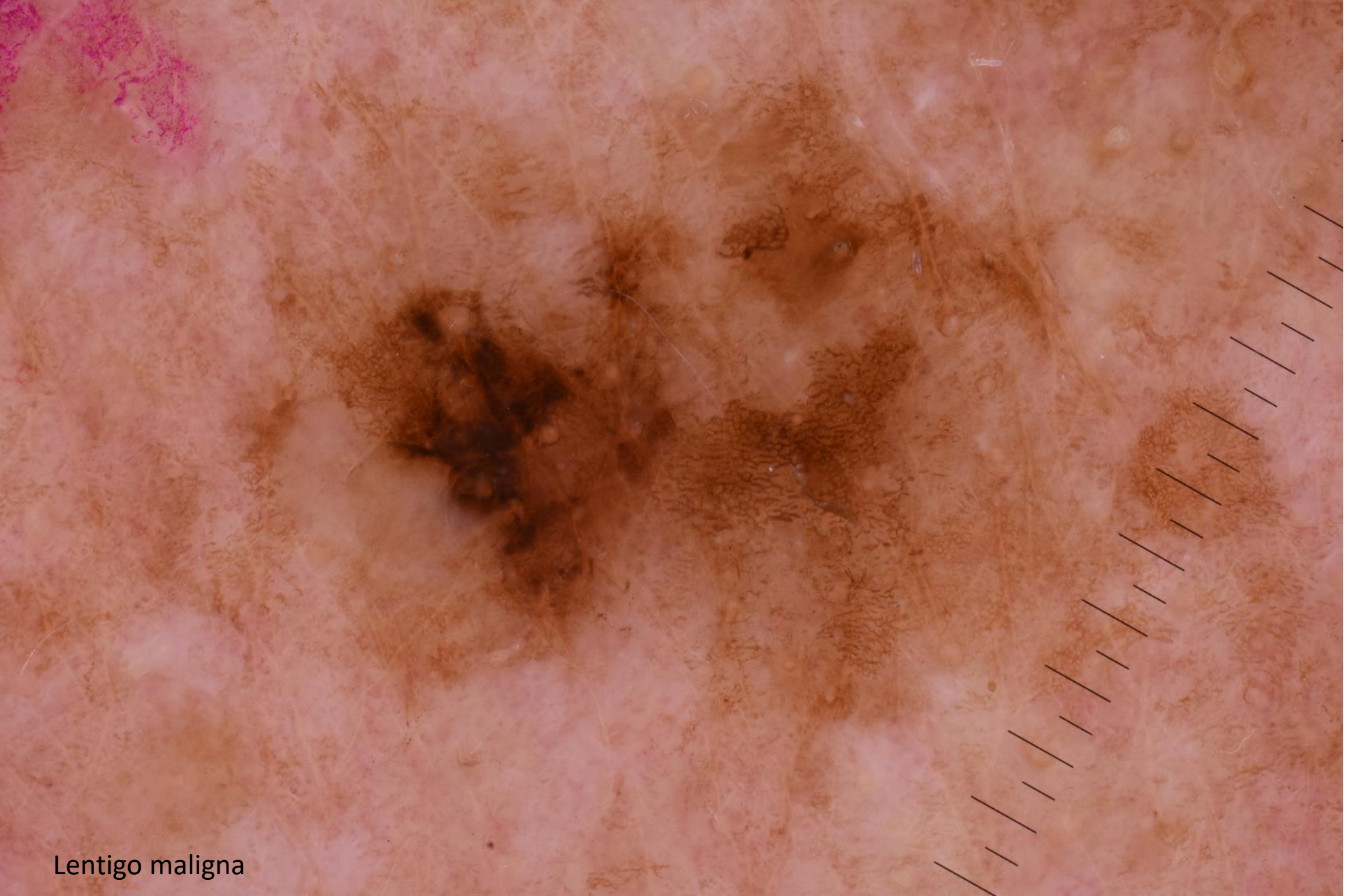
Hexagon  
6 sided polygon



Octagon  
8 sided polygon



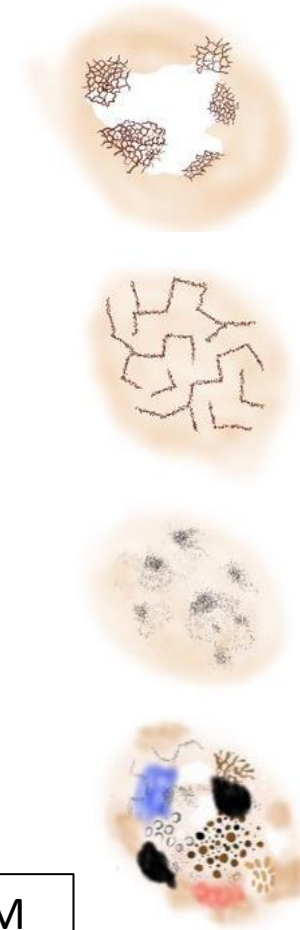




Lentigo maligna

# Dermatoscopic patterns- extrafacial *chronic sundamaged skin*

PATTERN	LOCALIZATION	Frequency
Patchy peripheral pigmented islands	back	37.6%
Angulated line	upper extremities	30.1%
Structureless areas and granularity	back	10.8%
Non-specific	Back	21.5%



- 83 –old-year patient
- Left frontal sclerotizing area, loss of hair
- Apparent for 1 year



