Update on the management of dysplastic nevi

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Dysplastic nevi may be

• Mimickers of melanoma
• Markers of increased risk of developing melanoma in an affected individual
• Potential precursors of melanoma, although the vast majority of dysplastic nevi are stable or may even involute over time and are therefore not felt to be high-risk precursors

Kim et al, JAMA Derm 2015

Mildly and moderately DN with clear margins do not need to be re-excised
Mildly DN biopsied with positive histologic margins without clinical residual pigmentation may be safely observed rather than re-excised
Observation may be a reasonable option for management of moderately DN with positive histologic margins without clinically apparent residual pigmentation BUT more studies needed

Kim et al, JAMA Derm 2015
What do pigmented lesion clinic directors do?

Nelson et al, JAAD 2018

- Study of 1809 mildly and moderately diagnosed from 2010 through 2011
  - 765 (42.3%) of these lesions were found to have positive surgical margins during biopsy
  - 495 (64.7%) of the 765 lesions were subsequently re-excised
  - Melanocytic residuum was present in 18.2% of re-excision specimens.

- Re-excision resulted in a clinically significant alteration of the diagnosis in only 1 case (0.2%, moderate → severe)
- Melanoma was not diagnosed in any of the 495 re-excision specimens

Engeln et al, JAAD 2017

- Retrospective single institutional study of 451 adult patients with severe DN biopsied 1994-2004, clinical follow-up > 5 years
  - Re-excision performed on 36.6% of specimens
  - Two melanomas were diagnosed in the re-excision specimens
  - Subsequent metastatic melanoma developed in 7 patients, all of whom had a history of melanoma prior to diagnosis of severe DN

To excise or not to re-excite: Moderately dysplastic nevi

- Multicenter study of 467 moderately dysplastic nevi with positive histologic margins and 3 years or more of follow-up data
  - Cutaneous melanoma did not develop at any of these sites within the follow-up period
  - 100 of the 438 patients in the study developed cutaneous melanoma at ANOTHER body site

Kim et al, JAMA Derm 2018

How to biopsy a suspected atypical nevus?

- Aim for a complete biopsy with 1-2 mm margins around the periphery of the lesion
- This technique may reduce the need for re-excision, depending on the degree of atypia noted on pathology

My approach to management of dysplastic nevi

- Mild atypia
  - Clinical observation
- Moderate atypia
  - Follow pathology recommendations, if given
  - If not: clinical observation of moderately atypical nevi that do not have clinical residuum
- Severe atypia
  - Re-excite with 2-3 mm margins
  - If MIS included in the differential diagnosis, then re-excite with 5 mm margins
The Dermatology Foundation
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– and patient care.

Penn Multidisciplinary Melanoma Program

Medical Dermatology
– Michael Ming
– Rose Elenitsas
– Brian Capell

Dermatopathology
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Medical Genetics
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Medical Oncology
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Surgical Oncology
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Derm Surgery
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– Thuzar Shin
– Nicole Howe

Thank you!
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