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Multiple primary thick melanomas: similar dermoscopic pattern

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It has been observed that a patient's "normal" moles resemble each other clinically. This concept also applies to dermoscopic observations, as shown by our previous demonstration that an individual's nevi tend to have one to three predominant overall dermoscopic patterns [1].

A recent study investigated and compared the dermoscopic patterns of multiple primary melanomas (MPMs) in a large series of patients [2]. The authors showed that MPMs of elderly patients with sun-damaged skin were often dermoscopically similar in pigment network and regression structures. This observation is intriguing because it suggests that a rule valid for the nevi of an individual (all nevi have a similar dermoscopic pattern, typical or otherwise), may also be valid for melanomas: i.e., in a given individual, melanomas in similar anatomical sites have similar dermoscopic patterns [3]. However, the authors mainly assessed thin melanomas and admitted this as a limitation of their study: "Thin and superficial spreading melanomas were predominant in our study population."

In the last five years we had the opportunity of observing five patients over 70 years of age with multiple melanomas (multifocal), thicker than 2 mm, located in photo-damaged areas (Figure 1-4) (Table 1). We evaluated the dermoscopic images of these pigmented skin lesions retrospectively. The images were taken using a photo camera equipped with a polarized contact dermoscope (DermLite® Photo 3Gen, San Juan Capistrano, CA, US). All images were analyzed by an expert dermoscopist (P.R.). Lesions were evaluated for eight dermoscopic features, as reported in Table 1.

As suggested by Moscarella et al. [2], similar appearance was defined as the same dermoscopically detected features with similar scores and/or with a difference in only one minor feature (a feature present in less than 10% of the lesion). Different appearance was defined as different dermoscopically detected features with different scores in all melanomas of a given patient. Features in a given lesion were quantified as present in < 10%, 10-50% and > 50% of the lesion.

Five patients (3 males) with a total of 12 melanomas were collected from the databases of three skin clinics. Age ranged from 70 to 84 years (mean 76.6 years). Three patients (60%) had two, and two patients (40%) had three primary melanomas. Mean Breslow thickness was 2.8 mm.

As reported in Table 2, in all our cases, the melanomas of a given patient shared very similar dermoscopic features and scores (Table 2) (Fig 1 a, b, c). We classified patients as having melanomas with similar or different dermoscopic features on

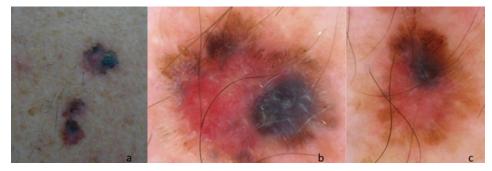


Figure 1. (a) Clinical appearance of two similar synchronous melanomas occurring on the back of a 77-year-old man; (b & c) Dermoscopic images of the melanomas: Breslow thickness 3.1 mm (b) and 2.2 mm (c). The lesions had the same dermoscopic features: atypical pigmented network, regression structures (chrysalis), eccentric globules, atypical vascular pattern and blue/white veil. [Copyright: ©2014 Feci et al.]



Figure 2. (a) Clinical appearance of two similar synchronous melanomas occurring on the back of a 74-year-old man; (b & c) Dermoscopic images of the melanomas: Breslow thickness 3.8 mm (b) and 2.4 mm (c). The lesions had the same dermoscopic features characterized by blue/white veil, structureless areas and regression structures. [Copyright: ©2014 Feci et al.]

the basis of lesion scores. In particular, 4/5 patients (80%) showed melanomas that were dermoscopically similar, and 1/5 (20%) had melanomas that were dermoscopically different.

In line with the experience described in Moscarella et al., our results suggest that the principles valid for nevi of a given individual (all nevi have similar dermoscopic pattern, typical or otherwise) might also be valid for thick and thin melanomas [3]. However, thick melanomas may tend to be similar by nature. Although our case series is too small for any statistical analysis, our preliminary results seem to corroborate the results of Moscarella and colleagues.

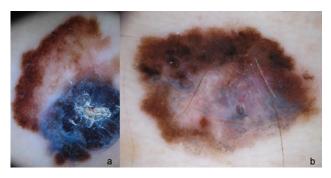


Figure 3. Two similar melanomas occurring one on the back (a) and one on the left lower leg (b) of a 70-year-old woman; (a & b) Dermoscopic images of the melanomas: Breslow thickness 3.5 mm (a) and 2.7 mm (b). The lesions had the same dermoscopic features characterized by blue/white veil, structureless areas and regression structures. [Copyright: ©2014 Feci et al.]

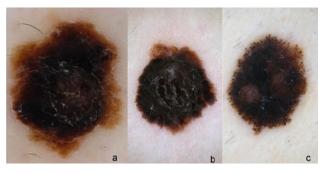


Figure 4. Three similar melanomas occurring two on the back (a, b) and one on the right lower leg (c) of a 78-year-old man; (a, b, c) Dermoscopic images of the melanomas: Breslow thickness 3.0 mm (a), 2.2 mm (b) and 2.4 mm (c). The lesions had the same dermoscopic features characterized by blue/white veil, structureless areas, streaks and peripheral globules more evident in Figures b and c. [Copyright: ©2014 Feci et al.

Dr. Pietro Rubegni provided substantial contributions to conception and design, acquisition of data, and analysis and interpretation of data; Dr. Luca Feci and Dr. Pietro Rubegni drafted the article and revised it critically for intellectual content; Prof. Michele Fimiani provided final approval of the version to be published.

Name	Sex	Age (years)	Location	Type of melanoma	Thickness of melanoma (mm)
A.M.	М	77	1) Trunk 2) Trunk	 1) Invasive superficial spreading melanoma 2) Invasive superficial spreading melanoma 	1) 3.1 2) 2.2
L.R.	М	74	1) Trunk 2) Trunk	1) Nodular melanoma 2) Nodular melanoma	1) 3.8 2) 2.4
N.F. M.M.	F	70	1) Trunk 2) Lower leg 1) Trunk	 Invasive superficial spreading melanoma Invasive superficial spreading melanoma Invasive superficial spreading 	1) 3.5 2) 2.7 1) 3.1
			2) Trunk 3) Upper harm	 melanoma 2) Invasive superficial spreading melanoma 3) Invasive superficial spreading melanoma 	2) 3.0 3) 2.2
C.R.	М	78	1) Trunk 2) Trunk 1) Lower leg	 Invasive superficial spreading melanoma Invasive superficial spreading melanoma Invasive superficial spreading melanoma 	1) 3.0 2) 2.2 3) 2.4

TABLE 1. Dermographic data of the patients [Copyright: ©2014 Feci et al.]

TABLE 2. Evaluation and scores of the dermoscopic features [Copyright: ©2014 Feci et al.
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% of the feature	Network (%)	Inverse network (%)	Regression structures (%)	dots/ globules (%)	Structureless (%)	Vascular pattern (%)	Blue/ white veil (%)	Streaks (%)
< 10%	6 (42.8)	2 (14. 2)	1 (8.3)	3 (21.4)	1 (8.3)	2 (14.2)	0	5 (35.7)
10-50%	4 (28.6)	0	6 (50)	1 (7.1)	5 (41.7)	6 (42.8)	3 (25)	2 (14.2)
> 50%	0	0	5 (41.7)	0	6 (50)	5 (35.7)	9 (75)	0
Total	10 (71.4)	2 (14.2)	12 (100)	4 (28.6)	12 (100)	13 (92.8)	12 (100)	7 (50)

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