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Research Communication

Dysplastic Nevus: A Fake Lesion?

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The story of "dysplastic nevus" dates as far back as 1978 when W.H. Clark and colleagues [1] reported a group of melanocytic lesions with atypical clinical and histological features. Such melanocytic nevi were regarded as precursors of melanoma in patients with multiple nevi and/or family history of melanoma and the term of "dysplastic nevus" soon after entered the diagnostic jargon. The concept of dysplastic nevus was later expanded to include isolated, sporadic nevi with dysplastic histological features and, similar to multiple nevi, they were associated with a putative increased risk of melanoma [2]. The effort of Arumi-Uria et al. [3] 15 years later to establish a grading system for dysplasia resulted in a lower diagnostic reproducibility.

In nearly 40 years, more than 31 definitions have been proposed for this very same lesion and more than 1,600 papers have been published on the subject. This plethora of studies fuelled the debate between those endorsing the idea of a descriptive term that could resolve cases of diagnostic uncertainty and those who opposed the concept of histological features being predictive alone of a high risk of developing a melanoma. I wonder if those routinely reporting "dysplastic nevus" have genuinely noted any increase in incidence of melanoma in patients bearing a dysplastic melanocytic lesion.

I do feel the name of "Clark's nevus" proposed by Nollet in 1986 [4] and popularized by Ackerman well resolves the controversy. I do in fact apply this term quite often in my practice to diagnose nevi with cytological and architectural abnormalities without committing myself to the worrying term of "dysplasia" or using "dysplasia" as a mere escape route (Fig. 1).

I asked Professor LeBoit if he was using the term dysplastic nevus: his answer was yes, because after complete removal, these lesions may turn out to be melanomas (personal communication) but if the lesion is completely excised, the diagnosis should rely on the full set of histopathological criteria allowing dermato/pathologists for a conclusive decision between "benign or malignant." Where can the line be drawn between in situ melanoma and dysplastic nevus with severe dysplasia (Fig. 2)? Why then not using "in situ melanoma," considering re-excision with 5-mm free margins represents the treatment of choice anyway [5]?

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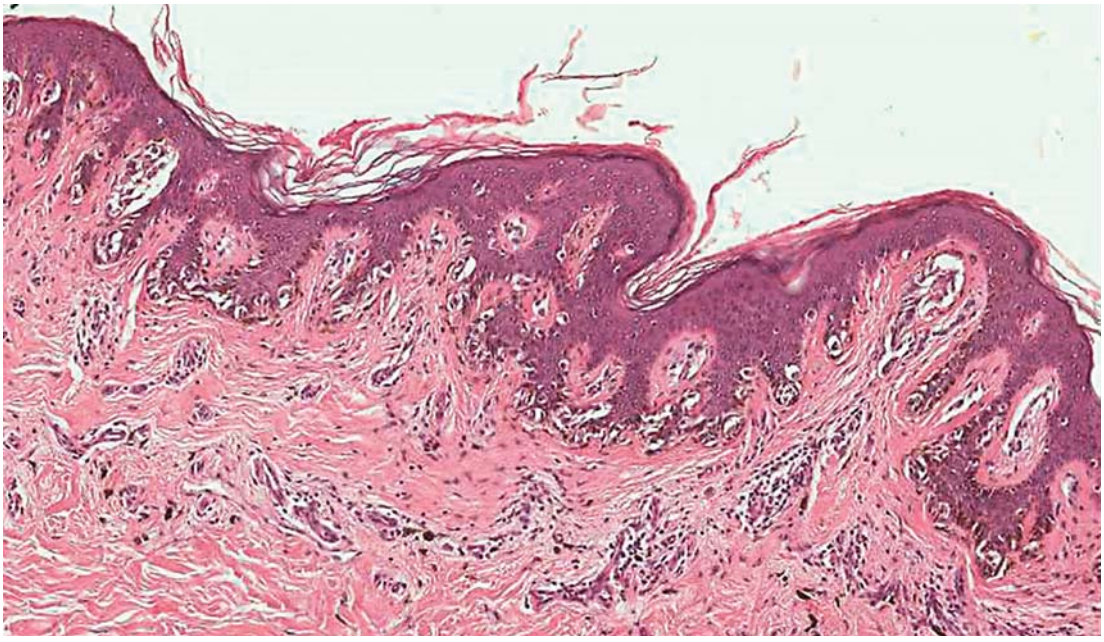

