

Session Four

**THE DYSPLASTIC NEVUS: CONCEPTS
AND CONTROVERSIES - 2007**

Dr. Jason Rivers

10:10 am - 10:30 am
Saturday, March 24

INTRODUCTION

Probably the first report of atypical nevi (dysplastic nevi) was published in 1820, however, it was not until 1978 that Clark and colleagues published their seminal study on familial melanoma. They noted that individuals in these families who had certain atypical moles were also those who were at high risk to develop melanoma. The recognition of the dysplastic nevus in the non-familial setting was reported soon thereafter and confirmed by others.

MARKERS AND POTENTIAL PRECURSORS

Today, it is recognized that atypical nevi are both markers and potential precursors for melanoma. In the familial setting, the probability of an atypical nevus affected individual in these families developing melanoma between the ages of 29 and 59 years old may approach 60%. In the non-familial setting, the cumulative lifetime risk for developing melanoma is much lower (<5%). Finally, others have demonstrated an increased relative risk for the development of melanoma in patients with dysplastic nevi compared with controls: risk increasing with the number of atypical nevi.

The concept of a precursor is that the lesion itself gives rise to melanoma. To substantiate this, the precursor must be identifiable histologically contiguous to the tumor. There is a marked difference in the reported percentages of dysplastic nevi in contiguity with melanoma which relates at least in part, to the number of histological sections available to identify contiguity between these lesions.

It is important to remember that most melanocytic nevi are clinically stable lesions that never progress to melanoma.

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CLINICAL RECOGNITION OF DYSPLASTIC NEVI

The clinical and histological features of dysplastic nevi have been well characterized. Unfortunately, the correlation between the two is at times quite low. Therefore, we subjectively grade atypical nevi into mild, moderate and severe categories:

- Mild DN: slightly irregular shape, fuzzy border, "fried-egg" appearance
- Moderate DN: moderately irregular shape, >6 mm, 2-tone pigmentation with slight asymmetry
- Severe DN: very irregular shape, multi-tone pigment, marked asymmetry

MANAGEMENT

The management philosophy has evolved as we have learnt more about dysplastic nevi. Initially, aggressive excision of these lesions was advocated. Our current approach is more conservative as we realize that (i) the majority of atypical nevi are stable and do not develop into melanoma; (ii) in a patient with atypical nevi, the melanoma may develop de novo (i.e. on normal skin rather than in contiguity with the atypical nevus); (iii) removing atypical nevi does not eliminate the risk for melanoma or the need for close follow-up; and (iv) sometimes, it is simply impractical to remove all the atypical nevi as the patient may have many lesions and new lesions may continue to develop. As such we advise: (i) more selective excision of atypical nevi, (ii) the use of dermoscopy and photography for follow-up, and (iii) regular cutaneous examinations.

Observation for the mild atypical nevi and excision for the severe atypical nevi is the rule. However, this is modified by several factors. These include the dermoscopic appearance of the lesion and the patient's history as to whether or not a change has occurred to the lesion in question. The location of the lesion will

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also affect the therapeutic approach. For example, we often recommend that atypical nevi of the scalp should be excised as these lesions are difficult to follow with time. We recommend regular cutaneous examinations at 6 to 12 month intervals. Access to baseline photos can improve the diagnostic accuracy of skin self-exam. Furthermore, photography can help to detect changing/new melanocytic nevi and can help to reassure a patient when no change has developed in a specific pigmented lesion. The patient should also be counselled on the warning signs and symptoms of melanoma and on sun protection.

SELECTED REFERENCES

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