UPDATES IN MELANOMA GUIDELINES AND THE ROLE OF SENTINEL LYMPH NODE BIOPSIES IN MELANOMA

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Disclosures

I do not have any relevant conflicts of interest.
Who Makes Clinical Guidelines?

(AAD) American Academy of Dermatology (Nov 2018)

(NCCN) National Comprehensive Cancer Network® (Feb 2019)

(ASCO) American Society of Clinical Oncology (Dec 2017)
Why new guidelines?
• Incorporate new AJCC changes as of 2018
• New FDA approvals, new studies

Who should have the SLN procedure?
• Intermediate/Thick lesions (>1mm)
• Thin lesions (≤1mm)

Who should have completion lymph node dissection (CLND) if SLN+?
• AJCC (American Joint Committee on Cancer)
  • Creates cancer staging system
    • Melanoma system changed in 2018
  • Worldwide database of patients
    • Stratify patients by melanoma-specific survival
    • 2018 system only uses patients from the “SLN era”
## PRIOR AJCC STAGING SYSTEM

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CHANGES IN CURRENT SYSTEM

• Mitoses are no longer included in staging
  • Recommendation is still to assess mitoses

  2 or more mitoses much worse than 1 mitosis
CHANGES

• For lesions <1mm, thickness of 0.8mm is used for stratification

• Stage IA: no ulceration, <0.8mm
• Stage IB: ulceration OR 0.8 – 1mm
• We use the AJCC staging system for management decisions
  • Who will have worse survival
  • Who should have a sentinel lymph node procedure
• Remember:
  • AJCC purely based on survival
  • Can have hematogenous or lymphatic spread
  • Other factors are not in AJCC Staging System for simplicity
• Remember:
  • AJCC purely based on survival
  • Can have hematogenous or lymphatic spread
  • Other factors are not in AJCC Staging System for simplicity

• AJCC is part of the picture but not the whole picture
SLN procedure

• It is a diagnostic test
  • The primary purpose is not to improve outcome in itself but to guide treatment plans

• Prognostication/Staging
Reasons to **perform** SLN biopsy

- **Management plan changes if SLN +**
  - Imaging recommendations change (type and frequency)
    - CTs, PET/CTs

- **Adjuvant therapy available for SLN+ patients**
  - Ipilimumab (Oct 2015)
  - Nivolumab (Dec 2017)
  - Dabrafenib + Trametinib (May 2018)
  - Pembrolizumab (Feb 2019)

- **Potential enrollment in clinical trials**
Reasons to **avoid** SLN biopsy

- Pts for whom the results have no impact
- Risks from general anesthesia/surgery

- Lymphedema rates ~5%
- Infection <5%
- Hematoma < 5%
- Seroma 5-10%
- Paresthesia 5-10%
- Anaphylaxis from dye injection <<<1%
Weighing risks and benefits

For otherwise healthy patients, common cutoff for rate of SLN positivity is 5%
SLN Biopsy: Which patients would benefit?

Published Clinical Guidelines
Thicker (>1mm) melanomas

SLN Recommended

SLN Recommended

SLN Recommended
SLN biopsy recommendations

But what about thin ($\leq 1$mm) lesions?
Thin (≤1mm) melanomas

• First, confirm that this really is a ≤1mm lesion
  • Sampling biopsy
  • Positive deep margin
Positive Deep Margin

• How much is missing?
  • Broadly transected or tapering off?
  • Partner with your pathologist to help understand this
Thin (≤1mm) melanomas

- Discuss ≥0.8mm, or <0.8mm and either ulceration or “other adverse features”
- Consider if ≥0.8mm, or if ulcerated or other adverse features
- Consider if ≥0.8mm, or if ulcerated
Thin (≤1mm) melanomas

Discuss ≥0.8mm, or <0.8mm and either ulceration or “other adverse features”

Consider if ≥0.8mm, or adverse features

Consider if ≥0.8mm, or if ulcerated
Adverse features to consider

Ulceration

Young age (<40 yo)
“High” mitotic rate (2 or more mits)
Lymphovascular invasion
Positive deep biopsy margin (if close to 0.8mm)
Adverse features to consider

Ulceration

Young age (<40 yo)
“High” mitotic rate (2 or more mits)
Lymphovascular invasion
Positive deep biopsy margin (if close to 0.8mm)

Softer factors:
Female sex
1 mitosis
Clark’s level IV or V
To CLND or not to CLND?

• Incidence of finding additional non-sentinel nodes on CLND for a +SLN is approximately 15-20%

• Lymphedema rate much higher than for SLN procedure
  • 30-40% after inguinal dissection

• CLND was long considered the standard, but two randomized trials recently suggested close surveillance is appropriate
CLND?

CLND or Ultrasound surveillance (q4m for 2 years, then q6m for 3 years)

Cite NCCN, work with oncologists/surgeons/radiologists to decide

No specific guideline
When should CLND be considered more strongly?

- Certain patients are more likely to have involved non-sentinel nodes
  - Thicker lesions
  - Ulcerated lesions
  - Larger number of positive SLNs
  - Higher SLN tumor burden
Conclusions

• New guidelines reflect new AJCC changes, new FDA approvals, new studies
Conclusions

• SLN should be considered for
  • ≥0.8mm lesions
  • Adverse features assoc with higher rate of positivity such as
    • Ulceration
    • Younger age
    • High mitotic rate
    • Lymphovascular invasion
    • (Female sex)
    • (Higher Clark’s level)
Conclusions

- Patients with a positive SLN can be followed by nodal ultrasound rather than CLND
  - But CLND should still be considered if likelihood of positive non-sentinel LNs is higher
Giorgos Karakousis, MD
Thank you!