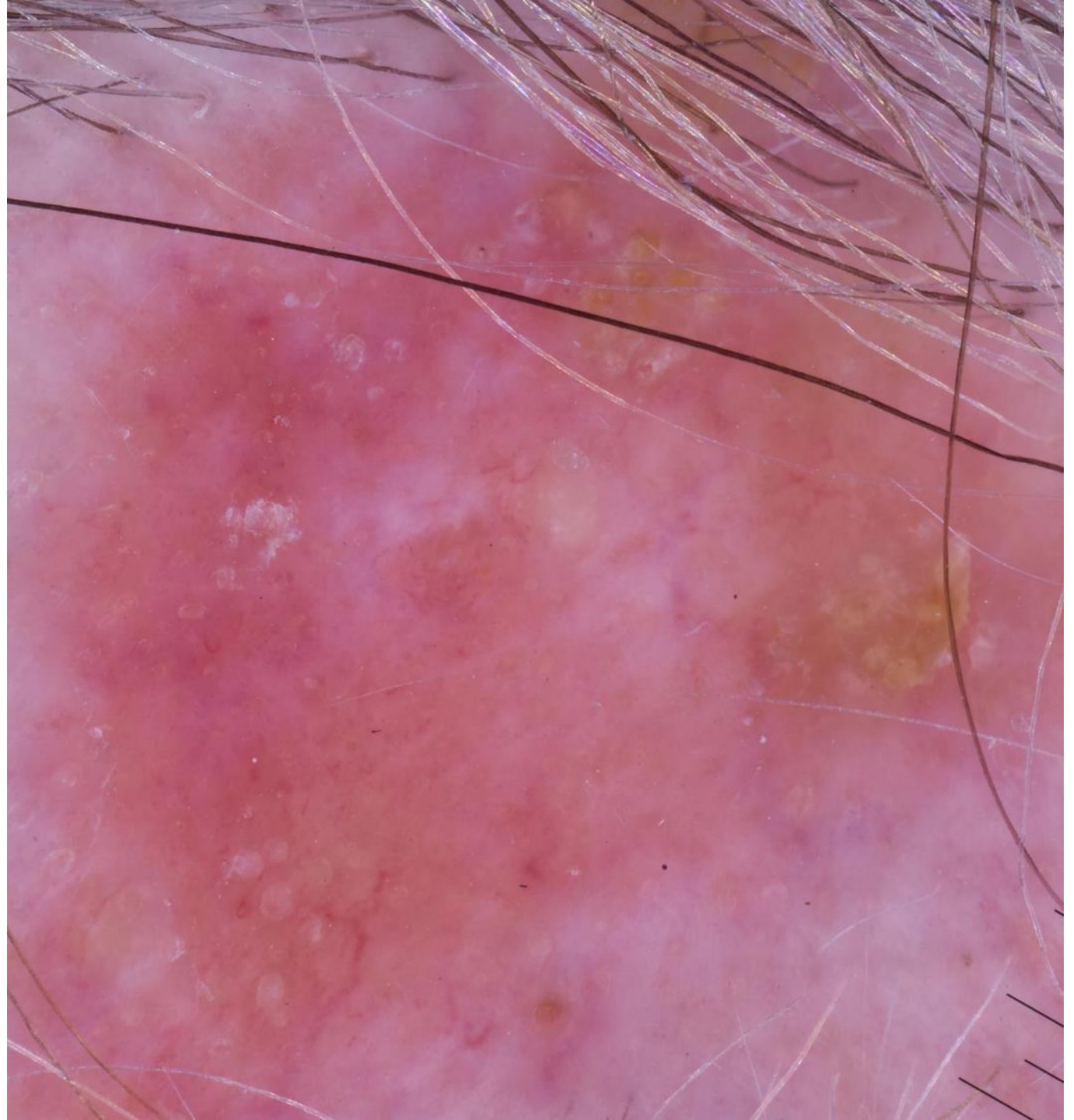


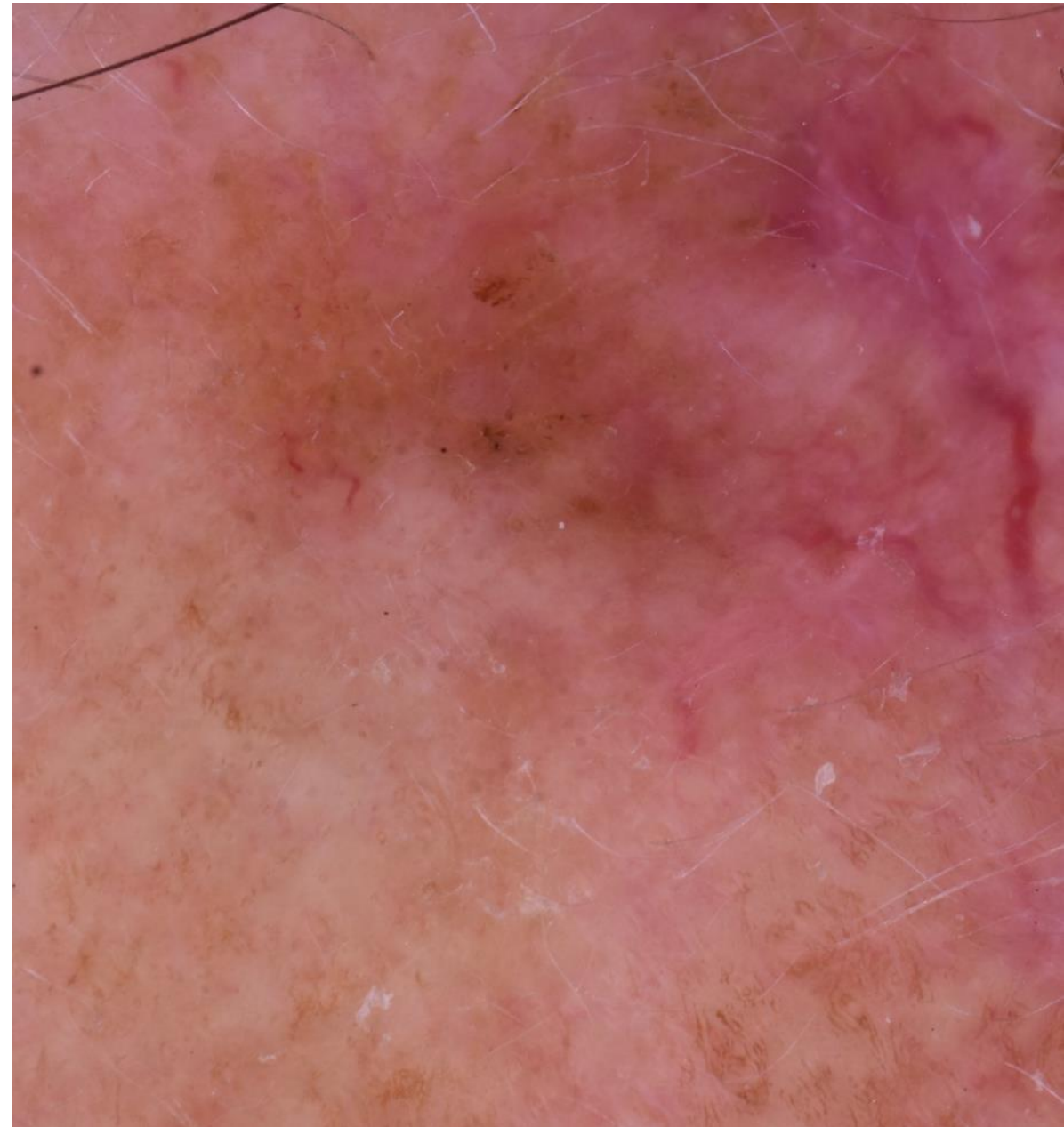
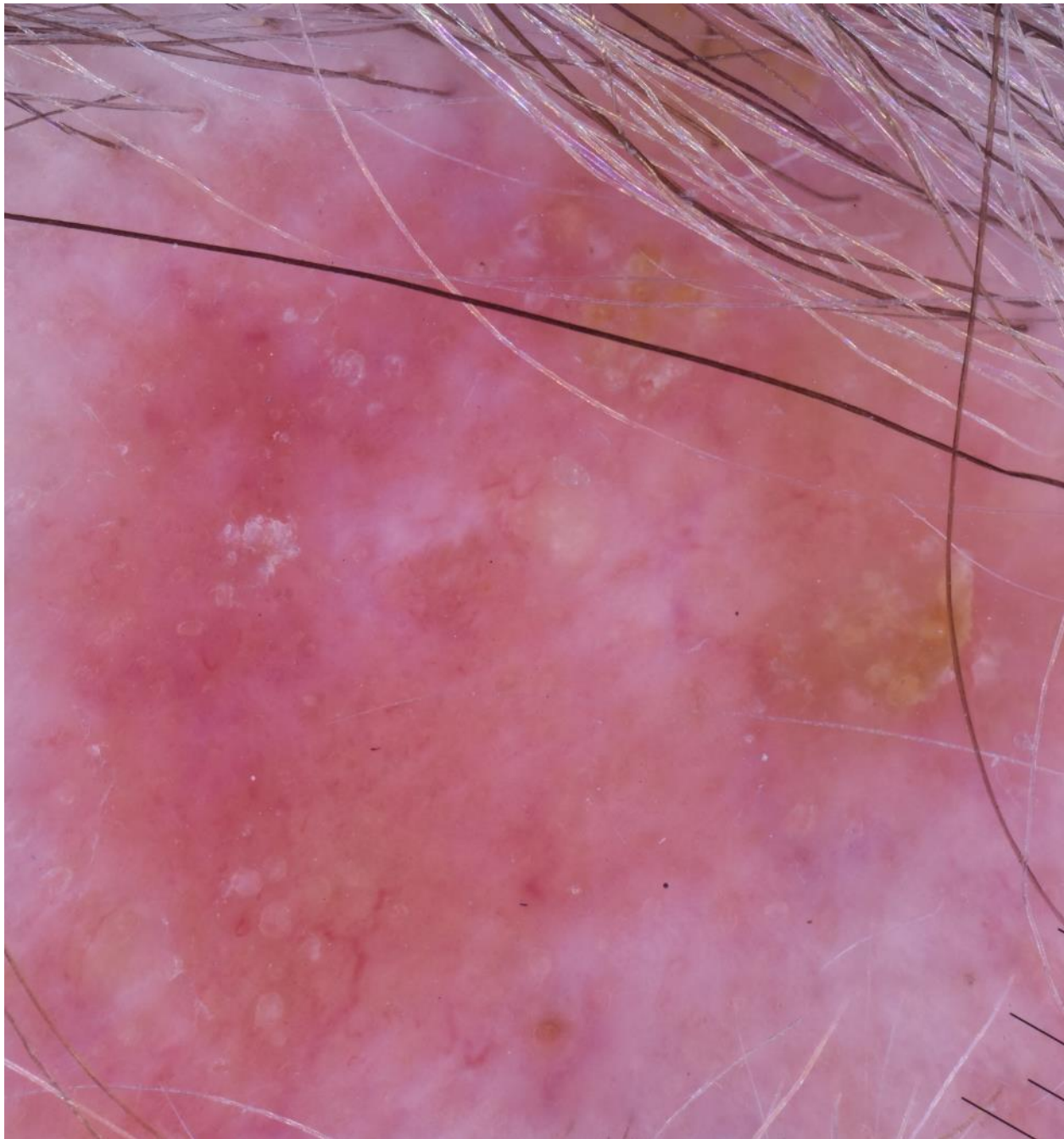
A. Morpheaform BCC

