Oncology and surgery
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HOW TO MANAGE HIGH RISK SCC
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HOW TO STAGE SCC

- **Problem with tumor depth**
  - Often not possible in partial biopsy specimens/not simple in a completely excised tumor
  - From granular layer of adjacent normal skin
  - If ulcerated: measure from the base of the ulcer

HOW TO STAGE SCC

• Staging systems
  • Why do we need to define high risk group?
    • Tell the patients about prognosis
    • Plan treatment & communicate with other health providers
    • Medical community: clinical trials

• 2 main staging systems:
  • AJCC
  • BWH stage (Brigham and Women’s Hospital tumor staging)
How to stage SCC

- Staging systems

**AJCC 7th**
- T1: ≤ 2 cm + 1 high risk feature máximo
- T2: > 2 cm with or without high risk features or ≥ 2 high risk features
- T3: facial bones invasión (maxila, mandible, orbit, temporal bone)
- T4: Other bone invasión or perineural invasión of skull bone

**High risk factors:** diameter ≥ 2 cm, invasión into cranial base, ear or lip location, > 2 mm thickness or Clark’s level IV, por differentiation, perineural invasion

**AJCC 8th**
- Tx: cannot be assessed
- Tis: in situ
- T1: < 2 cm
- T2: ≥ 2 cm-<4 cm
- T3: ≥ 4 cm and/or perineural invasion > 0,1 mm and/or minor bone invasion
- T4a: gross cortical bone/marrow invasion
- T4b: skull base erosion and/or skull base foramen involvement

AJCC 8th demonstrates superior homogeneity and monotonicity.
AJCC 7th few cases T3 and T4 vs 23% AJCC 8th
How to stage scc

• Staging systems

**BWH Staging system**
T1: No risk factors
T2a: 1 risk factor
**T2b: 2-3 risk factors**
T3: ≥ 4 risk factors or bony invasion

High risk factors: diameter ≥2 cm, poorly differentiated, perineural invasion > 0.1 mm, tumor invasion beyond fat (excluding bone invasion)

Tumors all sites
Unclear if AJCC 8 is better or not
Improve management in SCC

• Basic medical history and pe
  1. Neurological symptoms
     • Sensory nerve: nubness, tingling, pain...
     • Motor nerve
  2. Skin exam: induration/Depth, satellite lesions, in transit metastasis
  3. Palpate regional lymph nodes

• Identify high risk features (large size, satellite lesions...)
Improve management in SCC

• Anticipate high-risk features: Submit central debulking for final staging
  (sometimes staging gets worse compared to initial punch biopsy)

• If high risk is confirmed:
  • Best referral (Mohs, ENT, Rad onc...)
  • Imaging/SLNB:
    • Bone or lymph node invasion: CT with contrast
    • Nerve invasion: MRI
How to treat high risk SCC

• **BWH ≥T2b**: 21% risk of nodal metastasis.

• Consider
  • SLNB at the time of surgery (if patient is a surgical candidate)
  • Radiotherapy to primary site +/- nodal basin (if not a surgical candidate or presence of lymph node metastasis)

43% risk of recurrence with surgery +/- SLN dissection alone vs surgery plus radiotherapy in SCC metastatic to lymph nodes

• Consider PD-1 inh, EGFR inh, chemotherapy for advanced inoperable SCC
Advanced dermoscopy
Facial pigmented lesions. (G. Argenziano)

1. Gray color (sensible, not accurate)
   1. Circles
   2. Annular-granular pattern
   3. Rhomboidal structures

2. Absence of signs of benign lesions
   - Scales (may be pigmented)
   - Rosettes and White follicules
   - Reddish pseudonetwork
   - Fingerprint pattern
   - Moth eaten margin
   - Brown homogeneous pattern
   - SK features: millia cysts....
Acral melanoma. (H Kittler)

1. Malignant pattern: parallel ridge pattern
2. Benign pattern: parallel furrow pattern, fibrillar pattern
   • Other patterns: globules, structureless...
Acrual melanoma. (H Kittler)

1. Size

Paralel ridge pattern

No

Typical parallel furrow pattern, fibrillar pattern, lattice like pattern

Yes

Follow-up

No

Diameter >7mm

Yes

Follow-up

No

Biopsy

Koga und Said, Arch dermatol 2011; 147:741-3
# Acral melanoma.  
(H Kittler)

