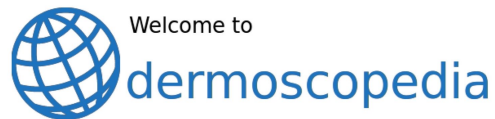


# Special Site Dermoscopy: **Mucosal**

*Ashfaq A. Marghoob, MD*  
*Attending Physician*



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# Mucosal

Glabrous portion of lips

Glabrous portion of genital skin

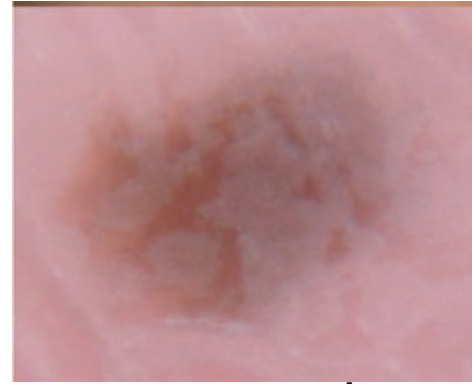
# Challenges - mucosal

- Few studies, all limited by sample size
- Studies use different methodologies and dermoscopic features; no consensus on nomenclature
- Malignant lesions in studies are usually patient-detected and/or advanced

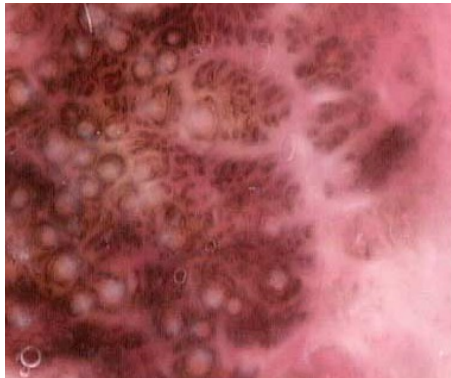
# Benign Patterns



Dots / globules



Structureless



Circles / half circles



Lines

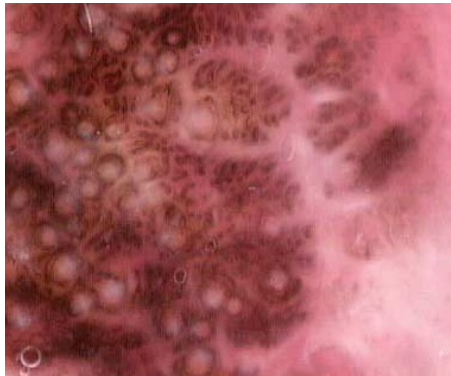
# Benign Patterns



Dots / globules



Structureless



Circles / half circles



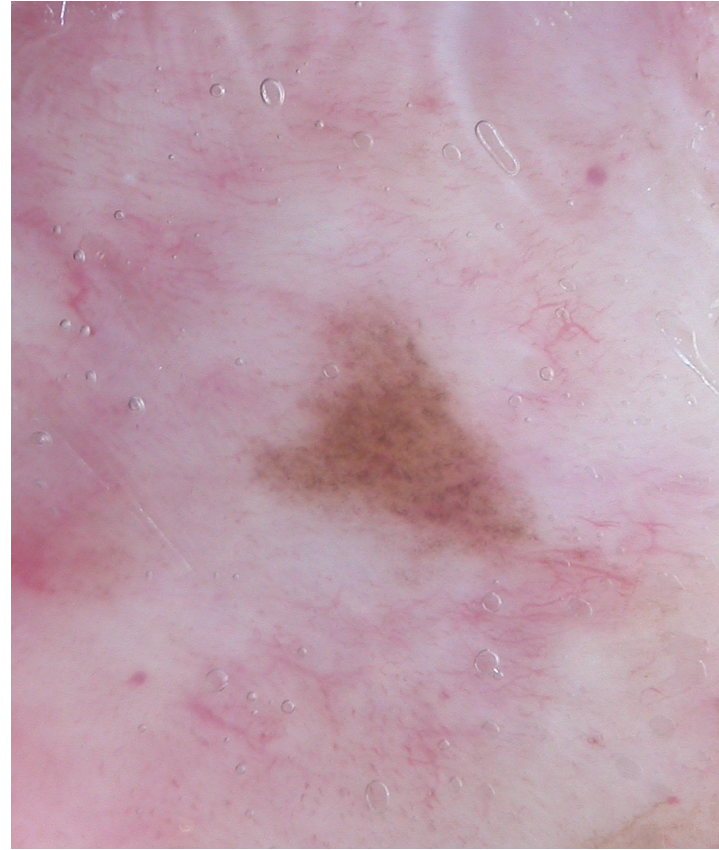
Lines

# Dots / Globules



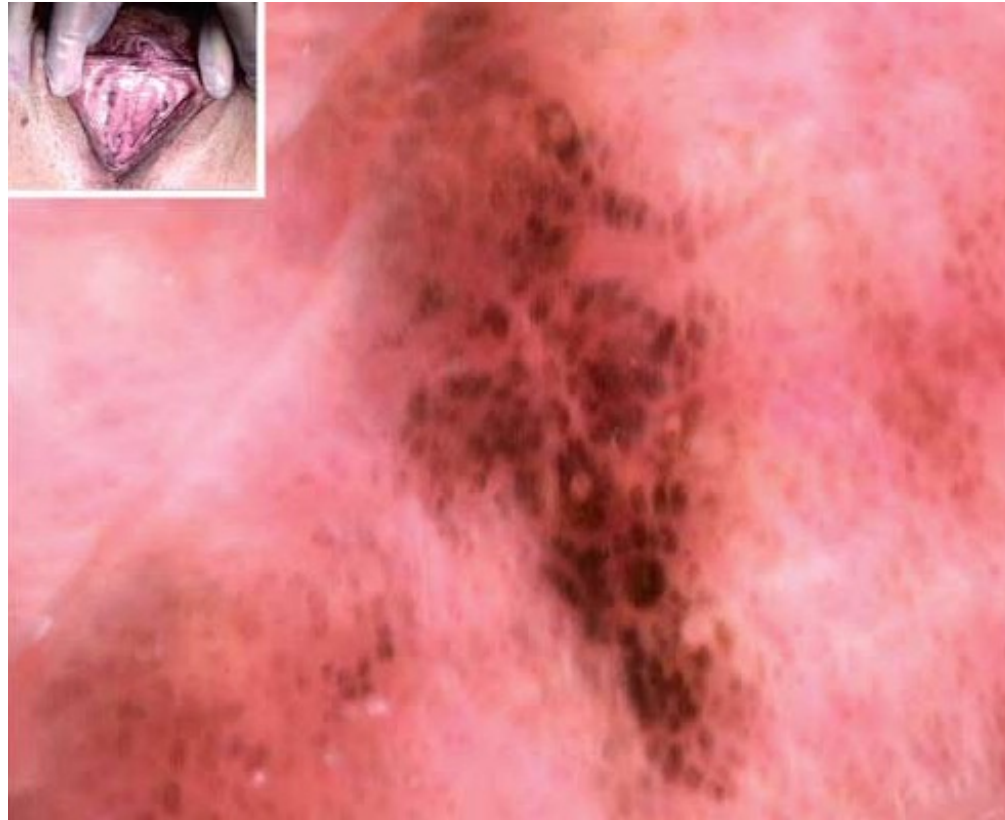
*Lin J et al, Br J Dermatol 2009*