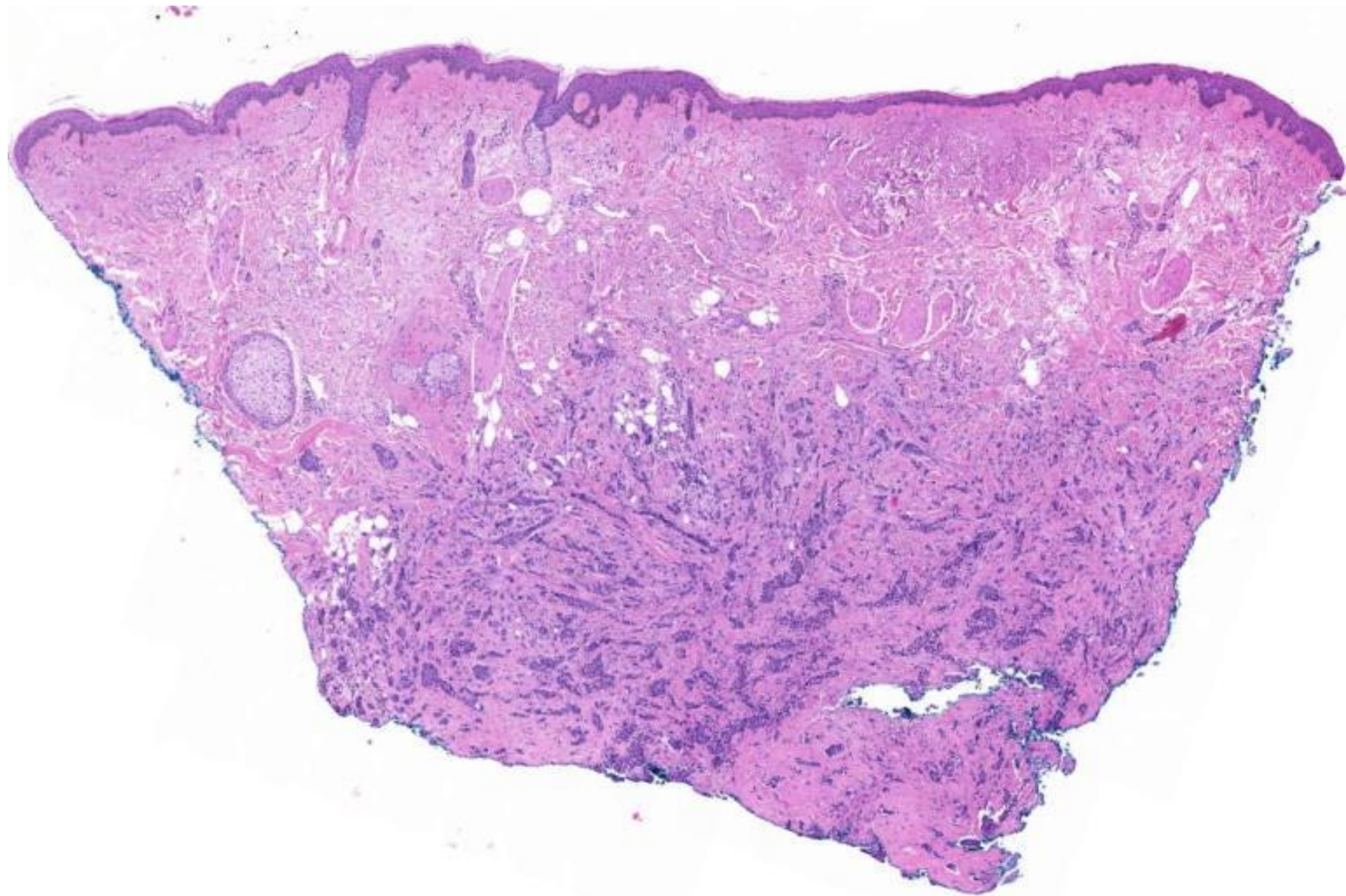
B. Sclerotizing area due to multiple trauma

