Update on Dysplastic Nevi

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I have no conflicts to disclose
1978
1978

Wallace Clark - B-K mole syndrome

Henry & Jane Lynch - Familial atypical mole-melanoma syndrome
• Numerous, large, clinically atypical nevi
• Familial malignant melanoma
• Well defined, clinically significant
Chaired Debate

"This House believes that dysplastic melanocytic naevus is a meaningless diagnosis", advocated by Dr. Mark Hurt, opposed by Dr. Alistair Robson
Andrews’ Diseases of the Skin
Meaningless diagnosis?
1980

Extended to sporadic melanoma

Termed “dysplastic nevi” (DN)
Controversy

• Terminology
• Specificity of histological criteria
• Prevalence
• Significance as risk markers
• Significance as melanoma precursors
Terminology

Term “Dysplasia”
Baby Bath Water
Terminology

Nevi with architectural disorder +/- graded cytological atypia (1992 NIH Consensus Panel)
Controversy

Specificity of histological criteria
Histological criteria

- Lentiginous and irregularly/horizontally nested
- Shoulder component in compound DN
- Inflammatory and fibrotic host response
- Focal nuclear atypia
Not Specific!

Histological criteria proposed for DN (lentiginous and irregularly nested junctional melanocytic hyperplasia, a shoulder component in compound DN, an inflammatory and fibrotic host response, and focal nuclear atypia) are not specific in that they may be seen in nevi that are not clinically atypical or associated with increased melanoma risk, and are especially common in small (≤ 4 mm) nevi.
"Normal" nevus
"Normal" nevi
"Normal" nevi

insert normal junctional and compound nevi
"Normal" nevus?
Lentiginous nevus
Lentiginous nevus - synonyms

- Jentigo
- Nevus incipiens
- Nevoid lentigo
- Hypermelanotic nevus
Lentiginous nevus
Histological criteria

- Lentiginous and irregularly/horizontally nested
- Shoulder component in compound DN
- Inflammatory and fibrotic host response
- Focal nuclear atypia
Controversy

- Prevalence
- Significance as risk markers
DN as risk markers

Familial melanoma
Andrews’ Diseases of the Skin
DN as risk markers

Sporadic melanoma (case-control studies)

- Nevus count
- Number of large nevi
- Number of clinical DN
- Multiple clinical DN have highest relative risk
Controversy

Significance as melanoma precursors
DN as melanoma precursors

- Most melanomas arise outside of DN, even in individuals with numerous DN

- The vast majority of clinical DN will never give rise to a melanoma
Grading

Cytological and sometimes architectural atypia
Grading and melanoma risk

- Very limited data

- High grade DN may be more specific for patients at increased melanoma risk
High-grade DN

• Some pathologists suggest re-excising high-grade DN

• Many clinicians re-excise high-grade DN
Clark’s nevus
Controversies in Dermatopathology

Naming Acquired Melanocytic Nevi
Common and Dysplastic, Normal and Atypical, or Unna, Miescher, Spitz, and Clark?

A. Bernard Ackerman, M.D., and Petra Milde, M.D.
FIG. 4. (a) Clark's nevi. Flat and slightly elevated brownish lesions of different sizes and shapes. All the nevi pictured are of a single type. (b) Clark's nevus. This slightly elevated, slightly mammillated melanocytic nevus is characterized by nests of melanocytes confined to the dermoepidermal junction and papillary dermis. Diagnosis is made by silhouette, not cytologic features.
Clark’s

DN
Clark’s

Lentiginous nevi
Lentiginous hyperplasia
Architectural disorder
Junctional nevi
Most compound nevi

DN
Histological criteria

Not Specific!
Lentiginous nevus
Clark’s

DN
Clark’s

Lentiginous nevi
Lentiginous hyperplasia
Architectural disorder
Junctional nevi
Most compound nevi

DN
Baby

Bath Water
“Nevi with architectural disorder and cytological atypia”
“Large Clark’s nevi with cytological atypia and an inflammatory and fibrotic host response”
“The nevi formerly known as dysplastic”
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