## Dots / Globules



Lower lip

# Dots / Globules



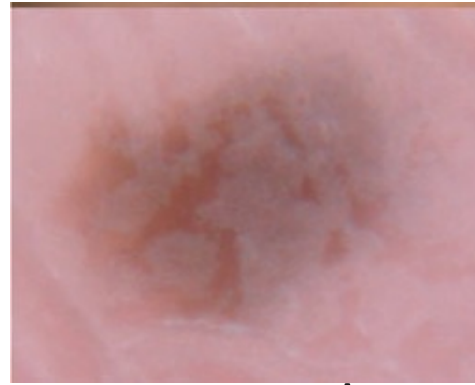
*Ferrari A et al, Arch Dermatol 2008*



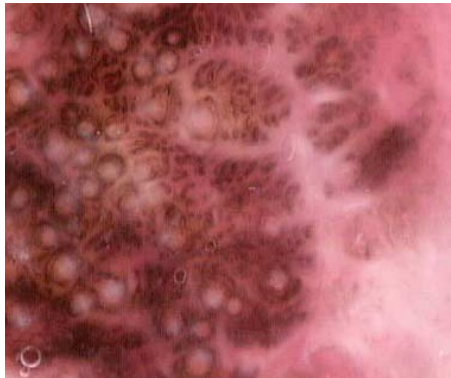
# Benign Patterns



Dots / globules



Structureless



Circles / half circles



Lines

# Structureless/Homogenous



*Lin J et al, Br J Dermatol 2009*



## Structureless – variant

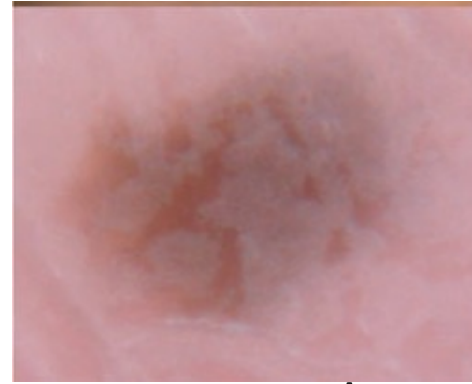


*Ferrari A et al, Arch Derm 2008*

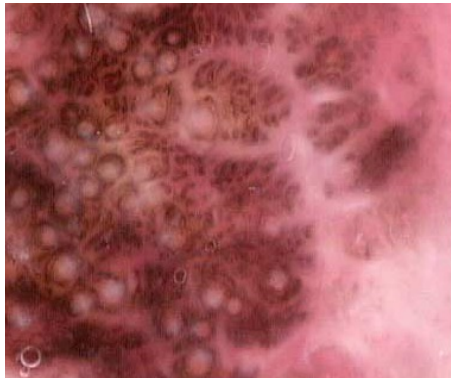
# Benign Patterns



Dots / globules



Structureless

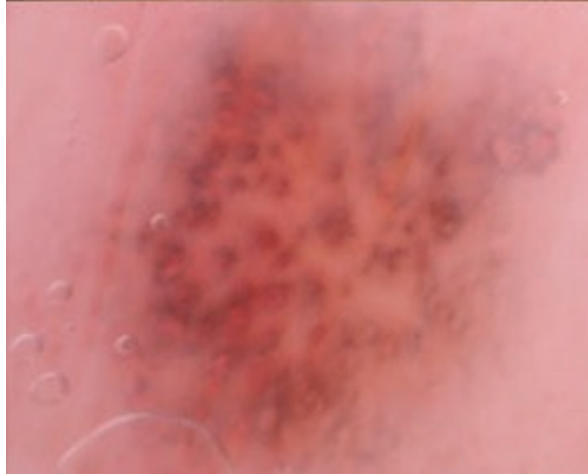


Circles / half circles



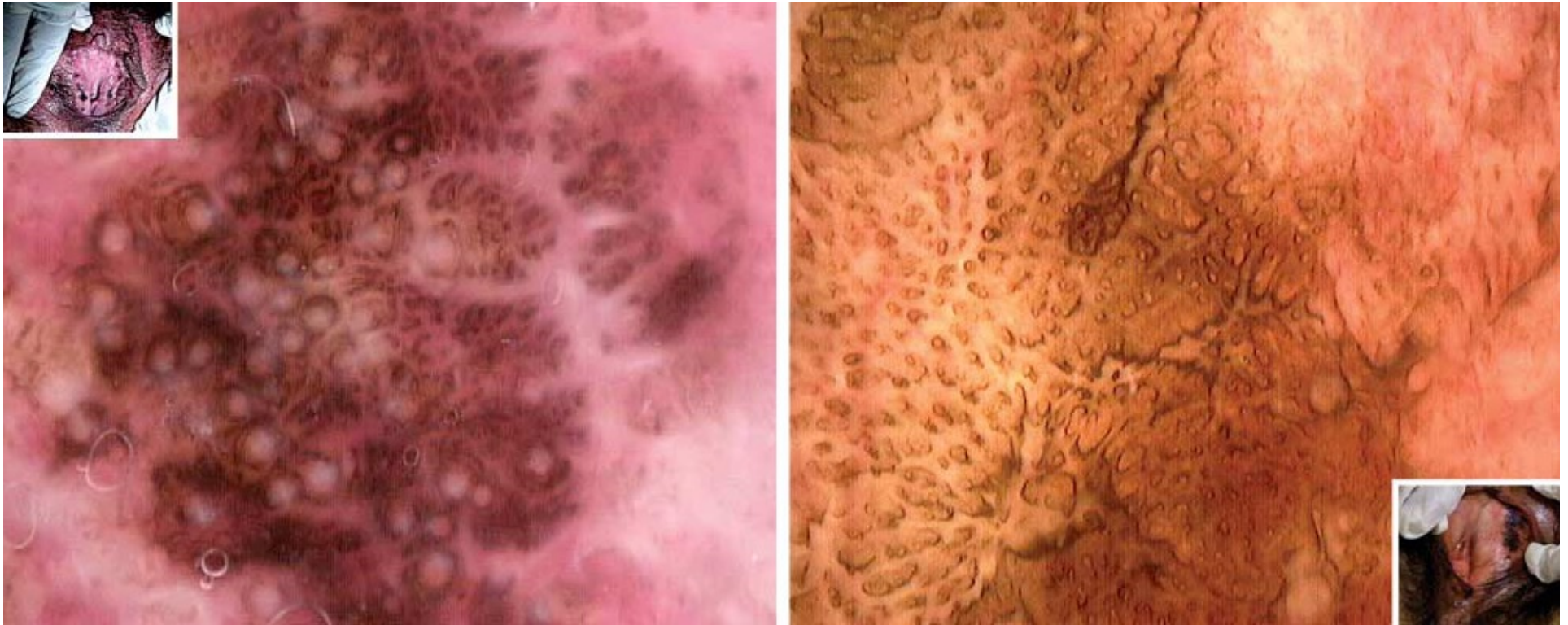
Lines

# Circles: Ring-like pattern



*Lin J et al, Br J Dermatol 2009*

# Ring-like pattern



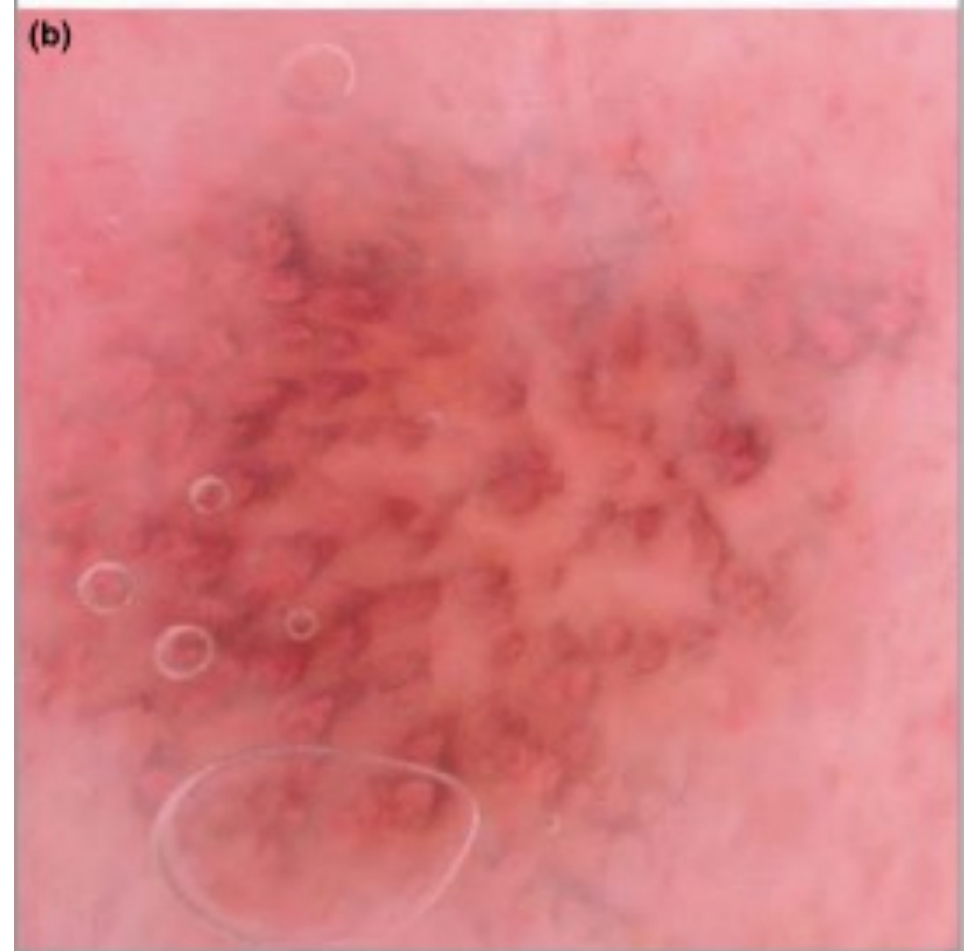
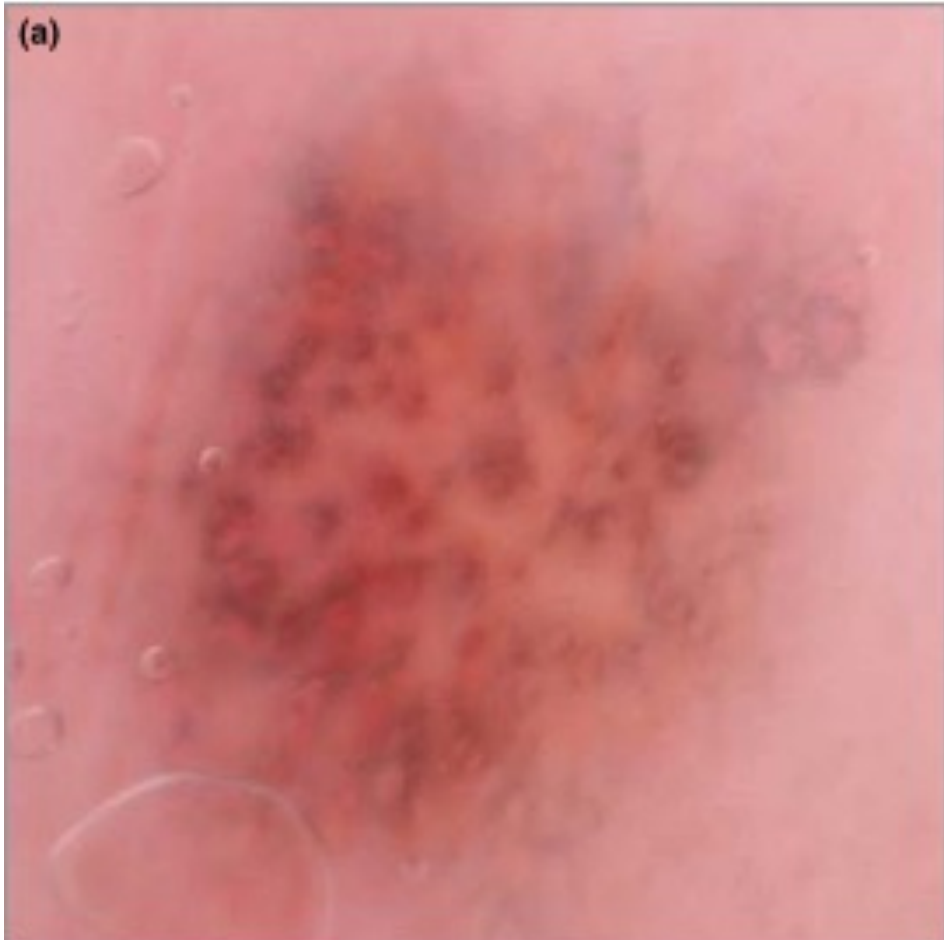
*Ferrari A et al, Arch Dermatol 2008*

Ring-like pattern variant  
(half circles = “fish-scale”)