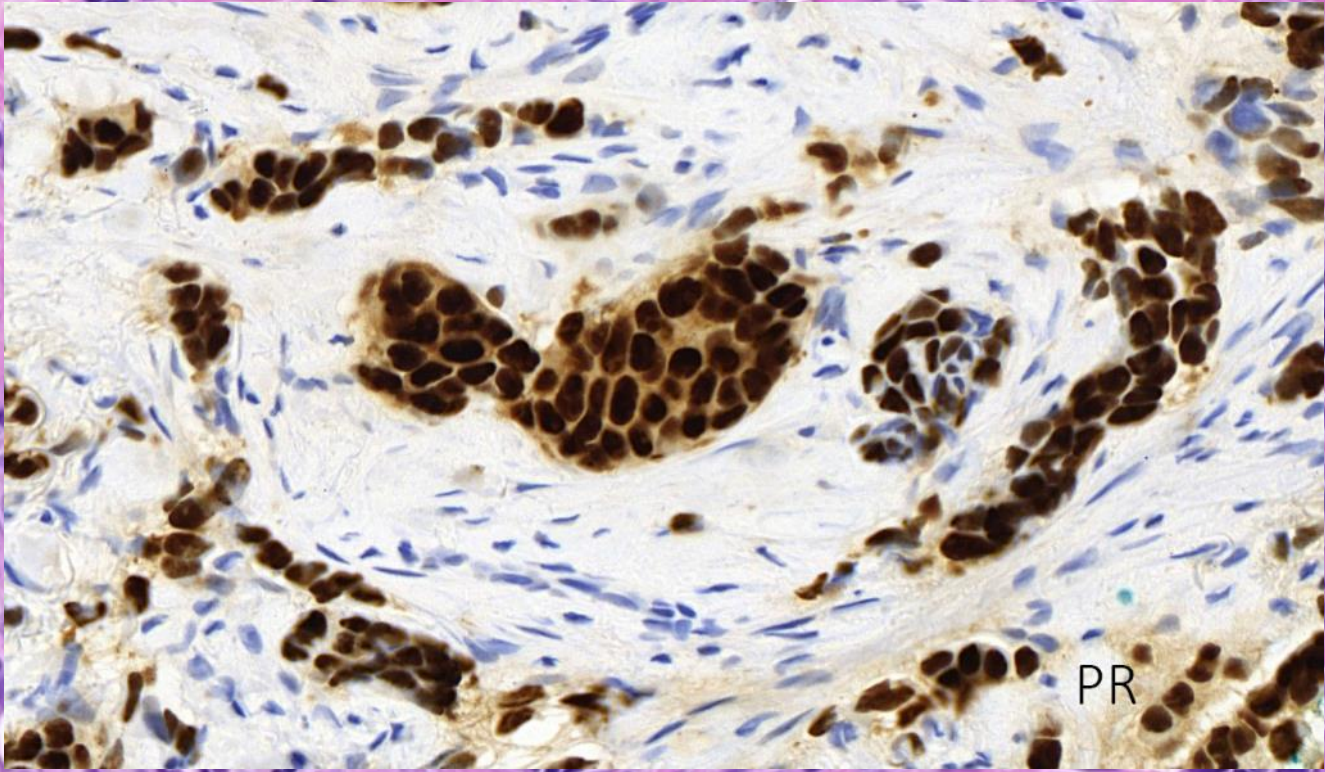
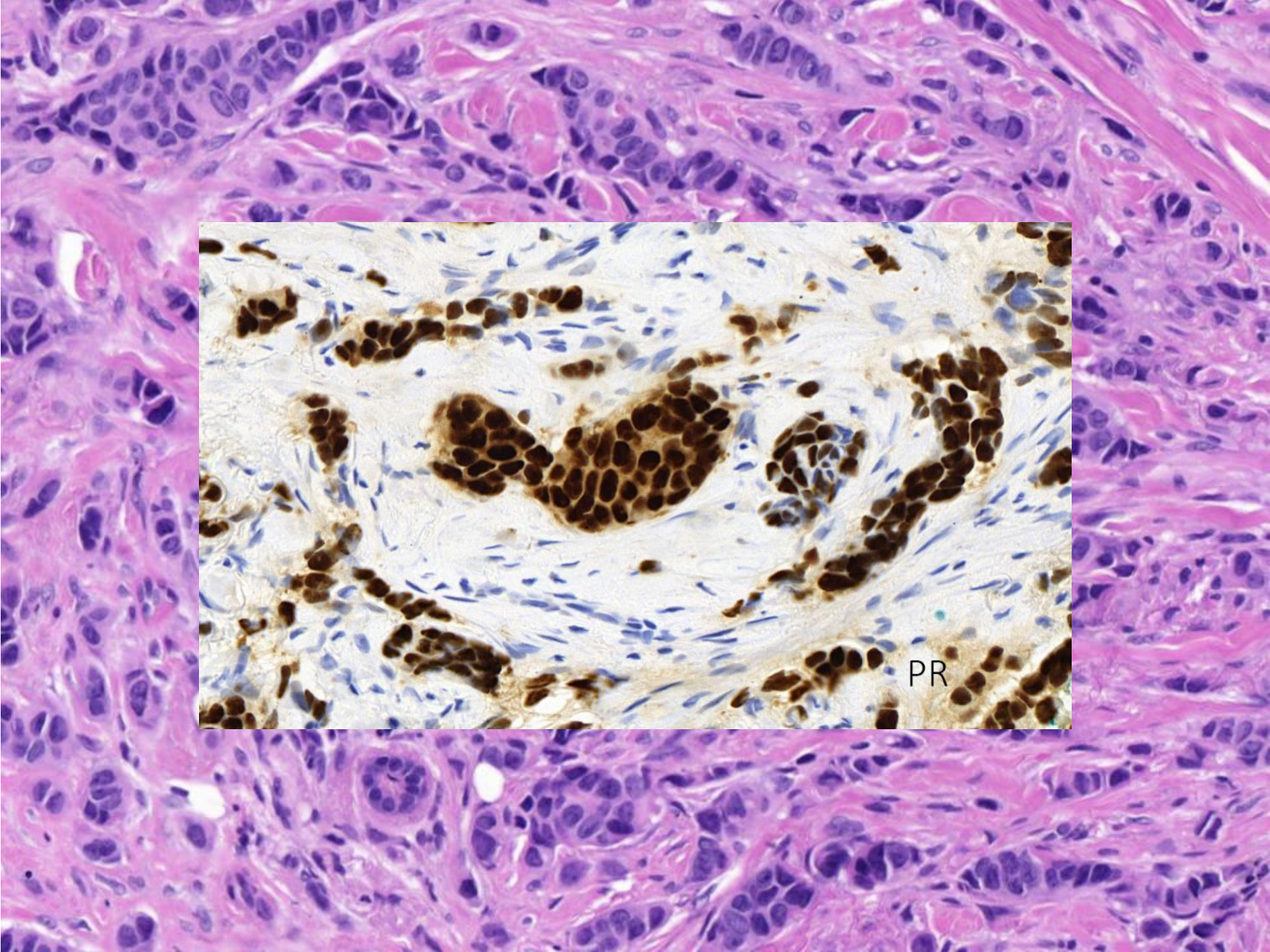
C. DLE

D. cutan metastases







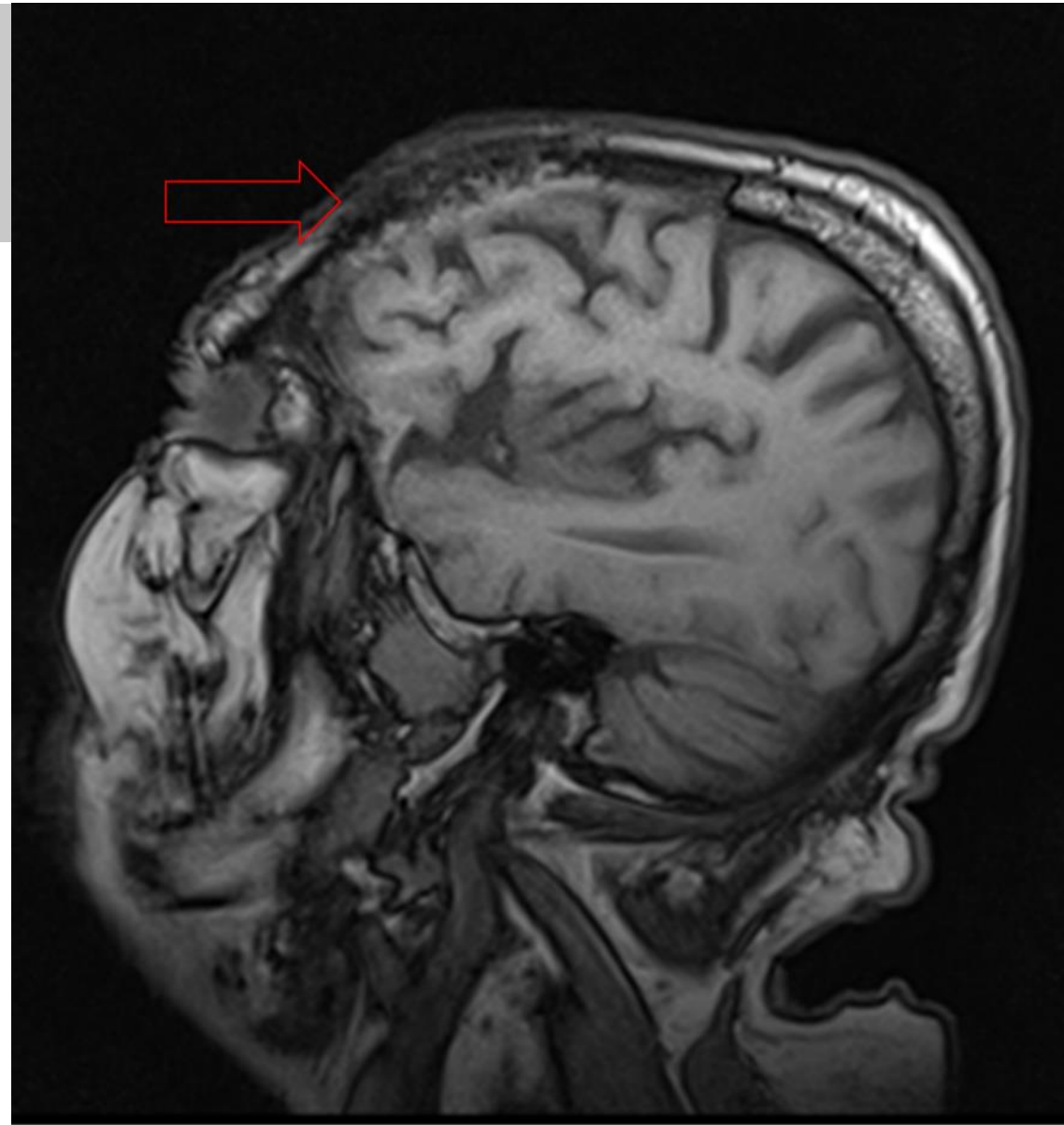


PR

## Diagnosis: Metastases of ductal breast cancer

At the first presentation there was a lack of relevant history taking.

