NEW AJCC 2018 STAGING 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.
Overview

AJCC Staging Changes for 2018

Reasons to perform (and avoid) a sentinel lymph node procedure

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

Which SLN+ patients should have a completion LN dissection (CLND)?
• AJCC (American Joint Committee on Cancer)
  • Creates cancer staging system
    • Stratify patients according to melanoma-specific survival
  • Prior system from 2009
    • 27,000+ pts with melanoma confined to skin (Stage I and II)
### 2017 AJCC STAGING SYSTEM

<table>
<thead>
<tr>
<th>Stage</th>
<th>Thickness</th>
<th>Ulceration</th>
</tr>
</thead>
<tbody>
<tr>
<td>IA</td>
<td>≤1mm</td>
<td>- and &lt;1 mitosis</td>
</tr>
<tr>
<td>IB</td>
<td>≤1mm</td>
<td>+ or 1 mitosis</td>
</tr>
<tr>
<td></td>
<td>1–2mm</td>
<td>-</td>
</tr>
<tr>
<td>IIA</td>
<td>1–2mm</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>2–4mm</td>
<td>-</td>
</tr>
<tr>
<td>IIB</td>
<td>2–4mm</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>&gt;4mm</td>
<td>-</td>
</tr>
<tr>
<td>IIC</td>
<td>&gt;4mm</td>
<td>+</td>
</tr>
</tbody>
</table>
CHANGES FOR 2018

• Mitoses are no longer included in staging
  • Recommendation is still to assess mitoses
CHANGES FOR 2018

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

• Stage IA: no ulceration, <0.8mm
• Stage IB: ulceration OR 0.8 – 1mm
CHANGES FOR 2018

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

• Stage IA: no ulceration, <0.8mm
• Stage IB: ulceration OR 0.8 – 1mm
  • <0.8mm, -ulceration = IA
  • <0.8mm, +ulceration = IB
  • 0.8-1mm = IB
**2018 AJCC STAGING SYSTEM**

<table>
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<tr>
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<th>Ulceration</th>
</tr>
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<tbody>
<tr>
<td>IA</td>
<td>&lt;0.8mm</td>
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</tr>
<tr>
<td>IB</td>
<td>&lt;0.8mm</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>0.8-1mm</td>
<td>+/-</td>
</tr>
<tr>
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<td>1 – 2mm</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>2 – 4mm</td>
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<td>+</td>
</tr>
</tbody>
</table>
CHANGES FOR 2018

• Thickness reported to one decimal place rather than two
  • 0.7mm rather than 0.74mm
• We use the AJCC staging system for management decisions
  • Who has worse survival
  • Who should have a sentinel lymph node procedure
It is tempting to use the AJCC Staging System to make SLN decisions, but

- AJCC purely based on survival
- Can have hematogenous or lymphatic spread
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)

- Adjuvant therapy available for SLN+ patients
  - Ipilimumab (2015)
  - Nivolumab (Dec 2017)

- 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, the common cutoff for rate of SLN positivity is 5%.
Overview

AJCC Staging System changes for 2018

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

Which SLN+ patients should have a completion LN dissection (CLND)?
SLN Biopsy: Which patients would benefit?

Published Clinical Guidelines: AAD, NCCN, ASCO
Thicker (>1mm) melanomas

- **AAD**: SLN Recommended
- **NCCN**: SLN Recommended
- **ASCO**: SLN Recommended
SLN biopsy recommendations

But what about thin (≤1mm) lesions?
Thick (≤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?
Thin (≤1mm) melanomas

AAD
Discuss ≥0.8mm, or
if between 0.5mm and 0.8mm AND has ulceration or >1 mitosis AND other adverse parameters

NCCN
Consider if ≥0.8mm, or if ulcerated or other adverse features

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

- Ulceration
- 2 or more mitoses
- Lymphovascular invasion

Soft factors:
- Clark’s level IV or V
- Younger age
- Female sex
Overview

Reasons to perform (and avoid) a sentinel lymph node procedure

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

Which SLN+ patients should have a completion LN dissection (CLND)?
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 now suggest close surveillance is appropriate.
Conclusions

• SLN biopsy has role in many melanoma patients with disease confined only to the skin
  • But not all patients (contraindications or SLN+ rate <5%)

• Lesions with positive deep margins or with partial sampling biopsies need to be carefully evaluated
Conclusions

- SLN should be considered for
  - $\geq 0.8\text{mm}$ lesions
  - Lesions with features associated with a higher rate of positivity such as ulceration/high mitotic rate/lymphovascular invasion/higher Clark’s level/younger age/female sex

- Many patients with +SLN do not need to have a completion lymph node dissection
  - But still need to be closely monitored
Giorgos Karakousis, MD
Thank you!