*Lin J et al, Br J Dermatol 2009*





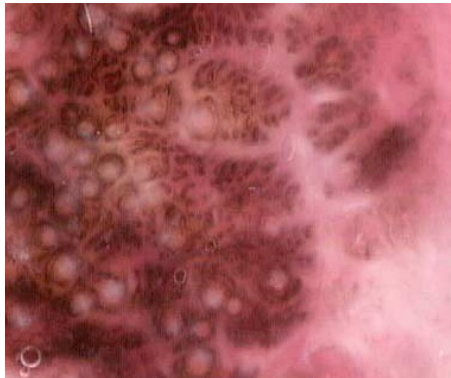
# Benign Patterns



Dots / globules



Structureless



Circles / half circles



Lines

# Lines: (parallel)

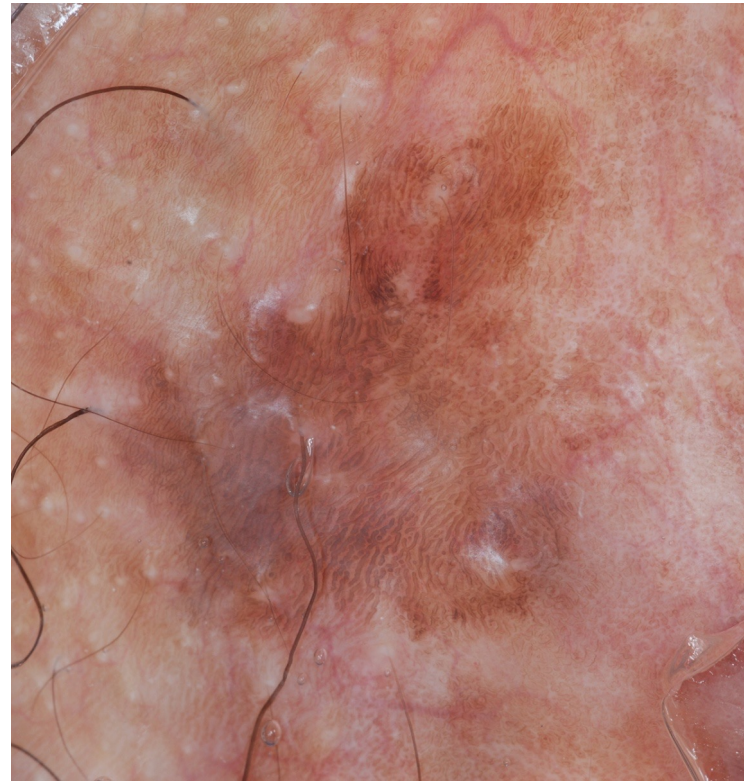


Fingerprint-like (parallel) pattern



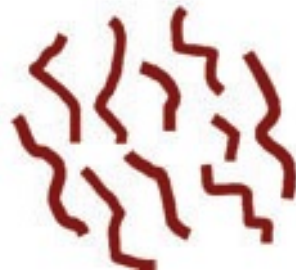
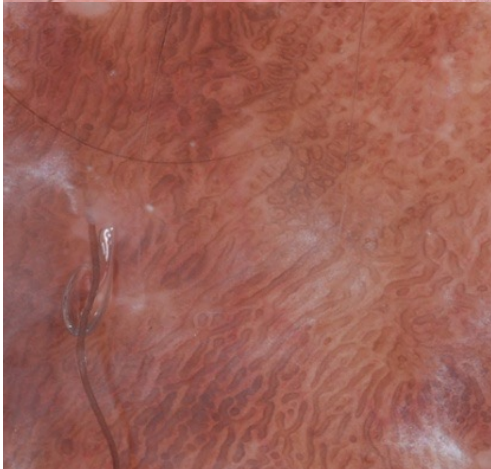
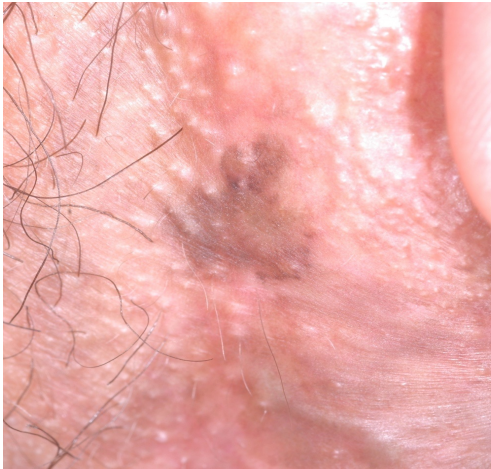
*Lin J et al, Br J Dermatol 2009*

## Lines: (parallel)



Vulva

Lines: (parallel)



## Lines: (reticular)



*Ferrari A et al, Arch Dermatol 2008*

# Accuracy of dermoscopy of mucosal lesions an IDS multi-centric study

## Best diagnostic model for melanoma–

- Presence of structureless zones inside the lesion
- +  
• Blue, gray, or white color (more than 2 colors)

100% sensitivity for melanoma and 82% specificity

*Blum A et al, Arch Dermatol 2011*







- Lines & structureless
- Blue-white & gray colors + brown, black





- Lines & structureless
- white & gray colors + brown, black

Special circumstances

# Genital lentiginos and melanocytic nevi with superimposed lichen sclerosus: A diagnostic challenge

Laila El Shabrawi-Caelen, MD,<sup>a</sup> H. Peter Soyer, MD,<sup>a</sup> Herwig Schaeppi, MD,<sup>b</sup>  
Lorenzo Cerroni, MD,<sup>a</sup> Carl G. Schirren, MD,<sup>c</sup> Christina Rudolph, MD,<sup>a</sup> and  
Helmut Kerl, MD<sup>c</sup>

*Graz and Dornbirn, Austria, and Darmstadt, Germany*

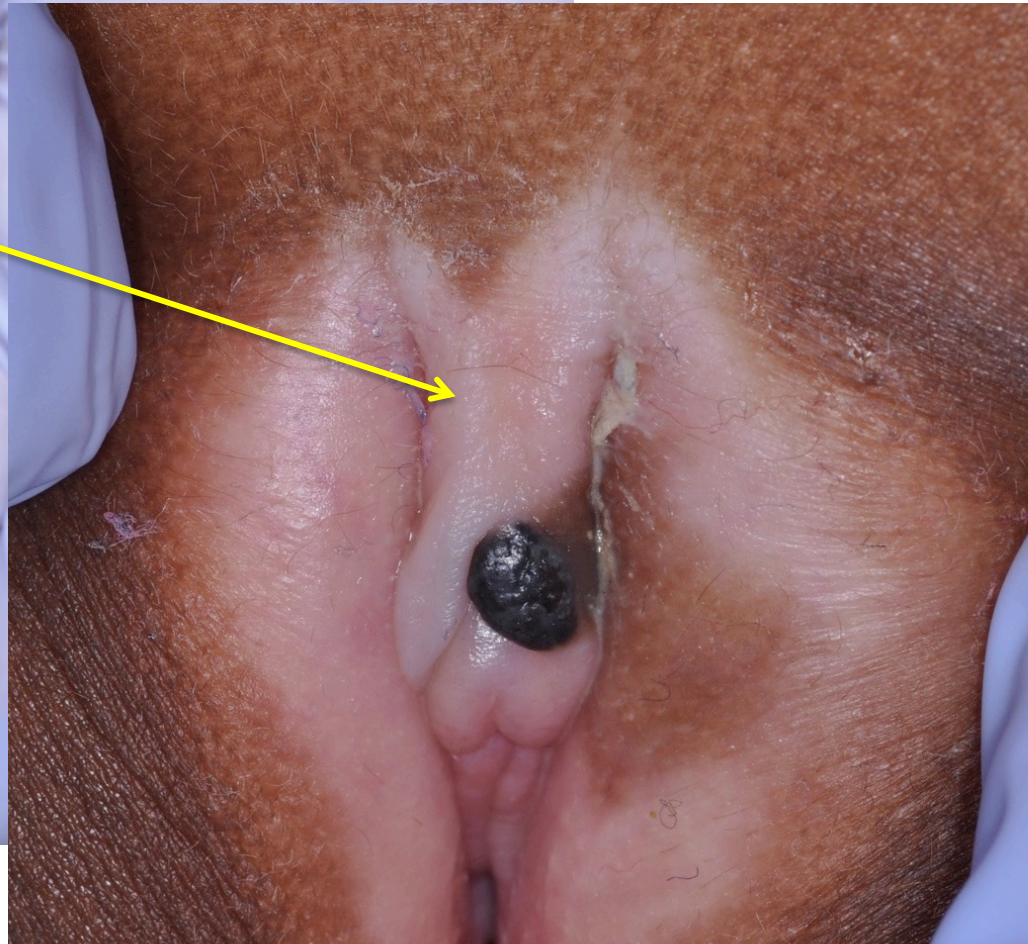
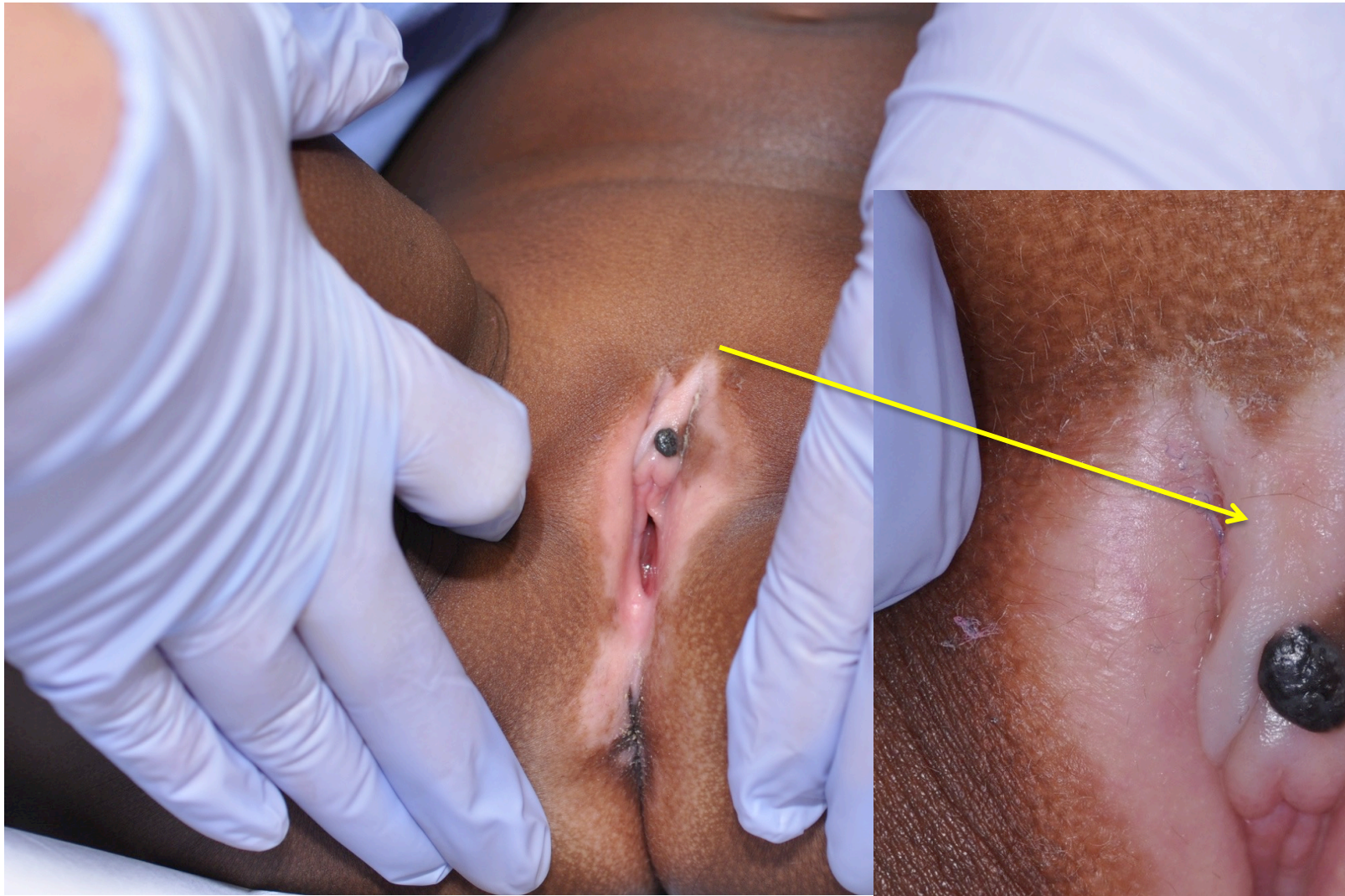
**Background:** Benign pigmented lesions of the genitalia, such as genital lentiginos and melanocytic nevi, often show clinical and histopathologic features highly suggestive of malignant melanoma (MM). Superimposed changes of lichen sclerosus (LS) may cause real concern and lead to an erroneous diagnosis of MM.