- In 1988 the patient had surgery for breast cancer, and received chemotherapy
- She was under oncological surveillance for 10 years.
- No history of pathological bone fracture.
- Staging was performed.
- Brain MR showed multiple lytic bone lesions of the skull.



**SACUMAN** = Scalp Alopecia due to a Clinically Unapparent or Minimally Apparent Neoplasm

klinikailag nem, vagy alig feltűnő tumor által okozott alopecia a hajas fejbőrön

Metastatic malignant neoplasms	Locally occurring malignant neoplasms	Benign neoplasms
Breast cancer	Basal cell carcinoma	Syringomas
Gastric cancer	Melanoma	Nerve sheath myxoma
Placental site trophoblastic tumor	Angiosarcoma	Nevocellular nevus
	Mycosis fungoides	Neuroma
	Syringomatous carcinoma	Trichoepithelioma
	Proliferating trichilemmal tumors	Osteomyoma-like tumor
	Squamous cell carcinoma	
	Plasmacytoma	
	Mastocytosis	

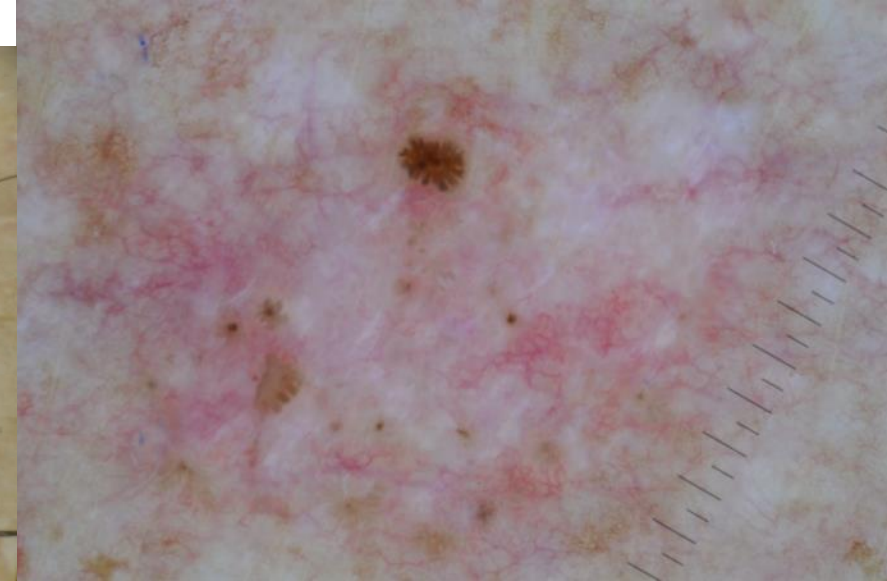
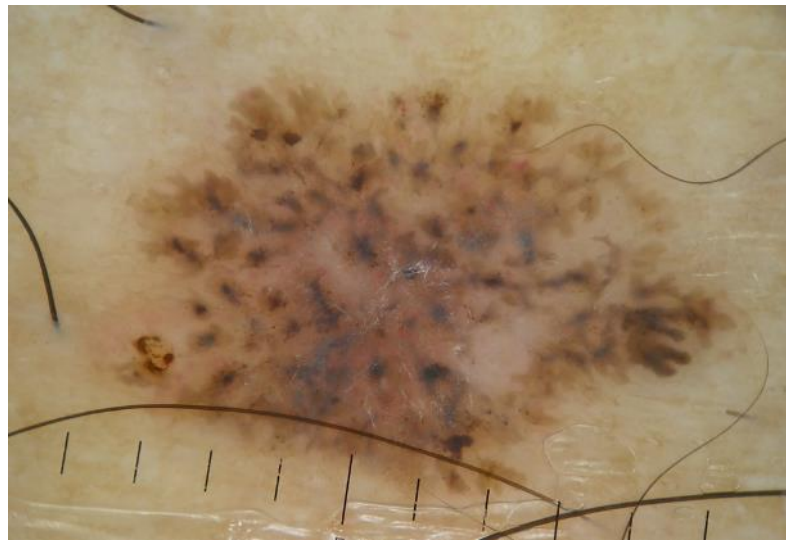
THM: Always take the proper history of the patient, do full body examination and in case of sclerotizing alopecia think about metastases!

# Basal cell carcinoma

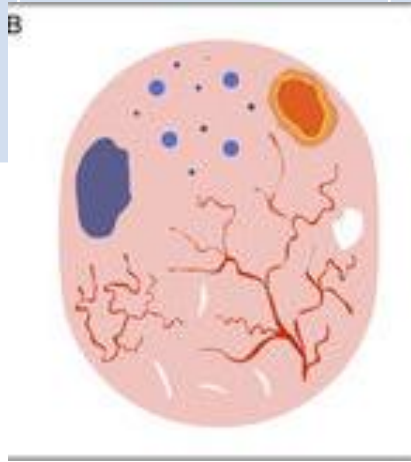
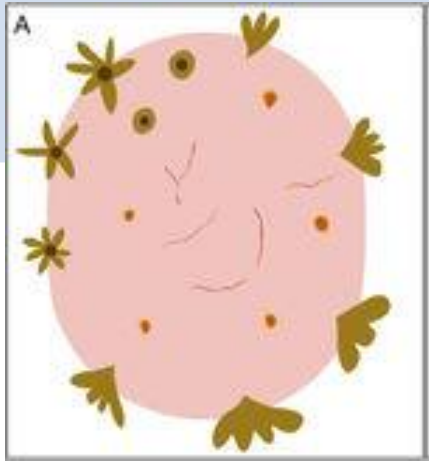
Pigmented Structures	Vascular Structures	Other Structures
Blue-gray ovoid nests	Arborizing telangiectasias	Multiple erosions
Blue-gray globules	Short fine telangiectasias	Ulceration
Blue-gray dots		Shiny white-red areas
Maple leaf-like structures		Shiny white structures
Spoke-wheel structures		
Concentric structures		



