

# Dermoscopy of cutaneous melanoma metastasis

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## Background

CMM = cutaneous melanoma metastasis



Variety of clinical, histological and dermoscopic features



Recognition is important for:

- Staging
- Therapeutic management
- Prognosis

#### Epidermotropic

- Involving dermis and epidermis
- Can resemble in situ melanoma histologically
- Up until now, naevus-like or blue-naevus like dermoscopic patterns are reported <sup>1-3</sup>

#### Dermotropic

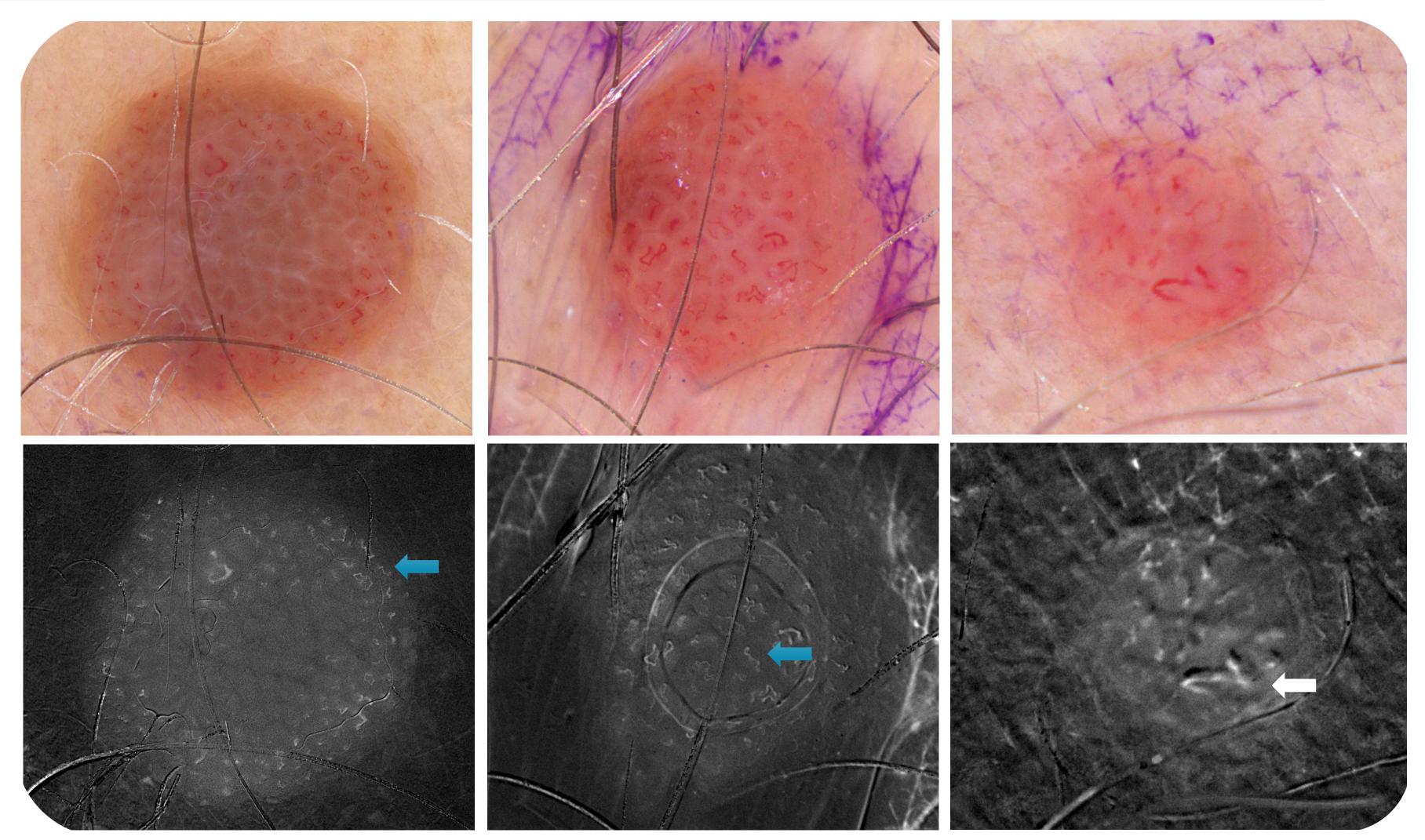
- Most frequent
- Involving dermis and subcutaneous tissue

#### Aim

To report dermoscopic features, according to dermal, epidermal involvement and prognostic parameters.

### Methods

- Retrospective observational study of 24 CMM
  lesions in 8 patients (April 2019 October 2021)
- White light and multispectral dermoscopic images, metadata (time between primary melanoma and metastasis, histology, BRAF mutation, Breslow and type of primary melanoma) were investigated with cluster analysis using SPSS v28.



Top row: White light images of 3 epidermotropic CMMs. Bottom row: multispectral images (blood maps) highlight vasculature of CMMs. Blue arrow: corkscrew vessels; white arrow: polymorphous vessels

### Results

Relapse time

Primary melanoma Breslow

Primary melanoma type

BRAF

Histology CMM

Dermoscopic type CMM

N = 322 months

1.95 mm

SSMM

Epidermotropic

Vascular (linear irregular, corkscrew and/or irregular polymorphous vessels)

N = 10

30 months

1.76 mm LMM (n=3)

SSMM (n=7) + (n=8)

- (n=2)

Dermotropic

Naevus like (n=8) Blue naevus (n=2) N = 7

199 months

1.02 mm

SSMM

Dermotropic

Naevus like

N = 4

19 months

5.5 mm

NMM

Unknown

Blue naevus (n=3) Angioma like (n=1)

### Conclusion

- We assessed clinical, histological and dermoscopic findings in 4 groups using cluster analysis in 24 CMM lesions in 8 patients. To our knowledge, this is the first research reporting on epidermotropic melanoma metastasis with a vascular dermoscopic pattern.
- Further research on larger groups of CMM is warranted for correlation between histology, dermoscopic pattern and primary melanoma type.

### References

- 1. Plaza JA, Torres-Cabala C, Evans H, Diwan HA, Suster S, Prieto VG. Cutaneous metastases of malignant melanoma: a clinicopathologic study of 192 cases with emphasis on the morphologic spectrum. Am J Dermatopathol 2010; 32: 129–136. 15
  - Lestre S, Joao A, Ponte P et al. Intraepidermal epidermotropic metastatic melanoma: a clinical and histopathological mimicker of melanoma in situ occurring in multiplicity. J Cutan Pathol 2011; 38: 514–520.
- 3. Farnetani F, Manfredini M, Longhitano S, et al. Morphological classification of melanoma metastasis with reflectance confocal microscopy. J Eur Acad Dermatol Venereol. 2019 Apr;33(4):676-685. doi: 10.1111/jdv.15329. Epub 2018 Dec 4. PMID: 30394598.