Melanoma Case 1
SURGICAL PATHOLOGY REPORT #1

Surgical Pathology Report
August 11, 2007

Clinical History: Patient presents today with the chief concern of growth between her left toes for 6 months. She was seen by a general doctor and diagnosed with fungal infection. He prescribed antifungal cream, which she applied every day for 6 months. It never got better with the cream. Now she has a mass between her big toe and second toes.

Specimen: First interspace, left foot

Final Diagnosis: Skin, first interspace, left foot, punch biopsy: Malignant melanoma with features of acral lentiginous type, invasive to a Clark level IV, and an approximate Breslow thickness of 3.25 mm, T3a, and extending to bilateral biopsy margins.

Melanoma Case 1
SURGICAL PATHOLOGY REPORT #2

Surgical Pathology Report:
August 14, 2007

Specimen: Right thigh

Final Diagnosis: Skin, right thigh, shave biopsy: Consistent with malignant melanoma, superficial spreading type, invasive to a Clark level II/III and a Breslow thickness of 0.79 mm, biopsy. Melanoma in-situ extends to inked biopsy margins.

Melanoma Case 1
SURGICAL PATHOLOGY REPORT #3

Surgical Pathology Report:
August 19, 2007

Specimen: Wide excision left foot, wide excision right thigh

Final Diagnosis:
A. Malignant melanoma, Breslow depth 3.40mm, skin between amputated first and second toe of left foot, margins free of tumor
B. Wide excision of melanoma from right thigh negative for residual melanoma.

END Melanoma Case 1

Melanoma Case 2
SURGICAL PATHOLOGY REPORT

Surigcal Pathology Report
May 5, 2007

Clinical History: Two biopsies left frontal medial and lateral scalp, approximately 5 mm from each other. Shave biopsies.

Specimen:
A. Left frontal medial scalp
B. Left frontal lateral scalp

Final Diagnosis:
A. Skin, left frontal medial scalp, shave biopsy: Invasive malignant melanoma, anaplastic, nodular type with anaplastic and spindle cell features. Clark's level: IV. Breslow thickness: 2.05 mm. Ulceration: Present. Satellites: Present.
B. Skin, left frontal lateral scalp: Invasive malignant melanoma with ulceration, histologically similar to the tumor present in specimen A, transected at base and edges of biopsy.

Comments:
The deepest measurable focus of invasive tumor is present is specimen A where tumor extends to the base of the shave biopsy. If the biopsies from part A and B are separated by a region of uninvolved skin, it is likely that one of these biopsies represents a satellite lesion. Histologically, these appear to be two distinct nodules but both have an intraepidermal component associated with them. The possibility also exists that these are two nodular foci of invasion arising in a broad melanoma. Biopsy B is clearly ulcerated. If these shave biopsies represent portions of the same lesion, the stage would be at least pT2b.

END Melanoma Case 2

Melanoma Case 3
SURGICAL PATHOLOGY REPORT

Surgical Pathology Report
July 5, 2007

Clinical History: 1. Lesion back (left upper) sebaceous keratosis vs melanoma. 2. Lesion back (right lower) melanoma?

Final Diagnosis:
1. Skin, upper back, excision – severely atypical junctional melanocytic proliferation, resembling a dysplastic nevus with severe cytoarchitectural atypia. Lesion is 2 mm from the nearest lateral resection margin. Unequivocal evidence of malignant melanoma is not seen.
2. Skin, lower back, excision – malignant melanoma in situ. Lesion appears to arise in a setting of a dysplastic nevus. Lesion is within 1 mm of the nearest lateral resection margin.

Addendum Report:
Specimen # 2 from the lower back represents malignant melanoma in situ, superficial spreading type. Specimen #1 from the upper back shares many histologic features from specimen # 2 and is within the same spectrum of severely atypical junctional melanocytic proliferations. Although specimen # 1 exhibits features of a severely dysplastic compound nevus, minor morphologic differences from specimen # 2 suggest that this lesion is a high risk transforming precursor lesion and best described as melanoma in situ.

Amended Final Diagnosis:
1. Skin, upper back, excision – melanoma in situ
2. Skin, lower back, excision – malignant melanoma in situ, superficial spreading type

END Melanoma Case 3

Melanoma Case 4
SURGICAL PATHOLOGY REPORT #1

Surgical Pathology Report
October 1, 2007

Specimen:
A. Left lower quadrant abdomen
B. Left lower medial thigh

Final Diagnosis:
A. Skin of abdomen, left lower, shave biopsy: Melanoma in situ. Melanoma confined to epidermis (Clark's level I). Features of regression not present.
B. Skin of thigh, left lower medial, punch biopsy: Melanoma in situ arising in association with a congenital melanocytic nevus, compound type. Melanoma confined to epidermis (Clark's level I). Features of regression are noted.