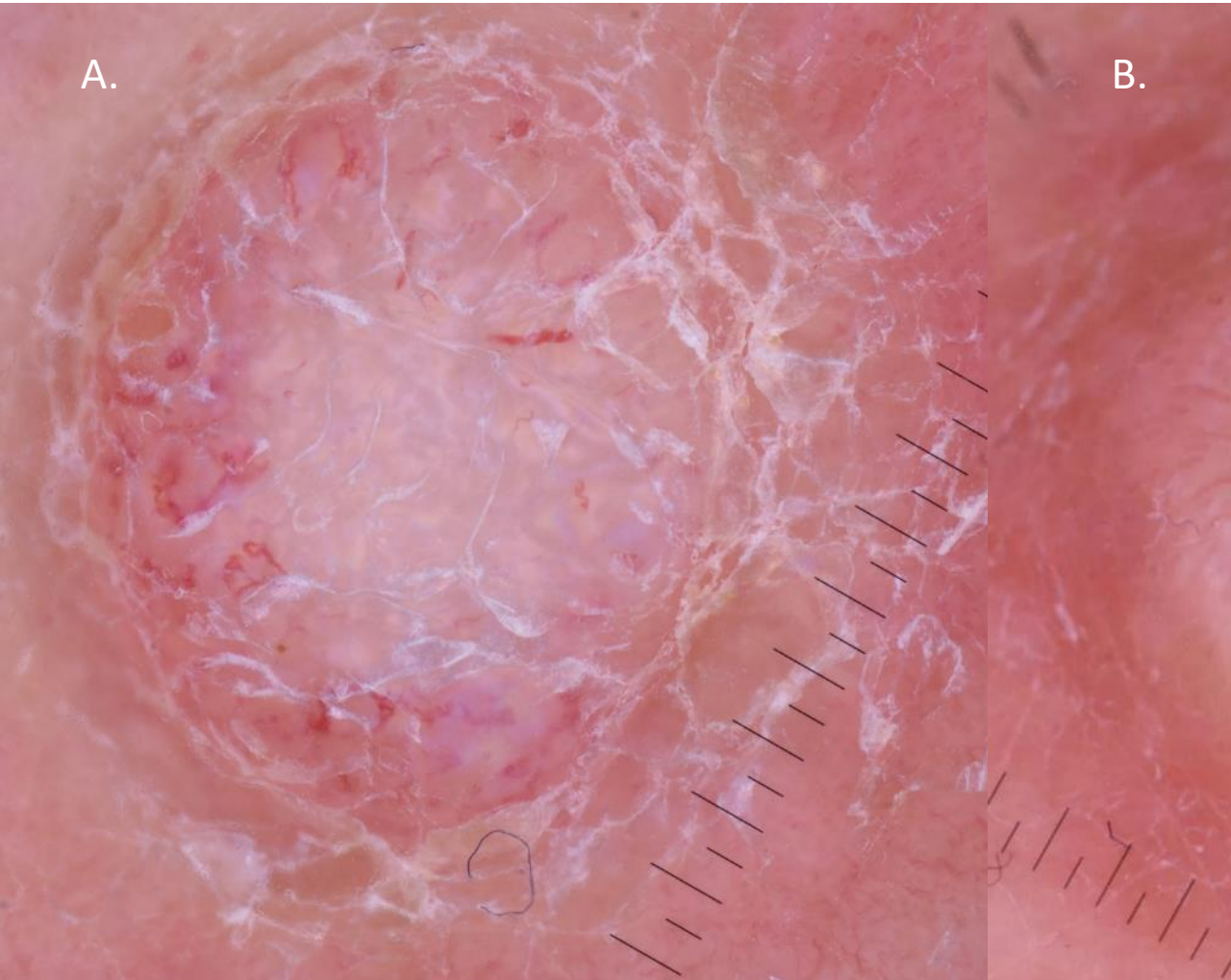
<sup>a</sup> Adapted from Wozniak-Rito et al.<sup>9</sup>



Superficial	Nodular	Morpheaform	Infiltrative	Micro-nodular	Basosquamous
<ol style="list-style-type: none"> <li>1. Leaf-like structures</li> <li>2. Spoke wheel-like structures</li> <li>3. Concentric structures/globules (variant of spoke wheel like structures)</li> <li>4. Brown dots – blue-gray dots/globules.</li> <li>5. Short fine superficial telangiectasia</li> <li>6. Multiple small erosions</li> <li>7. Shiny white blotches and strands</li> </ol>	<ol style="list-style-type: none"> <li>1. Arborizing vessels</li> <li>2. Blue-gray ovoid nests</li> <li>3. Ulceration</li> </ol>	<ol style="list-style-type: none"> <li>1. structureless hypopigmentation (porcelain white areas)</li> <li>2. arborizing vessels</li> <li>3. Ulceration</li> <li>4. rarely pigmentation was present (average of 0-13% of lesions), most commonly large blue-grey ovoid nests</li> </ol>	<ol style="list-style-type: none"> <li>1. arborizing vessels</li> <li>2. Ulceration</li> <li>3. shiny red areas</li> <li>4. multiple blue-gray globules</li> <li>5. fine telangiectasias</li> </ol>	<ol style="list-style-type: none"> <li>1. truncated vessels</li> <li>2. multiple blue-gray globules</li> </ol>	<ol style="list-style-type: none"> <li>1. unfocused (peripheral) arborizing vessels (72.7%)</li> <li>2. keratin masses (72.7%)</li> <li>3. white structureless areas (72.7%)</li> <li>4. superficial scale (68.2%)</li> <li>5. ulceration or blood crusts (68.2%)</li> <li>6. white structures (63.6%)</li> <li>7. blue-grey blotches (59.1%)</li> <li>8. blood spots in keratin masses (54.6%)</li> </ol>



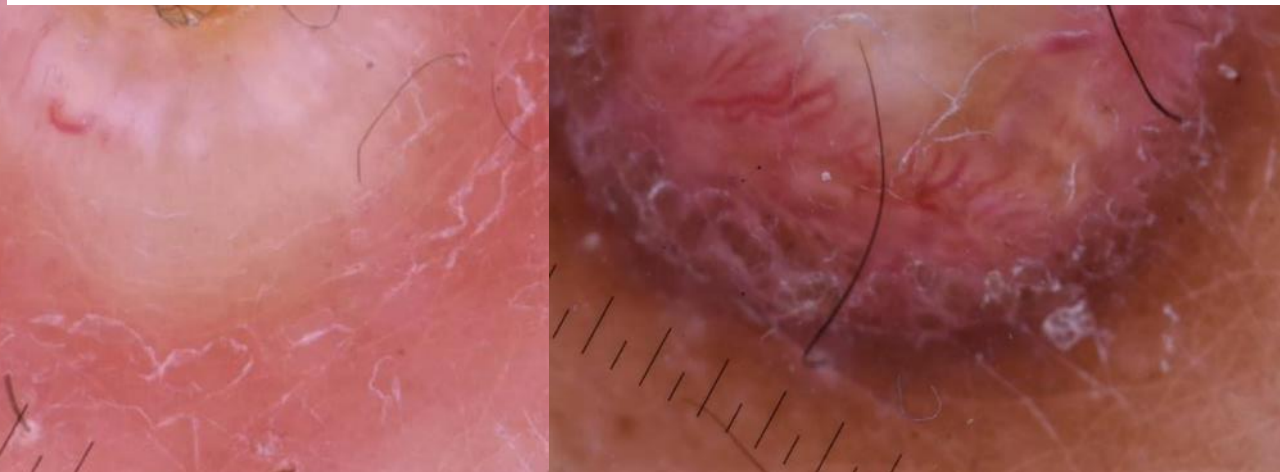




## Dermoscopic Features of Basal Cell Carcinoma on the Lower Limbs: A Chameleon!

Mara Lombardi<sup>a</sup> Riccardo Pampena<sup>a</sup> Stefania Borsari<sup>a</sup> Caterina Bombonato<sup>a</sup>  
Elisa Benati<sup>a</sup> Giovanni Pellacani<sup>b</sup> Caterina Longo<sup>a, b</sup>

<sup>a</sup>Centro Oncologico ad Alta Tecnologia Diagnostica, Azienda Unità Sanitaria Locale – IRCCS di Reggio Emilia, Reggio Emilia, Italy; <sup>b</sup>Dermatology Unit, University of Modena and Reggio Emilia, Modena, Italy



Basal cell carcinoma

Spitzoid melanoma

Dermatofibroma

# Multiple Aggregated Yellow-white globules (MAY)

- MAY globulus- high specificity
- seen in non-pigmented BCC (21 %)
- can be seen both in polarized and nonpolarized light