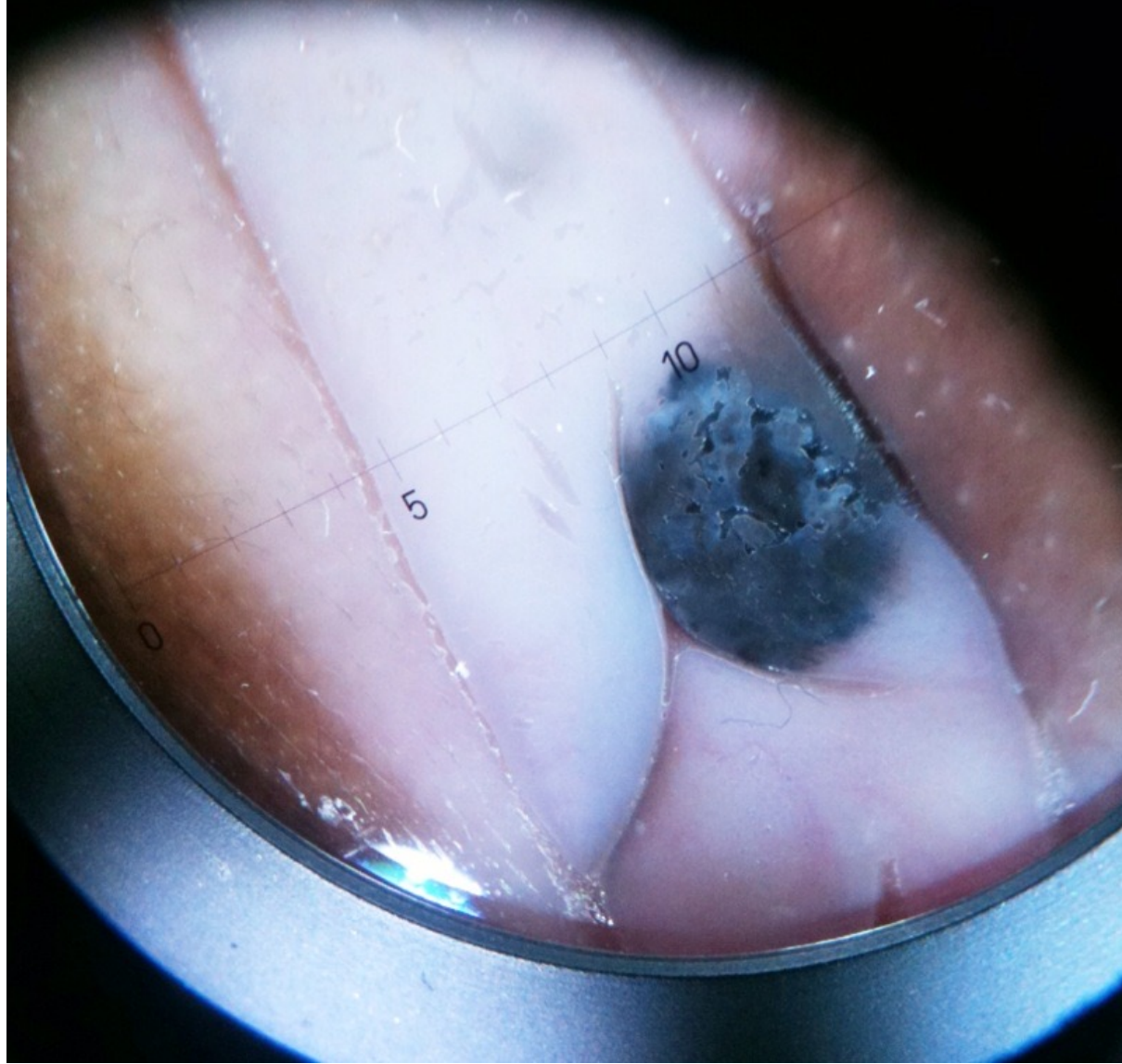
**Objective:** This study was performed to assess clinicopathologic characteristics of genital lentiginos and melanocytic nevi with associated LS.

