Distinguishing Pigmented Skin Lesions and Melanoma

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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

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

• Genomic Hybridization-used by pathologists to identify clones of abnormal cells
**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 re-excision 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 re-excision 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


Gene sequencing and melanoma

- Many melanomas have identifiable mutations- (BRAF and KIT) without chemotherapy, these may have a worse prognostic risk
- There are many new therapies being developed which target this group of melanomas
- Gleevec- KIT mutation
- vemurufinab-new therapy-extends life by 5.2 months- assoc with BCC’s and SCC’s
- Ipilumab-blocks BRAF immune response-increased overall survival for metastatic melanoma but only by 4-6 months
- PROBLEMS: Drug resistance, duration of response and second malignancy

Special Cases

- Identifying mutations-key
- Combining targeted therapies
- Combining targeted therapies with immunotherapies-target and boost

Current status and future directions of molecularly targeted therapies and immunotherapies for melanoma
David M. Miller MD, Keith T. Flaherty and Hensin Tsao MD
Semin Cutan Med June 2104

- 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