

AJCC Staging Moments

AJCC TNM Staging 8th Edition

Melanoma Case #3



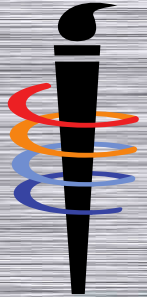
AJCC

American Joint Committee on Cancer

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Contributors:

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Melanoma Case # 3

Presentation of New Case

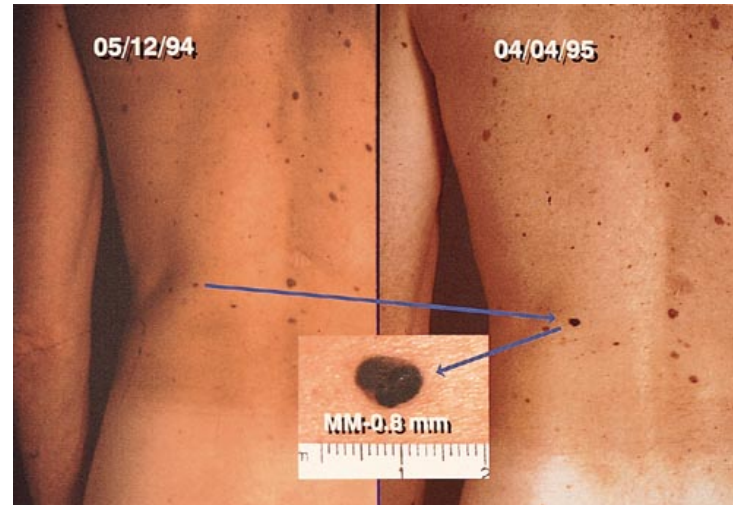
- Newly diagnosed melanoma patient
- Presentation at Cancer Conference for treatment recommendations and clinical staging



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



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Halpern A, Charles C,
Marghoob A. [Atlas of
Cancer](#). Edited by
Maurie Markman,
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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_____



Melanoma Case # 3

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

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 \geq 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

Gershenwald, Scolyer, et al. Melanoma. In Amin, M.B., Edge, S.B., Greene, F.L., et al. (Eds.) AJCC Cancer Staging Manual. 8th Ed., 2017

AJCC Eighth Edition Melanoma Stage III Subgroups									
N Category	T Category								
	T0	T1a	T1b	T2a	T2b	T3a	T3b	T4a	T4b
N1a	N/A	A	A	A	B	B	C	C	C
N1b	B	B	B	B	B	B	C	C	C
N1c	B	B	B	B	B	B	C	C	C
N2a	N/A	A	A	A	B	B	C	C	C
N2b	C	B	B	B	B	B	C	C	C
N2c	C	C	C	C	C	C	C	C	C
N3a	N/A	C	C	C	C	C	C	C	D
N3b	C	C	C	C	C	C	C	C	D
N3c	C	C	C	C	C	C	C	C	D

Instructions

- (1) Select patient's N category at left of chart.
- (2) Select patient's T category at top of chart.
- (3) Note letter at the intersection of T&N on grid.
- (4) Determine patient's AJCC stage using legend.

Legend

A	Stage IIIA
B	Stage IIIB
C	Stage IIIC
D	Stage IIID

N/A=Not assigned, please see manual for details.^{REF}

Gershenwald, Scolyer, Hess, Sondak et al., CA Cancer J Clin. 2017 Nov;67(6):472-492.

AJCC Stage III Stage Groups

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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 \geq 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

Gershenwald, Scolyer, et al. Melanoma. In Amin, M.B., Edge, S.B., Greene, F.L., et al. (Eds.) AJCC Cancer Staging Manual. 8th Ed., 2017

AJCC Eighth Edition Melanoma Stage III Subgroups									
N Category	T Category								
	T0	T1a	T1b	T2a	T2b	T3a	T3b	T4a	T4b
N1a	N/A	A	A	A	B	B	C	C	C
N1b	B	B	B	B	B	B	C	C	C
N1c	B	B	B	B	B	B	C	C	C
N2a	N/A	A	A	A	B	B	C	C	C
N2b	C	B	B	B	B	B	C	C	C
N2c	C	C	C	C	C	C	C	C	C
N3a	N/A	C	C	C	C	C	C	C	D
N3b	C	C	C	C	C	C	C	C	D
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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



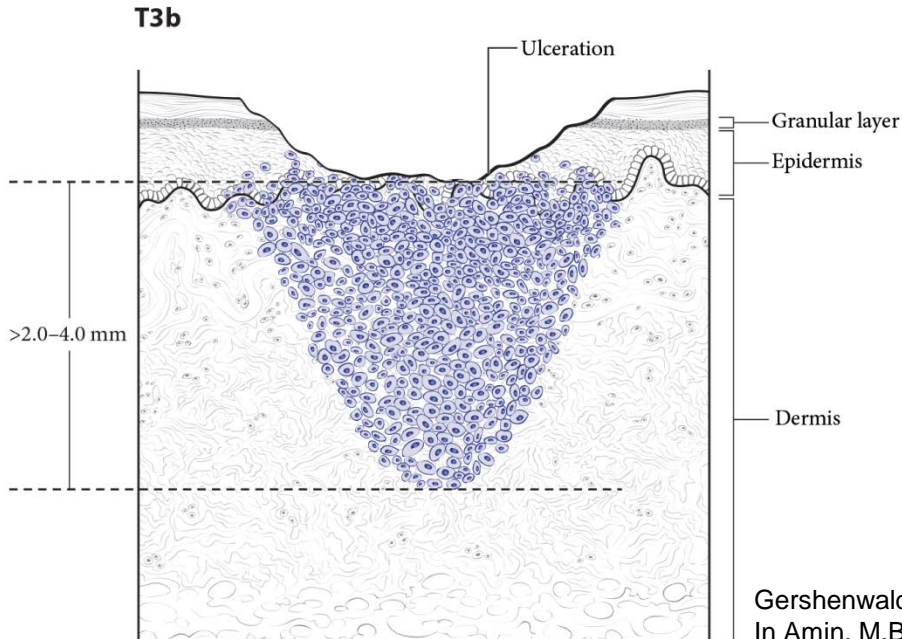
Prognostic Factors/Registry Data Collection

- 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



Gershenwald, Scolyer, et al. Melanoma. In Amin, M.B., Edge, S.B., Greene, F.L., et al. (Eds.) AJCC Cancer Staging Manual. 8th Ed., 2017

N1a

Clinically occult (non-palpable) involved node

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



Melanoma. In Compton, C.C., Byrd, D.R., et al. (Eds.) AJCC Cancer Staging Atlas, 2nd edition (2012)



Melanoma Case # 3

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)

