AJCC Staging Moments

AJCC TNM Staging 8th Edition

Melanoma Case #3
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Melanoma Case # 3
Presentation of New Case

• Newly diagnosed melanoma patient

• Presentation at Cancer Conference for treatment recommendations and clinical staging
Melanoma Case # 3  
History & Physical

• 79 yr old male who presented with a pigmented skin lesion left mid back, lesion enlarging and changing color, no regional lymphadenopathy

• No family history
Melanoma Case # 3
Imaging Results

• No imaging
Melanoma Case # 3
Diagnostic Procedure

• Procedure
  – Excisional skin bx left mid thoracic back

• Pathology Report
  – Melanoma
  – Breslow tumor thickness 2.8mm (now reported in tenths of mm)
  – Ulceration present
  – Mitotic rate – 1/mm2
  – Margins uninvolved
Melanoma Case # 3
Clinical Staging

• Clinical staging
  – Uses information from the physical exam, imaging, and diagnostic biopsy including excision of primary tumor in melanoma
  – Excision of primary tumor includes shave bx, punch bx, incisional bx, excisional bx, or complete excisional bx (microstaging)

• Purpose
  – Select appropriate treatment
  – Estimate prognosis
Melanoma Case # 3
Clinical Staging

• Synopsis: elderly patient with 2.8mm primary tumor thickness melanoma skin left mid back with ulceration present, clinically negative nodes

• What is the clinical stage?
  – T____
  – N____
  – M____
  – Stage Group_______
Melanoma Case # 3
Clinical Staging

• Clinical Stage correct answer
  – cT3b
  – cN0
  – cM0
  – Stage Group IIB

• Based on stage, treatment is selected

• Review treatment guidelines for this stage
Melanoma Case # 3
Clinical Staging

• Rationale for staging choices
  – cT3b for primary melanoma with tumor thickness >2.0 to 4.0 mm and ulceration present
  – cN0 → nodes were clinically negative on imaging*
  – cM0 → nothing to suggest distant metastases*
  – *if there is clinical suspicion of regional or distant disease, appropriate tests are generally performed before developing a treatment plan
Melanoma Case # 3
Treatment Options

• Review treatment guidelines for this stage

• Discuss appropriate treatment plans for this patient
Melanoma Case # 3
Surgery & Findings

• Surgery
  – Wide excision
  – 2 cm margin
  – Lymphatic mapping and sentinel node biopsy procedure

• Operative findings
  – Four sentinel nodes identified by dye and radioactive tracer
Melanoma Case # 3
Pathology Results

• Mixed superficial spreading and desmoplastic type melanoma
• Breslow tumor thickness 2.8 mm (now reported in tenths of mm)
• Ulceration present
• Margins negative
• 1 of 4 left axillary sentinel nodes with tumor involvement
Melanoma Case # 3
Pathological Staging

• Pathological staging
  – Uses information from clinical staging, operative findings, and resected specimen pathology report

• Purpose
  – Additional data for estimating prognosis
  – Calculating end results (survival data)
Melanoma Case # 3
Pathological Staging

• Synopsis: patient with 2.8 mm primary thickness melanoma, ulceration present, SLN metastasis present in 1 clinically negative regional node

• What is the pathological stage?
  – T____
  – N____
  – M____
  – Stage Group______
Pathological Staging

- Pathological Stage correct answer
  - pT3b
  - pN1a(sn)
  - cM0
  - Stage Group IIIC

- Based on pathological stage, there is more information (compared to clinical staging) to estimate prognosis and to contribute to adjuvant treatment decision-making
AJCC Stage III Stage Groups


AJCC Stage III Stage Groups

When T is...  And N is...  And M is...  Then the pathological stage group is...

| T1a/b–T2a | N1a or N2a | M0 | IIIA |
| T1a/b–T2a | N1b/c or N2b | M0 | IIIB |
| T2b/T3a | N1a–N2b | M0 | IIIB |
| T1a–T3a | N2c or N3a/b/c | M0 | IIIC |
| T3b/T4a | Any N ≥N1 | M0 | IIIC |
| T4b | N1a–N2c | M0 | IIIC |
| T4b | N3a/b/c | M0 | IIID |
| T0 | N1b, N1c | M0 | IIIB |
| T0 | N2b, N2c, N3b or N3c | M0 | IIIC |

Melanoma Case # 3
Pathological Staging

• Rationale for staging choices
  – pT3b is >2.0 up to 4mm in thickness, with ulceration present
  – pN1a(sn) because one clinically negative axillary node contained metastatic melanoma in SLN
  – cM0 – use clinical M with pathological staging unless there is microscopic confirmation of distant metastases
Prognostic Factors/Registry Data Collection

• Applicable to this case
  – Measured thickness: 2.8 mm (now reported in tenths of mm)
  – Ulceration: present
  – 1 tumor-involved clinically occult lymph node (ie, positive SLN)
T3b and N1a

T3b is >2.0mm up to 4.0 mm in thickness, with ulceration.

N1a is clinically occult (ie, SLN positive) metastasis in regional lymph node.


Recap of Staging

- Summary of correct answers
  - Clinical stage  cT3b cN0 cM0 Stage Group IIB
  - Pathological stage  pT3b pN1a(sn) cM0 Stage Group IIIC

- The staging classifications have a different purpose and method of assessment so can be different. Do not go back and change the clinical staging based on pathological staging information.
Staging Moments Summary

• Review site-specific information if needed

• Clinical Staging
  – Based on information before treatment
  – Used to select treatment options

• Pathological Staging
  – Based on clinical data PLUS operative findings and resected specimen pathology report
  – Used to evaluate end-results (e.g. survival)