**Methods:** We performed a retrospective review of 5 cases.

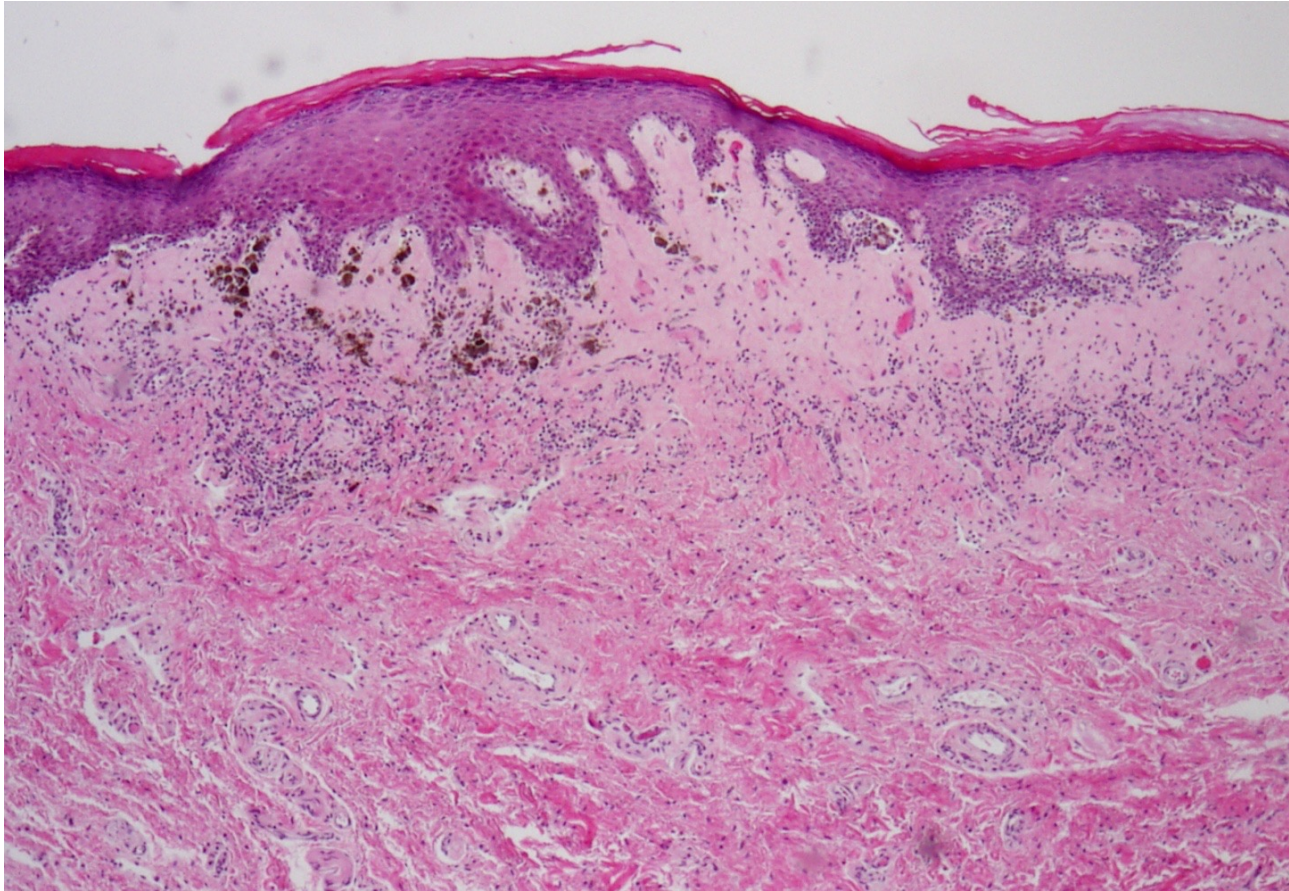
**Results:** Histopathologic sections of the 2 cases of genital lentiginos with concurrent changes of LS showed a lichenoid lymphocytic infiltrate and pigment incontinence with melanophages in a fibrosed papillary dermis, features reminiscent of completely regressed MM. The 3 cases of genital melanocytic nevi and superimposed LS were sharply circumscribed, relatively symmetric, but revealed confluent nests varying in size and shape and pagetoid upward spread of melanocytic nests and single melanocytes. Changes of LS extended beyond the melanocytic proliferation.

**Conclusion:** Genital lentiginos and melanocytic nevi with associated LS may show features that mimic MM. (J Am Acad Dermatol 2004;50:690-4.)