2. **Chaos**

## Table 5 The BRAAFF checklist for the diagnosis of acral melanoma

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Criterion</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Irregular blotch</td>
<td>+ 1</td>
</tr>
<tr>
<td>R</td>
<td>Parallel ridge pattern</td>
<td>+ 3</td>
</tr>
<tr>
<td>A</td>
<td>Asymmetry of structures</td>
<td>+ 1</td>
</tr>
<tr>
<td>A</td>
<td>Asymmetry of colours</td>
<td>+ 1</td>
</tr>
<tr>
<td>F</td>
<td>Parallel furrow pattern</td>
<td>− 1</td>
</tr>
<tr>
<td>F</td>
<td>Fibrillar pattern</td>
<td>− 1</td>
</tr>
</tbody>
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A total score of ≥ 1 is needed for a diagnosis of melanoma.

Spitzoid tumors

- **SPITZ NEVUS**
  - Pigmented
    - Starburst pattern
    - Inverse network
  - Symmetric
    - Hyperpigmentation in the center

- **ATYPICAL SPITZ NEVI**
  - Non-Pigmented
    - Dotted vessels
  - Symmetric

- **SPITZOID MELANOMA**
Forget about follow-up spitzoid-looking flat lesions in children: Spitz nevus regress assymetrically → false + and stress
Mucosal lesions (S. Puig)

How to explore them?

- Fluid: US gel
- Protect with PVC film
- Not too close: digital dermoscopy may help
Melanoma. Surgical considerations
Excision margins for melanoma. (J Kunishige)

- How deep? ➔ no trials suggest that reaching fascia is better
  - Deep subcutaneous tissue is enough
Excision margins for melanoma. (J Kunishige)

- **Head and neck melanoma**
  - Real medical practice: <1cm margins in 50% invasive melanomas → ↑ recurrence
  - 1 cm margins: no recurrences 52-91% → may not be enough
  - Suggest margins >1 cm
Excision margins for melanoma. (J Kunishige)

- **Melanoma in situ**
  - 23% of recurrent M in situ will be invasive
  - AAD recommends 0.5-1 cm margins → 0.5 cm margins 14% patients residual melanoma
  - To achieve 97% non-recurrence rate: 9 mm margins
  - LMM and M in situ behave similarly: the difference is the localization

<table>
<thead>
<tr>
<th></th>
<th>Head and neck</th>
<th>Trunk and EE</th>
</tr>
</thead>
<tbody>
<tr>
<td>% clearance with 6mm margins</td>
<td>79%</td>
<td>83%</td>
</tr>
</tbody>
</table>
Role of snlb. (JA Zitelli)

- Does not improve survival
- Is not the best prognostic test
  - False negatives 13%, False positives 11-34%
  - May not provide more-accurate prognostic information than Breslow thickness for most melanomas
- Better prognostic tools:
  - Informatic models: Lifemath.net, Memorial Sloan Kettering Nomogram, AJCC melanomaprognosis.net
  - **Gene expression profile**: better if combined with clinical and pathological features
- SLNB does not avoid long term complications
- SLNB cannot yet id patients who would benefit from systemic therapies → ongoing clinical trials... Probably in the future
Techniques for flap success

• Periocular reconstruction
  • Upper lid: Lid-brow subunit
  • Tripier flap
    • 20 mm of skin remaining prevents lagophtalmus

• Full lid thickness defect:
  • Lower full thickness defect: Hughes tarsoconjunctival flap. Uses entire posterior lamella as a pedicled flap
  • Lower full thickness defect: Cuttler-Beard flap (≈Hughes flap but requires further cartilage support)
Techniques for flap success

- Periocular reconstruction
- Lacrimal apparatus defect: if small, stenting → Mini-Monoka stent
  - Before or after surgery
  - Left 2 weeks – 6 months
Techniques for flap success

• Interpolated flaps
• Paramedian forehead flap
  • Blood supply: supratrochlear artery
  • Pedicle: 1.2-1.5 cm wide, contralateral to minimize twisting
  • Incise superficially at the tip of the flap and then advance at level of periostium in the rest of the flap