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Ringlike pattern as a dermatoscopy sign for vulvar melanosis does not preclude synchronous existence of vulvar melanoma

Ringlike pattern in vulvar melanoma

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Editor,

Vulvar melanoma (VM) accounts for 1-3% of all melanoma arising in women with poor long-term clinical outcome.^{1,2} VM can be uni- or multifocal.³⁻⁵ Multifocality is defined as multiple foci of melanoma separated by intact epithelium, or arising on follow-up, outside the vicinity of the surgical scar.⁶ Total of 66% of the patients had more than one focus of melanoma, either apparent at their initial diagnosis or developed during follow-up.⁶ There were only 25 cases of dermatoscopy of VM published so far, where blue, grey or white colour plus structureless zones, multicomponent patterns with irregular dots/globules, blue-white veil and atypical vessels were highly predictive for melanoma.^{1,3,4,5,7,8} Ringlike pattern is considered to be the frequent finding and the clue for vulvar melanosis, the most common clinical impersonator of VM,^{1,3,4,7} reassuring feature suggestive of benign process,⁷ not associated with melanoma and naevi.³ No dermatoscopy of recurrent VM has been published, to date.

A 41-year-old woman was referred for dermatoscopy examination after being diagnosed with invasive vulvar melanoma. Vulvar pigmentation had been noticed two years ago; first biopsy diagnosed genital melanocytic naevus. The pigmentation spread to both sides of labia minora, indicating second biopsy of the raised anterior part of the right labia minora. Melanoma Breslow 2.5 mm thickness, 4 mitoses/mm², was diagnosed. The patient did not approve radical vulvectomy. Adequate excisions and sentinel lymph node biopsy (SLNB) with double contrast (Tc⁹⁹colloid and methylene blue dye) were performed. Melanoma with different Breslow thickness was measured: from *in situ* to 0.72 mm. SLNB was negative. After five months, she underwent conservative surgery for her invasive ductal-

lobular breast cancer with negative SLNB, (pT1, pN0, M0). Radiotherapy and hormone therapy (goserelin and tamoxifen) were included. After 17 months, gynaecologist referred the patient for the irregular pigmentation on the right part of the vulva. Examination also revealed slightly pigmented 4 mm nodule on the contra lateral side (Fig. 1). Dermatoscopy was performed (equipment: DermLite Hybrid 3GEN, San Juan Capistrano, CA, USA coupled with Nikon J1 camera (Nikon corporation, Tokyo, Japan)) (Fig. 2a,c). Biopsies revealed melanoma, Breslow 2.25 mm, diagnosed in a small nodule on the left side of the vulva (Fig. 2b). The ringlike pigmentation showed features of vulvar melanosis (Fig. 2d). Again, the patient did not approve radical vulvectomy and the clitoral portion was spared. The histology revealed melanoma *in situ* in some parts of the removed tissue, no malignancy in two clitoral biopsies and the presence of atypical melanocytes on the resection margins for which adjuvant course of 5% topical imiquimod was prescribed.⁹ The patient has been free of recurrences for three years, with good quality of life.

Dermoscopic features of mucosal melanoma may not display high sensitivity for early melanoma.¹ Although vulvar melanosis is a benign lesion, its correlation with mucosal melanoma is still under debate.¹⁰ Multifocality is a common characteristic of both vulvar melanosis¹⁰ and VM.⁶ The ringlike pattern is the most frequent finding (82%) associated with vulvar melanosis with multifocal aspect.¹⁰ According to our opinion, the ringlike pattern in recurrent VM could be the sign of multifocal process that warrants careful examination of the whole vulva, not to miss VM recurrence in adjacent parts of the pigmented lesion. VM recurrence at the location diagonal to the thickest part of the initial tumour supports the concept of mucosal VM as a multifocal disorder, and suggests that VM is a consequence of “field effect” in affected women.⁶ Even normal-appearing mucosa often harbours atypical lentiginous melanocytic hyperplasia.⁶ As 70.4% of gynaecological melanoma are wild type²,

emerging targeted therapies have limitations in VM, thus raising the importance of dermatoscopy follow-up and early detection of local recurrences.

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FIGURE LEGENDS:

Figure 1: Clinical evaluation imaging has been performed 17 months after the vulvar melanoma surgery and 5 months after the breast cancer diagnosis: Irregular pigmentation around the surgical scar (black arrow) and a small 4 mm-nodule (white arrow) on the opposite side of the vulva were found.

Figure 2: (a) Dermatoscopy of a small nodule depicted on Figure 1 with white arrow: irregular shape of the nodule with asymmetry of the pigment (brown and grey) in two axes, and white linear scar-like structures; tumour blood vessels are atypical with irregular shape and diameter; (b) Histopathology of the same part of the lesion revealed melanoma in vertical growth phase with blood vessels inside the tumour and at the tumour base (haematoxylin & eosin, x40); (c) Dermatoscopy of the pigmentation depicted with the black arrow on the Figure 1: ringlike pattern (multiple round to oval structures), light to dark brown, with hyperpigmented well-defined regular borders (inset) arranged in grape-like manner in some areas; two shades of brown colour make asymmetry (d) Histopathology of the ringlike pattern-area shows hyperpigmented, elongated and widened rete ridges (arrows) with “skip” areas without increased pigmentation in suprapapillary plates (asterisks); “skip” areas correspond to the central hypopigmented part of the ringlike pattern, whereas hyperpigmented rete ridges correspond to pigmented rings. (haematoxylin & eosin, x200).