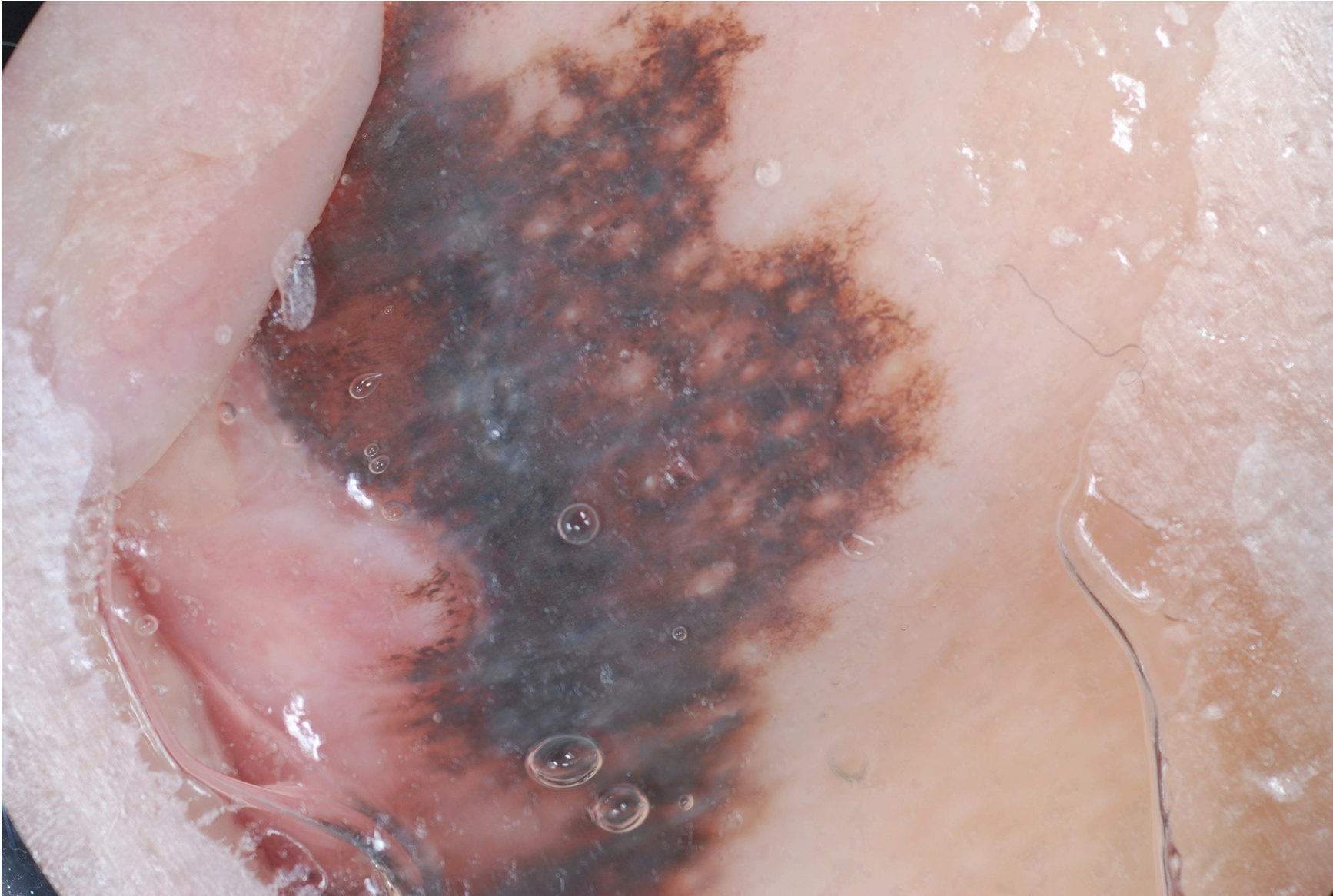


# Nevus in LS&A

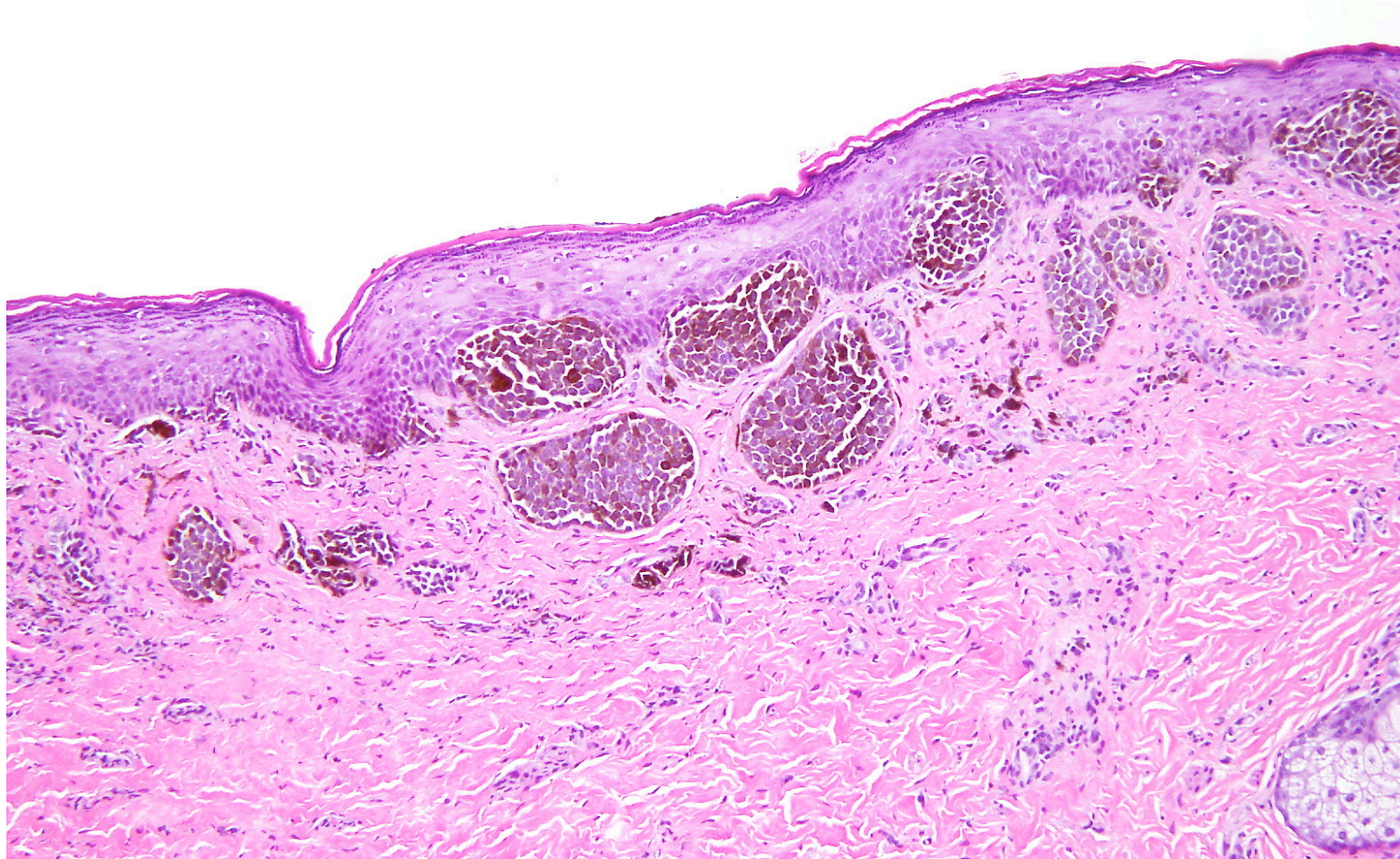








# Nevus in LS&A



# Challenges - mucosal

- Few studies, all limited by sample size
- Studies use different methodologies and dermoscopic features; nomenclature not universally accepted
- Malignant lesions in studies are clinically detected at late-stage

## Clinical and Dermoscopic Features of Vulvar Melanosis Over the Last 20 Years

Vincenzo De Giorgi, MD; Alessia Gori, MD; Lorenzo Salvati, MD; Federica Scarfi, MD; Pierandrea Maida, MD; Luciana Trane, MD; Flavia Silvestri, MD; Francesca Portelli, MD; Federico Venturi, MD; Piero Covarelli, MD; Daniela Massi, MD

Therefore, in a pigmented vulvar lesion, the presence of black and/or brown colors with a homogenous or nonhomogeneous arrangement and without red, gray, or blue colors and/or without typical dermoscopic parameters for melanocytic lesions allows for a diagnosis of vulvar melanosis with good diagnostic accuracy

**Table 1. Dermoscopic Features in 129 Cases of Melanosis**

Feature	No. (%)
Diffuse pigmentation (homogeneous or dishomogeneous)	97 (75)