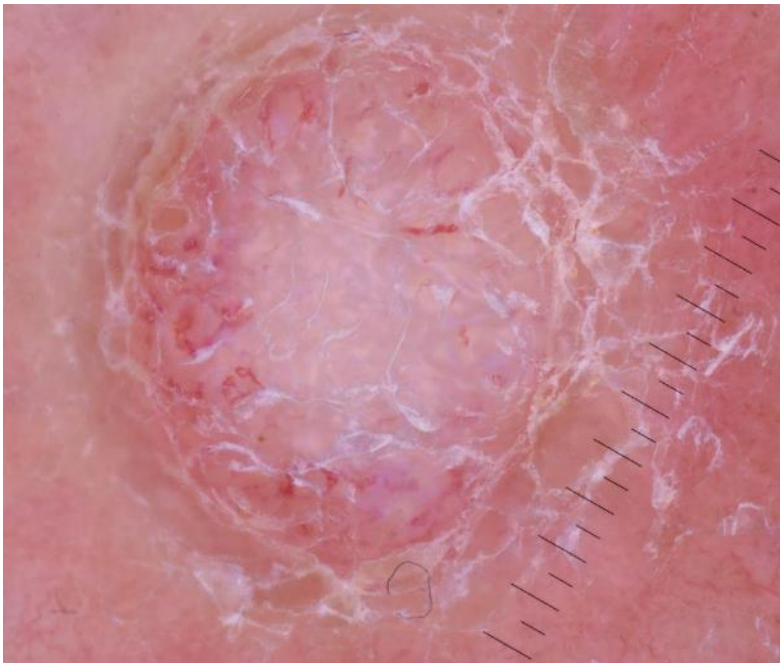
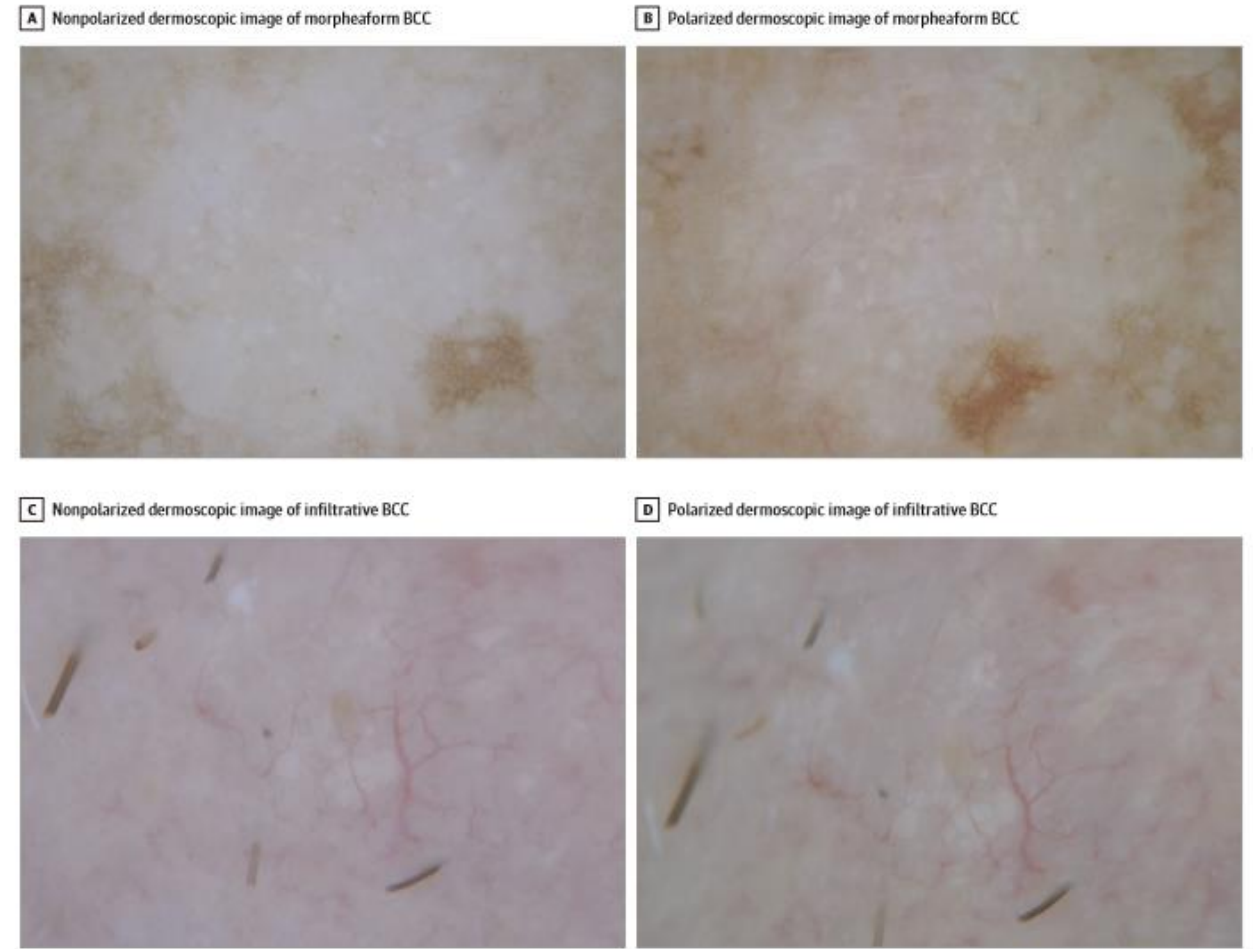
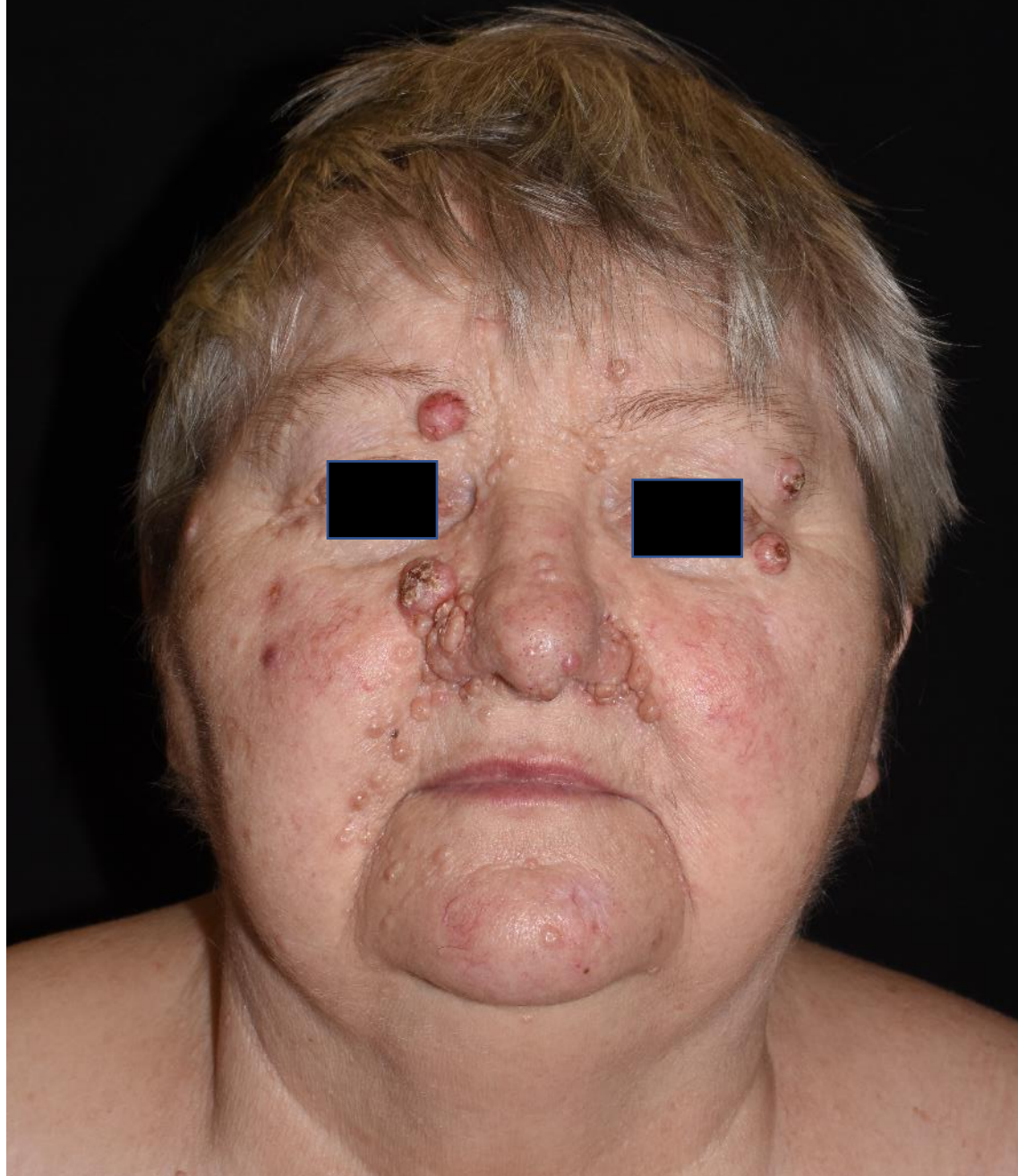


