Melanocytic dysplasia and multiple melanoma of the vulva

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Summary

We report a case of a 24-year-old woman with multiple pigmented lesions on her vulva. Histologically the lesions showed a heterogeneous pattern: the majority consisted of melanoma in situ and invasive melanoma; in a few lesions a much less clear-cut picture was found with only melanocytic dysplasia of various degrees.

Our case shows the relationship between anomalous melanocytic proliferation of the vulva and vulvar melanoma and underlines the necessity of a thorough check of all melanocytic vulvar lesions also in young patients.

Key words: Vulvar multiple melanoma; Vulvar melanocytic dysplasia; Melanoma precursors.

Case Report

Clinical inspection of a 24-year-old patient revealed numerous flat pigmented lesions scattered all over the vulva (Figure 1). The lesion was excised and the histological examination revealed melanoma in situ.

Radical vulvectomy was performed and a heterogeneous histological picture was found:

- the majority of the lesions were melanoma in situ with a proliferation of strikingly atypical melanocytes aligned in a lentiginous array along the basal layer (Figure 2);
- on the clitoris a melanoma 7 mm in thickness was present; cells were highly atypical and mitoses were numerous;
- a few lesions showed only melanocytic dysplasia ranging from mild (Figure 3) to severe (Figure 4). Enlarged melanocytes were aligned along the junction in a lentiginous pattern, nuclei were not hyperchromic and mitosis or cellular necrosis was not found. Only occasional melanocytes were present above the junction.



Figure 1. — Clinical picture. Multiple flat pigmented lesions on the labia, clitoris and introitus.

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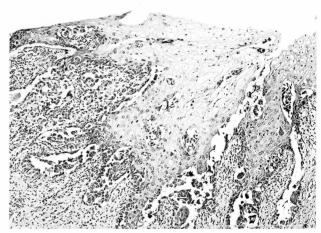


Figure 2. — Melanoma in situ and invasive melanoma. A proliferation of strikingly atypical melanocytes substitutes the lower most portion of the vulvar epithelium. This pattern is that of a melanoma in situ. In one border a few melanocytes infiltrate the superfical dermis. An extensively invasive melanoma of 7 mm in thickness was found in the clitoris.

Discussion

Our case allows us to make a few considerations.

- First of all we confirm that vulvar melanoma can be multiple [1, 2] and can also occur in young premenopausal patients. So far multiple vulvar melanoma has been reported only in postmenopausal [3, 4] women and this is the first case reported in a young woman.
- Although the majority of the lesions resulted to be plain melanoma in situ or invasive melanoma, a consistent number of lesions had a much less clearcut picture. Figures 2 and 3 illustrate a quite subtle pattern which can be labelled quite differently according to the different school of thought. The most appropriate definition is probably melanocytic lentiginous proliferation with slight to severe dysplasia. A straightforward melanoma could in fact have been diagnosed based only on cellular size of

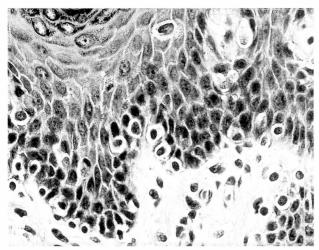


Figure 3. — Slight melanocytic dysplasia. An evident increase in the number of melanocytes with a clear perinuclear halo is evident in this lesion. Cells are mostly typical. Although different diagnoses are possible, the definition of slight melanocytic dysplasia in a lentiginous pattern seems the most appropriate.

the basal melanocytes and the presence of cells above the dermoepidermal junction: these are expected findings in nevi of the genitalia. The lesions can not be defined as nevi of any type because discrete junctional nests of melanocytes are absent.

The very coincidence of these foci of multiple dysplastic melanocytic lentiginous proliferation with melanomas scattered all over the vulva suggests that melanocytic vulvar lentiginous dysplasia can act as precursor of vulvar melanoma [4].

– Our finding indicates that in multiple pigmented lesions of the vulva, a heterogeneous pattern can be found as it happens in the oral cavity [5] and that the nature of all the lesions can not be inferred from the morphology of a single one, and a lesion with only dysplasia can be a few centimeters apart from a melanoma. Consequently when multiple melanocytic vulvar lesion are present all of them should be histologically controlled, also in a young patient.

Conclusion

In conclusion we underline that melanocytic dysplastic lesions of the vulva can be suspected as precursors of vulvar melanoma and their supposed benign nature is at least questionable. Moreover we stress the fact that a multiple melanoma is possible also in a young patient and that the heterogeneous histological pattern make a thorough study of all the lesions mandatory.

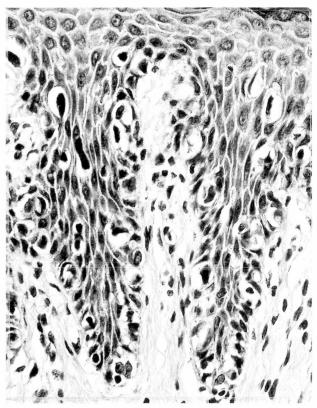


Figure 4. — Severe melanocytic dysplasia. The picture in the majority of the lesions was that of severe melanocytic dysplasia-melanoma in situ. The proliferative pattern is lentiginous with no nests of cells at the dermo-epidermal junction.

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