Parallel pattern	19 (15)
Nonspecific pattern <sup>a</sup>	13 (10)
Ringlike pattern	19 (15)
Pigment network	0
Dots and globules	0
Pseudopods and streaks	0
Blue-white veil	0
Regression (gray-blue areas, white areas, or peppering)	0

**Table 2. Dermoscopic Colors in 129 Cases of Melanosis**

Color	No. (%)	Correlation with anatomical structures and histopathologic aspects
Black	77 (60)	Stratum corneum, melanin, and blood
Brown	129 (100)	Epidermis and melanin
Gray	9 (7)	Upper dermis and melanin
Blue	9 (7)	Deep dermis and melanin
Red	0	Dermis and vascularity
White	0	Depigmentation, scar, and regression
Yellow	0	Sebaceous material and hyperkeratosis
Orange	0	Erosion and ulceration

# Criteria for mucosal melanoma



- **Blue**, gray, or white color
  - Sensitivity: 100%; Specificity: 64.3%
- Asymmetric, disorganized appearance
  - Generally  $\geq 2$ -3 colors and  $\geq 2$  structures

DERMOSCOPY

Thank  
you!



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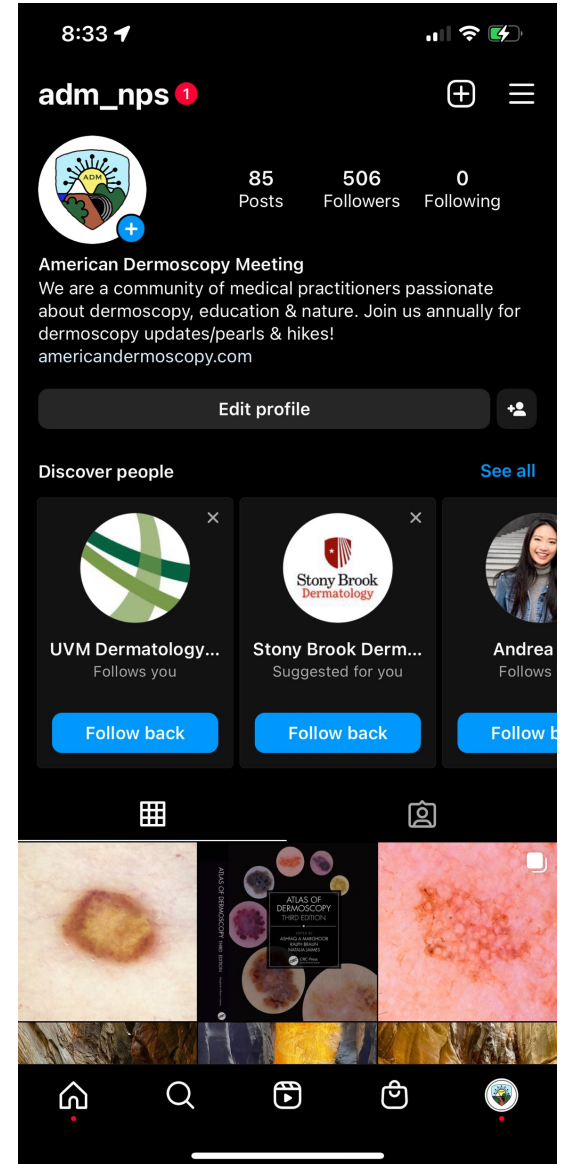
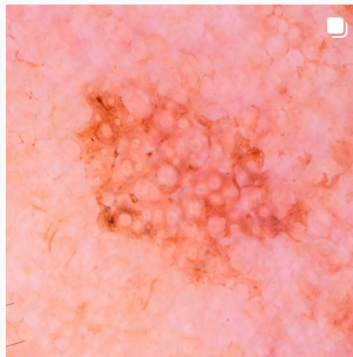
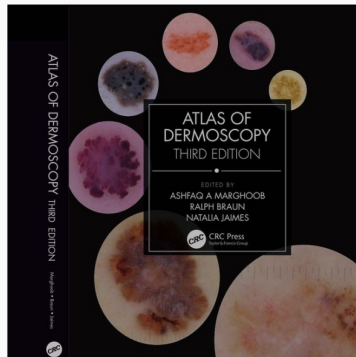
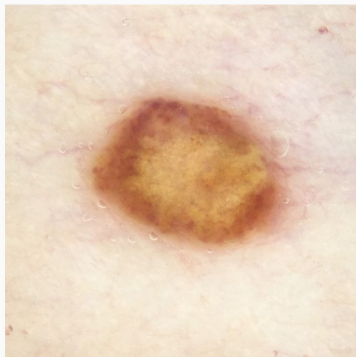