Fig. 1. The lesion is characterized by mostly lentiginous proliferation at junction with also small nests. There is fusion of nests, but infiltration of upper layers of epidermis is not seen. Lamellar fibroplasia is present in the papillary dermis combined with lymphocytic infiltrate and vascular proliferation: these features should not be interpreted as regression. All these features are not distinctive of dysplastic nevi and can be seen in common or congenital nevi.

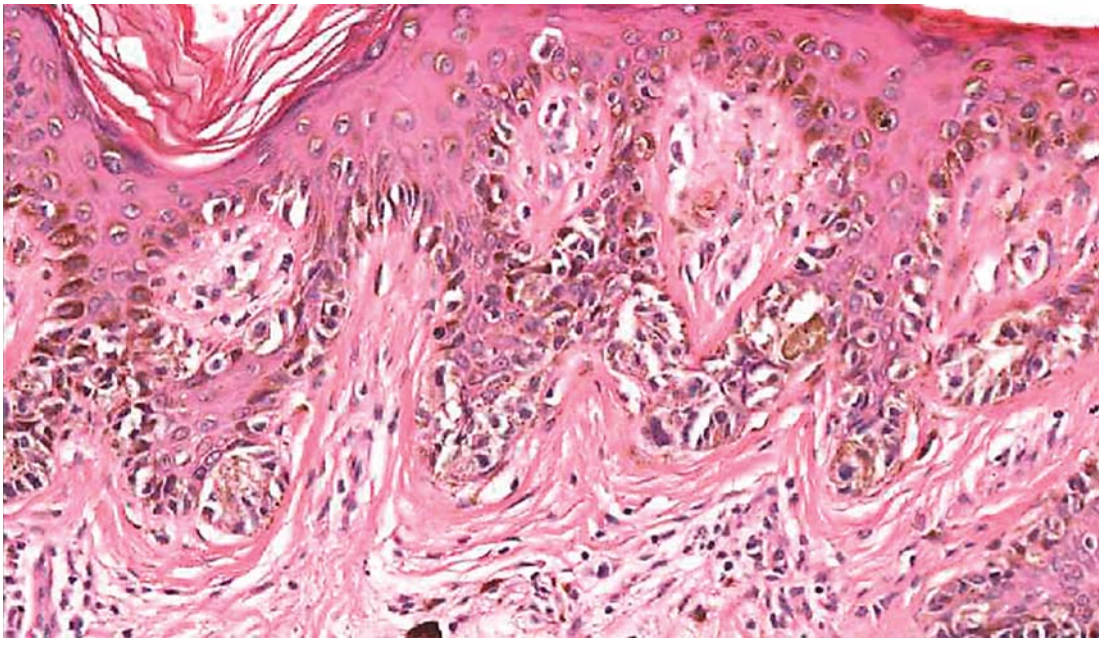

Fig. 2. In the differential diagnosis with in situ melanoma, it is important to note that although melanocytes show some degree of atypia, "pagetoid" spread is not observed and the shapes of rete ridges are distorted but they are still elongated to approximately similar lengths.

Finally, I think Clark's nevus should be diagnosed being aware of the clinical context. In this respect, I share the views of Massi and LeBoit [6]: "…The overall risk of melanoma is best assessed by clinical phenotype rather than by histopathological scrutiny of a nevus… the predictive value of the degree of cytological atypia for the patient risk of developing a melanoma elsewhere is questionable."

I would like to end with a provocative question: after 40 years, why is our community still debating on the existence or the meaning of dysplastic nevus?

Statement of Ethics

The author has no ethical conflict to disclose.

Disclosure Statement

The author declares no conflict of interest.

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