Comment:
Both biopsies consist of a melanocytic proliferation with an intraepidermal component that shows features of melanoma in situ including pagetoid migration of atypical melanocytes. In the biopsy from "left lower medial thigh", there is a dermal melanocytic component that is composed primarily of small melanocytes and is interpreted as a pre-existing nevus.

Melanoma Case 4
SURGICAL PATHOLOGY REPORT #2

Surgical Pathology Report
October 14, 2007

Specimen:
A. Left abdomen
B. Left lower medial thigh excision

Final Diagnosis:
A. Skin of abdomen, left, wide excision: Cicatrix. No residual malignant melanoma in situ is identified.
B. Skin of thigh, left lower medial, wide excision: Cicatrix. No residual malignant melanoma in situ is identified.

END Melanoma Case 4

Melanoma Case 5
SURGICAL PATHOLOGY REPORT

Surgical Pathology Report
May 14, 2007

Specimen(s):
Melanoma left trunk.
A. Lymph node axillary sentinel node left
B. Lymph node intra-pectoral lymphatic left
C. Skin melanoma left trunk

Final Diagnosis:
A. Left axillary sentinel node: no evidence of malignancy, negative for melanoma
B. Left intra-pectoral lymphatic: fibroadipose tissue with no evidence of malignancy
C. Wide local excision of left trunk melanoma: malignant melanoma with the following features:

1. Histologic type:
    a. Spindle cell histology with superficial spreading (radial growth) pattern
    b. Single focus of nodular, superficially invasive (vertical growth phase) with epithelioid cytology
2. Clark's level IV
3. Breslow's thickness 0.93 mm
4. Zero mitoses per square millimeter
5. No evidence of regression
6. Focal infiltrating leukocytes but extensive subjacent lymphohistiocytic response
7. No evidence of ulceration, dermal satellites or vascular space invasion
8. Surgical margins widely negative for melanoma

END Melanoma Case 5

Melanoma Case 6
SURGICAL PATHOLOGY REPORT

Surgical Pathology Report
April 1, 2007

Clinical History:
Labeled growth behind the right ear is a 2.8 x 1.7 x 0.8 cm ellipse of rubbery tan skin and subcutaneous tissue. Suture indicates the superior resection margin.

Specimen(s):
Growth behind right ear

Microscopic Examination:
The ulcerating tumor is a nodular melanoma, spindle cell variant, which extends deeply into the reticular dermis. Resection margins are not involved by tumor. No radial growth phase is identified. The elongated tumor cells, arranged in streaming fascicles, show a high mitotic rate of $12/mm^{2.}$ No tumor-infiltrating lymphocytes or evidence of regression are identified. All resection margins are free of tumor. No angiolymphatic invasion is noted. No co-existing nevus is seen. A panel of immunostains shows marked positivity of the tumor cells for S100 and desmin and weak positivity for actin. Tumor cells are negative for HMB45 and AE1/3 by this method.

Final Diagnosis:
Skin, behind right ear: Nodular melanoma, spindle cell variant, excised

Summary of Malignant Neoplasm:
Skin-Malignant Melanoma
Histopathologic subtype: Nodular, spindle cell variant
Clark's level: IV
Breslow thickness (mm): 8.65 mm
Margins: Not involved (0.2 cm to closest margin)
Ulceration: Yes
Mitotic rate (dermal component): $12/mm^2$
Vascular or lymphatic invasion: Not identified
Perineural invasion: Not identified
Tumor infiltrating lymphocytes (vertical growth phase only): Not present
Regression: Not identified
Satellitosis (in-transit dermal metastases): Not identified

END Melanoma Case 6

Melanoma Case 7
SURGICAL PATHOLOGY REPORT

Surgical Pathology Report
August 30, 2007

Specimen(s):
A. Left medial shin lesion
B. Left anteromedial shin lesion

Gross Examination:
The specimen is received in two parts (Part A, Part B):
Part A, designated left medial shin lesion, is a formalin-fixed, wrinkled-surfaced, 3.0 x 2.6 x 0.5-cm disc of pale tan skin. On the surface are two irregular, slightly roughened, pink-gray lesions. One is 0.6, the other 1.5 cm in greatest dimension. The specimen is inked and sectioned.
Part B, designated left anteromedial skin lesion, is a formalin-fixed, wrinkled-surfaced, 3.0 x 2.8 x 0.7-cm disc of pinkish-tan skin. On the surface is an irregular, slightly raised, 1.1-cm in greatest dimension, pinkish-gray lesion. The specimen is inked and sectioned.