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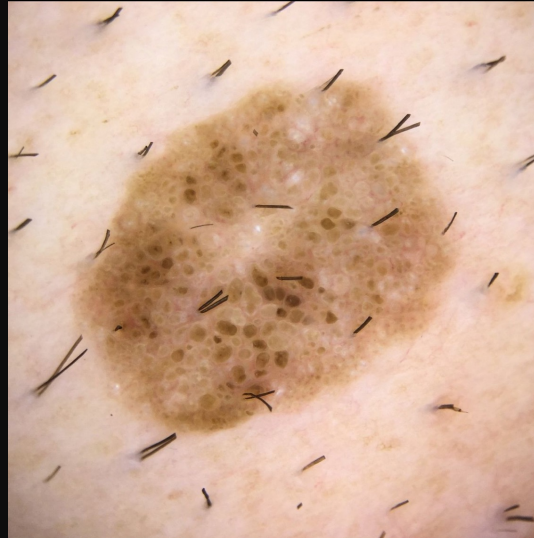
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**adm\_nps** Case #22: The differential diagnosis for this lesion is between globular pattern nevus and seborrheic keratosis. What simple bedside maneuver/test can help in the diagnostic process?

- A) Ink test
- B) Scratch test (Darier's sign)
- C) Pinch test (Fitzpatrick sign)
- D) Scratch sign (Besnier's sign)

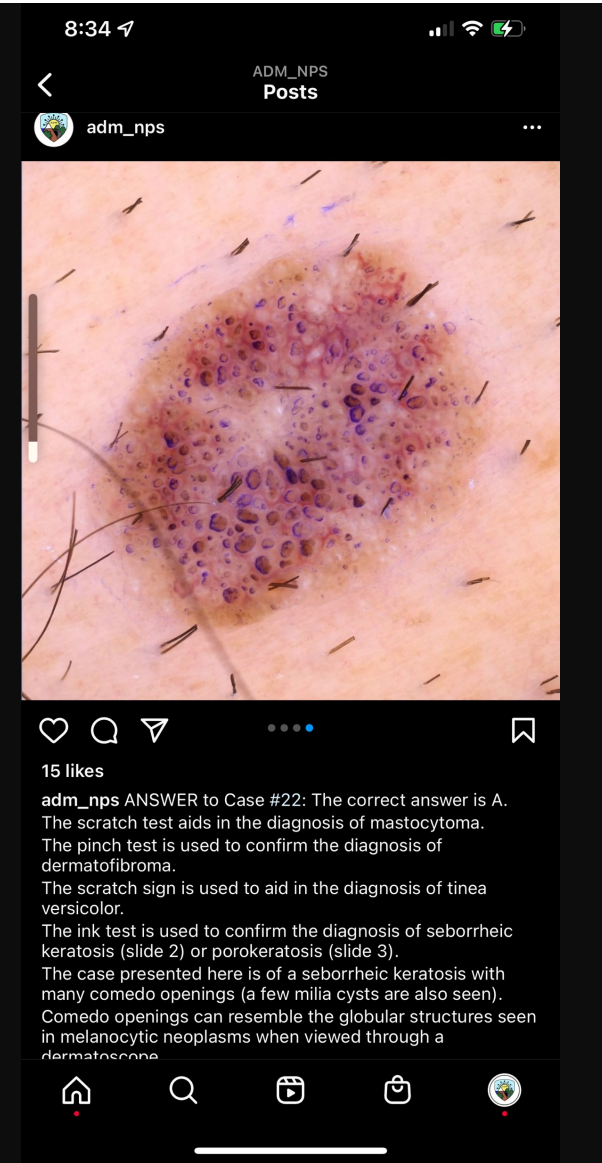
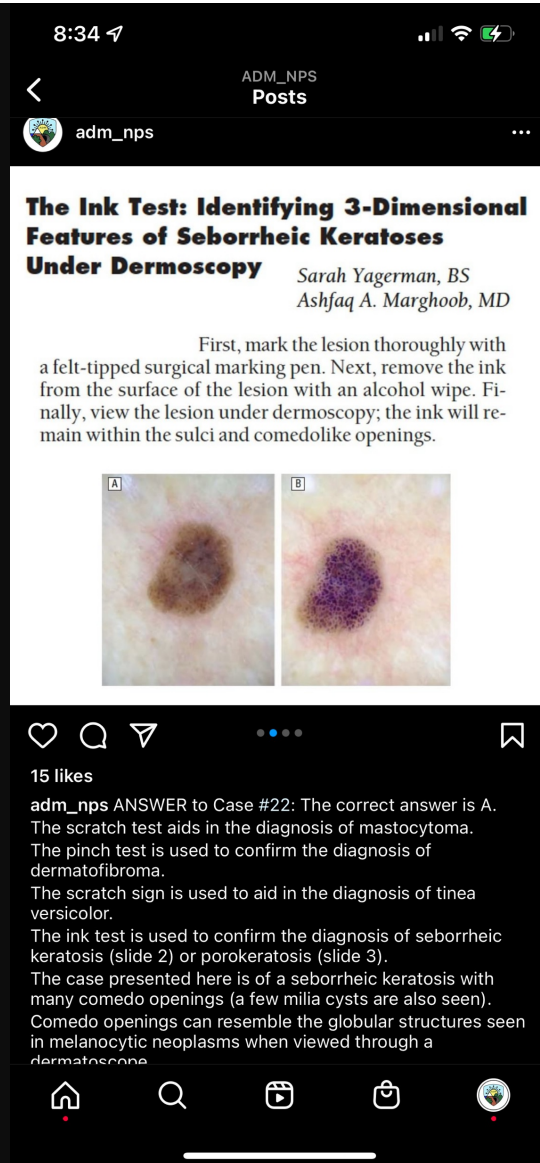
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**rusatine A.** or just feel the texture. The SK will be rough and elevated





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10:13



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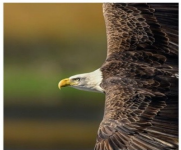
Ashfaq Marghoob

A Long Islander, I found photography, got lost along the way, then rediscovered it. Grateful for the beauty surrounding me. Let the adventure continue.

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