Distinguishing Pigmented Skin Lesions and Melanoma

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Risk Factors

- Red/blond hair
- Family history of melanoma
- Sun exposure in childhood/intermittent sun exposure
- Multiple nevi-typical and atypical in fair-skinned persons

Survival

- In 1940’s 5 year survival was 40%, now 90%
- Survival assoc. with tumor thickness-early detection is what has changed statistic not the treatment

Melanoma- Miller AJ-NEJM July 2006-good review re: nevus to melanoma-what it takes
Specific Types of Melanoma

- Lentigo maligna
- Nodular Melanoma
- Acral Melanoma
- Amelanotic Melanoma
How do we increase our chances of finding thin melanomas

- Full body exam on everybody? - Not enough evidence to support
- Concentrate on high risk folks and incorporate skin exam into physical exam-men 50 and older-look at their backs
  Factors Associated with physician discovery of early melanoma in middle-aged and older men. Arch Dermatol 2009 Apr Geller AC et al.

Ask these questions:

1) Personal or family history of melanoma?
2) History of atypical nevus that has been removed?
3) Presence of new or changing mole- i.e. change in size or color?
Melanoma

- Melanoma may be INHERITED or occur SPORADICALLY
- 10% of melanomas are of the INHERITED type Familial Atypical Multiple Mole-Melanoma Syndrome (FAMMM)

Risk Factors for Sporadic (Nonhereditary) Melanoma

- Numerous normal nevi, some atypical nevi
- Sun sensitivity, excessive sun exposure
Clinical Features of FAMMM

- Often numerous nevi (30-100+)
- Nevi > 6mm in diameter
- New nevi appear throughout life (after age 30)
- Nevi in sun-protected areas (buttocks, breasts of females)
- Family history of atypical nevi and melanoma

Risk Categories (Lifetime Risk)

- Very low risk: pigmented races (Latino, African American, Asian, etc.)
- Low risk: Caucasian = 1%
- Intermediate risk: Caucasian w/additional risk factors = 2% - 10%
- High risk: FAMMM Syndrome up to 100%

Prevention

- Self examination/spousal exam for low-risk individuals
- Self examination/spousal exam and regular physician examination (yearly to every several years) for intermediate risk individuals
- Self examination and examination by a dermatologist every 3-12 months for FAMMM kindred
• Take all nevi off—NO to “melanotomies”
• Look for signature nevi and then identify ugly duckling

Strategies for early melanoma detection Approaches to the patient with nevi-JAAD May 2009 Goodson A and Grossman D

If not sure:
• Measure and see pt back in 3-6 months for reevaluation!!
Tools to improve the Art

- Photography - available at pigmented nevus centers
  Involves mapping of nevi, far and close up photos
  Set of photos for pt and provider
  About $200.00
- Dermoscopy - magnified view of lesion - a science being developed and validated - needs lots of training; better developed in Europe
- Confocal microscopy - looking at lesions in the human at the bedside
- Genomic Hybridization - used by pathologists

Differential Diagnosis

- Seborrheic keratosis
- Nevus, blue nevus, halo nevus
- Solar (senile) lentigo
- Pigmented BCC
- Dermatofibroma
How to Diagnose

- If melanoma is suspected, an excisional biopsy is recommended

Why Excisional Biopsy?

- The diagnosis and prognosis of melanoma is dependent on the depth of the lesion
- Send your pathologist the whole thing
What to do if Melanoma

• Staging workup for melanomas > 1 mm in depth
• Re-excise all melanomas with wider margins

What to Do if Melanoma Dx

• Depth is key
  – < 1 *mm* - Close clinical f/u and labs
  – > 1 *mm* - CT scans of chest, pelvis, MRI/PET scan brain & sentinel nodes to stage
  – Now also looking at mitoses to determine work-up
  – Melanoma center at least once (or call for latest guidelines)

If Melanoma:

• Re-excise area with larger surgical margins: size of reexcision dependent on the original depth of melanoma
  • Original melanoma in-situ-Excise 0.5 cm margin
  • Original melanoma < 1 mm-Excise 1.0 cm margin
  • Original melanoma > 1 mm-Excise 2.0 cm margin
• Coordinate with surgeon in the know and someone who can do nuclear scan/sentinal node at time of the reexcision if indicated.

Primary care follow-up

• For the first two years after diagnosis-see patient back q 6 months for total body exam
• Looking for local recurrence, in-transit metastases, lymph node involvement and second melanomas.
• Q yr CBC, LFT’s including LDH for lymph node involvement or ulcerative lesion
• CXray-controversial

Follow-up for Melanomas

- Second melanomas 1% after 1 year, 2% at 5 yrs, 3% at 10 yrs and 5% at 20 yrs - regular f/u for LIFE (Cancer 97, 2003)
- Developing new risk trees for patients with thinner melanomas
- Also look for non-melanoma skin cancer and non-Hodgkin’s lymphoma (higher risk is those who had primary melanoma)
- Melanoma risk is 5 x’s higher in renal transplant recipients

New Directions in Therapy

- Surgical excision is our therapy
- Very little to offer re: metastatic disease-6-9 month survival. Current chemo extends life to 1.3 yrs
- Rational therapy that targets genes and interrupts signalling pathways for metastases


BRAF mutations and melanoma

- Many melanomas have a BRAF mutation—without chemotherapy, these may have a worse prognostic risk
- There are many new therapies being developed which target this group of melanomas
- PLX4032-new therapy
- Ipilimumab-blocks BRAF gene expression-increased overall survival for metastatic melanoma but only by 4-6 months

Special Cases

- Genital pigmented lesions
- Congenital nevi
- Pregnancy
Genital Pigmented Lesions

- Follow the same rules as other pigmented lesions
- 15% of genital melanoma pts had family history of melanoma

Congenital Nevi

- < 1 cm - 1% Lifetime risk of melanoma
- 1-5 cm - Unknown risk
- > 5 cm - 10% Lifetime risk
- Have congenital nevi evaluated once by a dermatologist

Pregnancy

- Nevi change during pregnancy
- New ones appear
- Should people who have had melanoma get pregnant?
  - Depends on depth of melanoma
  - Call Central Melanoma Center for advice