Microscopic Examination:
A. Sectioning the lesion shows within the epidermis irregular nests of atypical melanocytes. In the current material, the lesion appears as in-situ melanoma with evidence of "regression".
B. Sectioning the lesion shows within the epidermis irregular nests of atypical melanocytes. These cells possess large nuclei and abundant pale cytoplasm. In the current material, the lesion appears as in-situ melanoma with evidence of "regression".

Final Diagnosis:
A. Left medial shin lesion: In-situ melanoma, appearing excised
B. Left anteromedial shin lesion: In-situ melanoma, appearing excised

END Melanoma Case 7

Melanoma Case 8
SURGICAL PATHOLOGY REPORT #1

Surgical Pathology Report
August 7, 2007

Specimen: Skin right neck

Final Diagnosis:
Skin of neck, right, shave biopsy:
Amelanotic malignant melanoma, invasive (lentigo maligna melanoma)
Melanoma is ulcerated
Melanoma at least extends into and fills papillary dermis (at least Clark's level III)
Melanoma thickness (Breslow thickness) at least 0.98 mm
No lymphovascular invasion identified
Features of regression not present
Invasive melanoma extends to peripheral and deep edges of shave biopsy specimen

Comment:
The biopsy consists of ulcerated malignant melanoma with little melanin pigment (amelanotic melanoma). Invasive melanoma is transected at the base of the biopsy. Therefore, the overall thickness and level may be greater.

Melanoma Case 8
SURGICAL PATHOLOGY REPORT #2

Surgical Pathology Report
August 27, 2007

Specimen: Right submandibular melanoma neck, short stitch-superior, long-lateral

Final Diagnosis:
Skin and subcutaneous tissue of neck, right submandibular region, wide excision:
Residual melanoma in situ. See comment. Margins negative for melanoma in situ (melanoma in situ present approximately 4 mm from closest peripheral margin). No residual invasive melanoma identified.

Comment:
The wide excision specimen shows residual melanoma in situ flanking the biopsy site. No residual invasive melanoma is identified. Although the borders of the melanoma in situ are ill-defined, the melanoma in situ appears well encompassed by the margins of the excision.

END Melanoma Case 8

Melanoma Case 9
SURGICAL PATHOLOGY REPORT #1

Surgical Pathology Report
April 24, 2007

Specimen: Right chest skin biopsy

Microscopic Summary:
Histologic Type: Invasive melanoma with nevoid features
Ulceration: Absent/not observed
Extent of Invasion: T1a: Melanoma 1.0 mm or less in thickness and level II or III, no ulceration
Depth of Invasion: Approximately 0.74 mm
Tumor Infiltrating Lymphocytes: Brisk
Blood/Lymphatic Vessel Invasion: Absent/not observed
Perineural Invasion: Absent/not observed
Tumor Regression: Present involving less than 75%

Final Diagnosis:
Skin, right chest, shave biopsy: Consistent with malignant melanoma with nevoid features, invasive to a Clark level III and a Breslow thickness of approximately 0.74 mm with features of regression (less than 75%), biopsy.

Melanoma Case 9
SURGICAL PATHOLOGY REPORT #2

Surgical Pathology Report
April 30, 2007

Specimen: Right chest skin wide excision previous melanoma

Final Diagnosis:
Wide excision, 1.85 mm melanoma, right chest: Skin with biopsy-related changes; no residual invasive melanoma identified. Severely atypical lentiginous melanocytic hyperplasia is present in both peripheral margins immediately adjacent to the prior biopsy site.

END Melanoma Case 9

Melanoma Case 10
SURGICAL PATHOLOGY REPORT #1

Surgical Pathology Report
March 28, 2007

Specimen: Abdomen and back

Immunohistochemical procedures are done using a standard LSAB (Labeled StreptAvidin Biotin) Kit, DAB as a detection reagent on a DAKO immunostainer. Procedure and dilutions of antibodies are on file. The standard immunohistochemical protocol was followed. Laboratory extrinsic controls for the antibodies tested exhibited appropriate staining.

Antibody 1: S100
Interpretation: Negative
Vendor: NDAKO
Pretreatment: none
% of Cells: 0
Intrinsic controls were positive

Antibody 2: HMB 45
Interpretation: Negative
Vendor: DAKO
Pretreatment: none
% of Cells: 0
Intrinsic controls were not evaluable

Final Diagnosis:
A. Skin lesion, abdomen, excision consult diagnosis: Severe melanocytic dysplasia of indeterminate malignant potential plus a focus of in situ melanoma (traumatic scar and invasive melanocytic lesion cannot be excluded), abdominal.
B. Skin lesion, back, excision consult diagnosis: Malignant melanoma, superficial spreading type having level III invasion (Clark classification).

END Melanoma Case 10