COMMENTARY

Management of atypical pigmented lesions

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In this issue of the Journal of the American Academy of Dermatology, Piepkorn et al present a management-oriented approach to the histologic classification of cutaneous pigmented lesions.\(^1\) Although the authors found early on that each panel member used a unique nomenclature, differences in terminology became less problematic when the diagnostic terms were translated into management recommendations. For example, it would make little difference if one pathologist refers to a lesion as a “benign junctional nevus” and another calls it a “junctional lentiginous nevus”—in terms of management, both are benign and neither requires any further treatment. The authors divided lesions according to a 5-point scale corresponding to treatment recommendations:

1. No further treatment required.
2. Excision with narrow margins.
3. Excision with at least a 5-mm margin.
4. Excision with at least a 1-cm margin.
5. Wide excision (>1 cm).

They acknowledge that small biopsy specimens may require further sampling before a lesion can be classified, and that some terms for lesions of uncertain malignant potential may span a range of classes. Although new molecular techniques such as fluorescent in situ hybridization and comparative genomic hybridization assays may resolve some diagnostic quandaries, these tests remain costly and may not be necessary when the hematoxylin-eosin features of a given lesion dictate a clear course of action. For this reason, treatment schematics such as this one hold considerable appeal to clinicians.

The authors’ range of management options has substantial overlap with categories I have advocated in the past.\(^2\) I agree with the authors that for practical purposes, clinicians and patients want to know if a lesion is benign, atypical enough to be removed, or frankly malignant, so most dermatopathologists gravitate toward a similar range of recommendations. A review of this particular classification scheme did yield a few surprises, though. For instance, pigmented spindle cell nevus, conventional Spitz nevus, cellular blue nevus, and deep penetrating nevus are assigned to category 2 corresponding to a recommendation of re-excision with a narrow margin. These recommendations are likely to provoke some controversy. If a child with a conventional Spitz nevus on the tip of the nose or eyelid has an excellent cosmetic result after a shave removal, should the clinician be obligated to perform a re-excision of the site, leaving the child with a lifelong scar? Although it simplifies management to associate diagnoses with set recommendations, the practice of medicine is often not that simple. The lesions listed above are benign, and I do not believe it is always in the patient’s best interest to re-excite such lesions if they have no atypical features and there is no diagnostic uncertainty. In some circumstances, it may be best to discuss the management options with the clinician before issuing a report that could tie the clinician’s hands.

Similarly, the authors associate category 3 with a recommendation for re-excision with a margin between 5 mm and 1 cm. The inclusion of melanoma in situ in this category will incite little debate, although some will note that lentigo maligna may have indistinct margins that may benefit from the Mohs technique and that lesions with clinically distinct margins may sometimes be managed with narrower margins so as not to sacrifice vital structures.

Special site nevi (acral, genital, flexural, milkline/breast, scalp) with severe atypia also appear in category 3. Atypical scalp nevi in children are often quite large, and excision with an additional 5-mm to 1-cm margin may amount to a major surgical procedure for a child. Similarly, the clinician may be

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somewhat reticent about such margins in acral, genital, and breast lesions. The concept that “out is out” may be helpful when dealing with some such lesions. Data suggest that nevi with an atypical appearance are common on the scalp of children and adolescents, the breast and anogenital area, ears, ankles, and dorsal feet. There is little evidence that stable moles in these sites progress to melanoma and the significance of high-grade atypia in such lesions is unknown. Given the difficulty of surgery in these sites, some patients will be better served by individualized margins than by predetermined margins.

In fairness to the authors, they acknowledge that opinions in the professional community differ and state that they offer the suggestions in the diagnostic-treatment mapping tool as a basis for dialogue. I hope they will accept my comments as a well-intentioned beginning to just such a dialogue. They are careful to note the absence of data for some lesions and some recommendations. In the text, they note that a diagnosis in category 2 indicates that such lesions would confer “some, but most probably low, likelihood of persistent local proliferation, which in some cases could ultimately result in adverse consequences.” Accordingly, they state that consideration of narrow but complete re-excision could be justified although follow-up monitoring could be a reasonable alternative.

The authors are thoughtful and experienced dermatopathologists, and their logic is sound. There remains some concern that others may adopt the tool but not apply the same degree of discretion to lesions listed in the table. A good tool in the hands of an inexperienced physician may not give the same outcomes as when it is used by someone with experience—individual judgment remains key. My recommendations for the management of atypical pigmented lesions are noted in Tables I and II.

I believe that the terms “benign melanocytic nevus,” “atypical nevus,” and “malignant melanoma” remain well suited to convey meaningful information to the clinician. From the first word, the clinician knows if there is no cause for concern, atypia, or frank malignancy. Many authors have commented that the term “atypical nevus” is used by various physicians to convey either clinical or histologic concern about the malignant potential of a lesion. Although it is true that not all clinically atypical lesions demonstrate atypical histologic features, I do not believe that diminishes the utility of the term when applied to a histologically atypical lesion.

A key question remains: are atypical/dysplastic nevi precursors for melanoma, or merely markers for an increased risk of de novo melanoma? Data are mixed, and this commentary will not attempt to resolve a dispute that at times bears more of a resemblance to discussions about religion than science. Some believe that atypical nevi should be removed because they are more likely to progress to malignancy. Others believe that they should be removed, not because of malignant potential, but because of diagnostic uncertainty. I take a practical approach—if all are agreed that the lesion should be removed, the exact reason why may not have prime importance.

There is little justification for wholesale removal of low-grade Clark nevi, and the diagnostic-treatment mapping tool agrees with this approach.
Table II. Proper coding for melanocytic lesions

- Nevi with no atypia should be coded as benign neoplasms (216.X).
- Nevi with atypia suspicious for malignancy should be coded as 238.2, and those with features consistent with malignant melanoma in situ should be coded as 172.X.
- Lesions coded as 238.2 correspond to the procedure codes for benign lesions.
- Those coded as 172.X correspond to excision codes for malignant lesions.
- If any dermis remains at the base of the wound, the procedure should be coded as a shave rather than an excision.
- Excisions must extend through the full thickness of the dermis (i.e., fat covers the entire base of the wound).
- Shave codes do not distinguish between benign and malignant lesions, so regardless of the pathologic diagnosis, a tangential procedure that remains within the dermis is a shave. The diameter reported should be the lesion diameter, not counting any adjacent normal skin removed during the procedure.

by assigning them to category 1. Fortunately, evidence suggests that there is fairly good concordance among pathologists when dealing with severely atypical lesions.25 There is a middle ground of atypical lesions.26 Although some data suggest a correlation between the lifetime risk of melanoma and the degree of atypia in a patient’s signature moles,27 it should be noted that cytologic atypia may not be the best indicator of biologic behavior of an individual lesion. Architectural features are at least as important as the presence of atypia in assigning individual lesions to risk categories.28 In my opinion, grading schemes that convey meaningful information about the risk of an individual lesion are helpful. For most lesions in the uncertain category, removal is wise, but “out is out” and arbitrary margins do little to advance patient care.

REFERENCES


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