Figure 1. Morpheiform Basal Cell Carcinoma (BCC) and Infiltrative BCC Showing Multiple Aggregated Yellow-White Globules





Vismodegib  
treatment



4 months of  
therapy



4 months of therapy

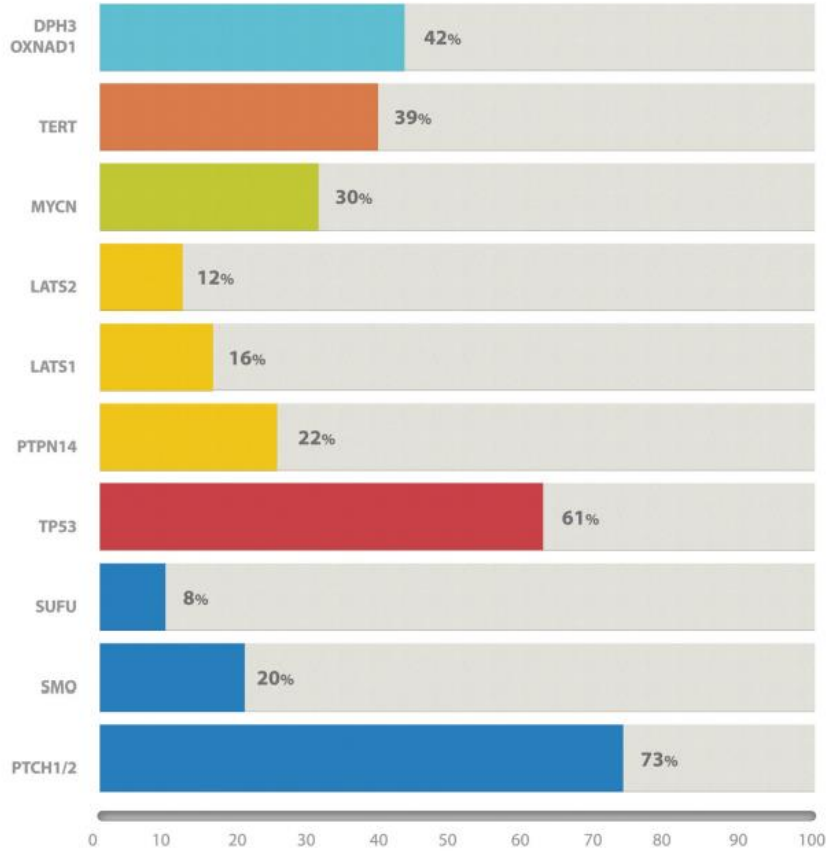


## Multiple Hereditary Infundibulocystic Basal Cell Carcinoma Syndrome Associated With a Germline *SUFU* Mutation

Joshua M. Schulman, MD<sup>1,2</sup>; Dennis H. Oh, MD, PhD<sup>1,3</sup>; J. Zachary Sanborn, PhD<sup>4</sup>; [et al](#)

[» Author Affiliations](#) | [Article Information](#)

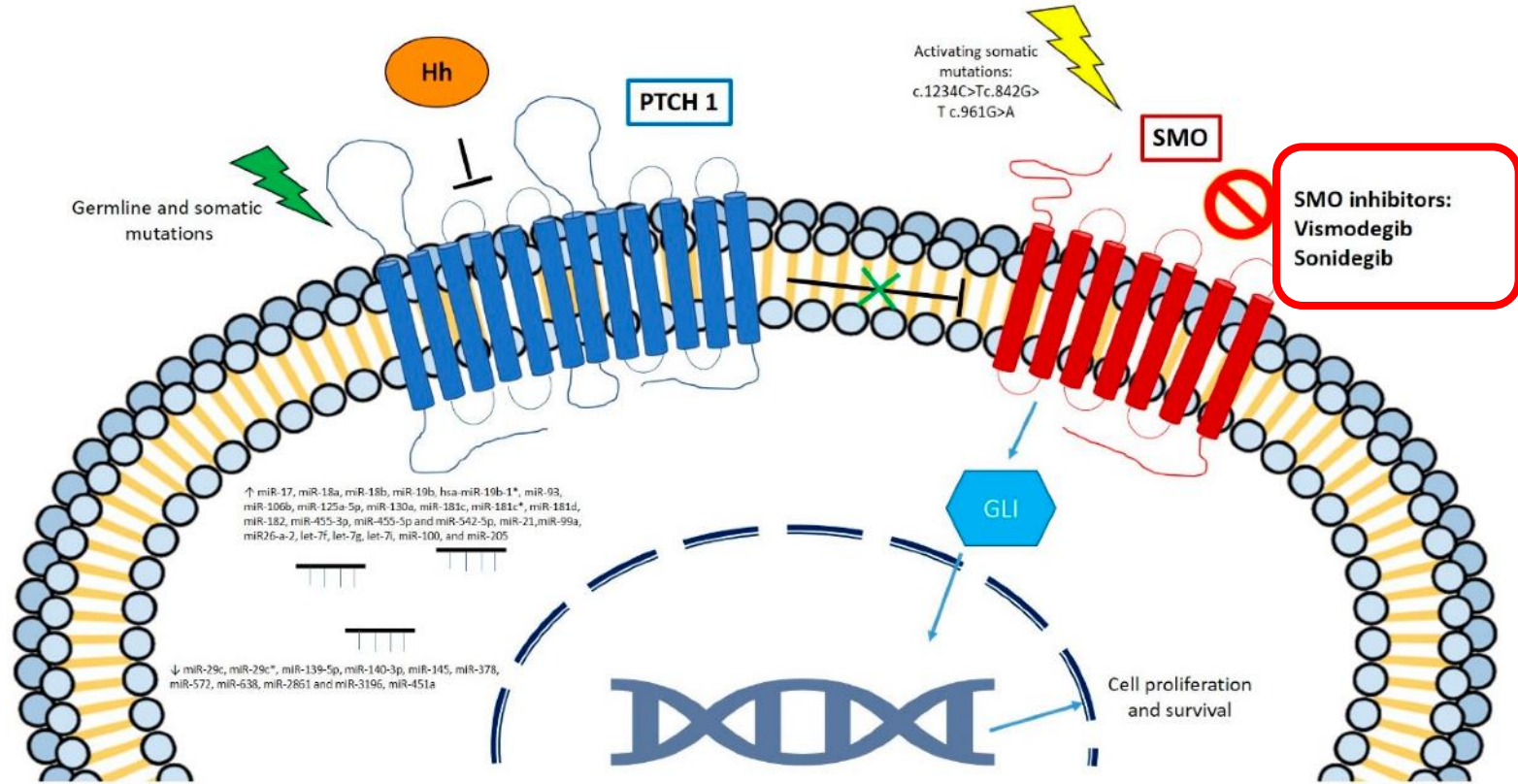
*JAMA Dermatol.* 2016;152(3):323-327. doi:10.1001/jamadermatol.2015.4233



PERCENTAGE OF BCC TUMORS HARBORING SOMATIC MUTATIONS IN GENE

■ Hippo-Yap ■ HH Pathway

COMMONLY MUTATED PATHOGENIC GENES IN BCC



ORR: 68.5%-locally advanced BCC  
36.9% -metastatic BCC

Adverse events!-31%