Clinical Diagnosis of Skin Cancer
Setting the stage

James H. Keeling III, M.D.
I have no conflicts of interest.
OBJECTIVES

• Criteria for clinical diagnosis
• Classic clinical paradigm
• Problematic clinical scenarios
Basal Cell Carcinoma
Nodular Basal Cell Carcinoma
Waxy, telangiectatic
Basal Cell Carcinoma
Not just the older patient
Through and through defect of the nasal wall
Basal Cell Carcinoma
Skin of color
Basal cell carcinoma

Special situations

Treatment options
Squamous Cell Carcinoma
Squamous Cell Carcinoma

Right cheek
One of several SCC
Parotid mets

Right ear
Perineural invasion
Angiolymphatic invasion

Left cheek x 3 mos
Lymph node involvement
68 yo double lung transplant 2003 repeat 2010
2007-2008 SCC x2, BCC x1
2010-2016 SCC x59 (+ nodal mets), BCC x1
Melanoma
# MELANOMA 2016 ESTIMATES

<table>
<thead>
<tr>
<th>Category</th>
<th>Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEW CASES</td>
<td>76,380</td>
</tr>
<tr>
<td>Men (No. 5)</td>
<td>46,870</td>
</tr>
<tr>
<td>Women (No. 7)</td>
<td>29,510</td>
</tr>
<tr>
<td>DEATHS</td>
<td>10,130</td>
</tr>
<tr>
<td>Men</td>
<td>6,750</td>
</tr>
<tr>
<td>Women</td>
<td>3,380</td>
</tr>
<tr>
<td>in addition</td>
<td></td>
</tr>
<tr>
<td>MELANOMA IN-SITU</td>
<td>68,480</td>
</tr>
</tbody>
</table>

LIFETIME RISK OF MELANOMA 2016

MEN :  1 in 33

WOMEN :  1 in 52

Statistics for white population only

Probability based on invasive tumor

Classic clinical melanoma paradigm
Asymmetry, Border, Color, Diameter
Classic clinical melanoma paradigm
ABCD + E (evolving)
(Document recommendations)
Melanoma
“Ugly duckling”
0.65 mm
Melanoma in the freckled, red head

- **Thickness:** 0.45 mm
- **Breslow Depth:** In-situ (0.3 mm)
- **Mitoses:** 1
- **Location:** Leg
- **Location:** Arm
Classic clinical paradigm

• Superficial spreading 66%
• Nodular 14%
• Lentigo maligna melanoma 12%
• Acral lentiginous 1.5%
• Amelanotic < 1%

Modified from SEER data (subtype known)

Arch Dermatol 2012; 148: 30-36
Superficial Spreading Melanoma
Radial then vertical growth
66% of melanomas
Nodular Melanoma
Vertical growth only
14% of melanomas
Lentigo Maligna Melanoma
Melanoma in sun-damaged skin
12% of melanomas
Diagnostic aids for pigmented lesions
Lentigo maligna melanoma
Woods light for margins
Acral Melanoma
Common in skin of color
1.5 % of melanomas

“At least” 1 mm
0.48 mm
0.24 mm

“At least” 1 mm
72 yo AA male
Nail bed melanoma
0.24 mm

Beware: Changing color or width, extension onto nail bed or onto proximal nail fold, onset later in life
Amelanotic Melanoma < 1 %

4.2 mm Arm
Alive & well 7 years

8 mm Upper arm
Red patch before nodule

2.75 mm, 5 mitoses, ulcer
Right shoulder x 6 mos
Sentinel node neg
Alive & well 6 years
MELANOMA AND NEVI

• Most melanomas develop de novo
• Melanomas develop from common nevi
• Melanomas develop from dysplastic nevi
• Melanomas develop in congenital nevi
Changing Nevus

Melanoma

Nevus
Dysplastic nevi and melanoma

Marker or precursor

18 yo
1.56 mm
Family hx melanoma
Left sideburn: Small congenital nevus with melanoma

Teaching point: Small or medium congenital nevus = surface
Giant congenital nevus of scalp: Dermal melanoma (no surface change)

22 yo white female
Pregnant
Scalp nodule palpated

Teaching point: Giant = deep
Local recurrence
10 “clipped by barber”

1 year later
XRT then taxotere

4 years later: distant cutaneous mets, liver, gut
<table>
<thead>
<tr>
<th>Age</th>
<th>Description</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>98 yo</td>
<td>&quot;Sun freckle&quot; decades</td>
<td>Excision</td>
</tr>
<tr>
<td>99 yo</td>
<td>Recurrence</td>
<td>Excision</td>
</tr>
<tr>
<td>100 yo</td>
<td>Recurrence with node met</td>
<td>XRT</td>
</tr>
</tbody>
</table>
Diagnostic aids: Dermoscopy

3.68 mm
6-8 mitoses
SNL neg

1.5 mm
0 mitoses
SNL neg

in-situ
While on vacation 2013: Dermatitis? Bite?

Recommendation: Have it checked

TELEMEDICINE
Patient initiated
“The cell phone camera expedient”
TELEMEDICINE

Professional teledermatology (secure links)
or

Patient version (cell phone camera and email)

PMH
Melanoma: 1.33 mm, Clark level IV, midline, upper back at the base of the neck (2001).

While on vacation 2013: Dermatitis? Bite?

Melanoma
0.9 mm
SLN neg
Lymphoma
Cutaneous T-Cell Lymphoma
High grade non-Hodgkin B cell lymphoma

Cutaneous marginal zone B cell lymphoma

Peripheral T-Cell lymphoma
Merkel Cell Carcinoma
Merkel Cell Carcinoma
OBJECTIVES

• Criteria for clinical diagnosis
• Classic clinical paradigm
• Problematic clinical scenarios