## **MPH Quiz**

#### Melanoma Case 1

Surigcal Pathology Report May 5, 2007

Clinical History: Shave biopsies of a tumor on the left cheek and another in the mid chin area. Tumors are approximately 5 cm from each other. Patient now presents for a wide excision of each tumor.

Specimen: A. Left cheek B. Chin

Final Diagnosis:

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- A. Skin, left cheek, shave biopsy: Invasive malignant melanoma, anaplastic, nodular type with epithelioid and spindle cell features. Clark's level: IV. Breslow thickness: 2.05 mm. Ulceration: Present. Satellites: Present.
- B. Skin, mid chin, invasive malignant epithelioid cell melanoma. Clark's level: II. Breslow thickness: 1.05 mm. Ulceration: Present. Satellites: None

# Melanoma Case 2 SURGICAL PATHOLOGY REPORT #1

Surgical Pathology Report October 1, 2007

Specimen:

- A. Left upper quadrant abdomen
- B. Left lower chest wall

Final Diagnosis:

- A. Skin of abdomen, shave biopsy: Malignant melanoma in situ, lentigo maligna type confined to epidermis (Clark's level I). Features of regression not present.
- B. Skin of left chest wall, punch biopsy: Melanoma in situ arising in association with a congenital melanocytic nevus, compound type with features of regression. Melanoma confined to epidermis (Clark's level I).

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 chest wall", there is a dermal melanocytic component that is composed primarily of small melanocytes and is interpreted as a pre-existing nevus.

# SURGICAL PATHOLOGY REPORT #2

Surgical Pathology Report October 14, 2007

Specimen:

A. Left abdomen

B. Left chest wall

Final Diagnosis:

- A. Skin of abdomen, left, wide excision: Cicatrix. No residual malignant melanoma in situ is identified.
- B. Skin of chest wall, wide excision: Cicatrix. No residual malignant melanoma in situ is identified.

#### Melanoma Case 3 SURGICAL PATHOLOGY REPORT

Surgical Pathology Report April 1, 2007

Clinical History: Labeled growth behind the right ear is a  $2.8 \times 1.7 \times 0.8$  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<sup>2</sup>. 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<sup>2</sup> 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

# Melanoma Case 4 SURGICAL PATHOLOGY REPORT

Surgical Pathology Report August 30, 2007

Specimen(s):

- A. Left medial shin lesion
- B. Left anteromedial thigh 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,  $3.0 \times 2.6 \times 0.5$ -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 thigh 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 thigh lesion: In-situ melanoma, appearing excised

## Melanoma Case 5 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 arising in a congenital melanocytic nevus. This is of indeterminate malignant potential (traumatic scar and invasive melanocytic lesion cannot be excluded)...
- B. Skin lesion, back, excision consult diagnosis: Malignant melanoma, superficial spreading type having level III invasion (Clark classification).

# **MPH Quiz Questions**

#### Case 1

- 1. Which mulitple primary rule would be used for case 1?
  - a. M1 Single primary
  - b. M3 Multiple Primaries
  - c. M4 Multiple Primaries
  - d. M8 Single Primary
- 2. Which answer below indicates the histology for each primary in case 1?
  - a. Nodular melanoma, NOS (8721/3)
  - b. Epithelioid cell melanoma (8771/3)
  - c. Epithelioid and spindle cell melanoma, mixed (8770/3)
  - d. Spindle cell melanoma (8772/3)
- 3. Which histology rule(s) would be used for case 1 (circle all that apply)?
  - a. H3
  - b. H4
  - c. H9
  - d. H10

# Case 2

- 4. Which mulitple primary rule would be used for case 2?
  - a. M1 Single primary
  - b. M2 Single primary
  - c. M5 Multiple Primaries
  - d. M8 Single Primary
- 5. Which answer below indicates the histology(ies)in case 2?
  - a. Melanoma in situ (8720/2)
  - b. Lentigo maligna melanoma, in situ (8742/2)
  - c. Melanoma in situ arising in a congenital melanocytic nevus (8761/2)
  - d. Spindle cell melanoma (8772/3)
- 6. Which histology rule(s) would be used for case 2 (circle all that apply)?
  - a. H3
  - b. H4
  - c. H9
  - d. H10

# Case 3

- 7. Which mulitple primary rule would be used for case 3?
  - a. M1 Single primary
  - b. M2 Single primary
  - c. M5 Multiple Primaries
  - d. M8 Single Primary
- 8. Which answer below indicates the histology(ies)in case 3?
  - a. Nodular melanoma, NOS (8721/3)
  - b. Epithelioid cell melanoma (8771/3)
  - c. Malignant melanoma (8720/3)
  - d. Spindle cell melanoma (8772/3)

- 9. Which histology rule(s) would be used for case 3 (circle all that apply)?
  - a. H3
  - b. H4
  - c. H9
  - d. H10

#### Case 4

10. Which mulitple primary rule would be used for case 4?

- a. M1 Single primary
- b. M2 Single primary
- c. M5 Multiple Primaries
- d. M8 Single Primary
- 11. Which answer below indicates the histology(ies)in case 4?
  - a. Melanoma in situ (8720/2)
  - b. Melanoma in situ with features of regression (8723/2)
  - c. Melanoma arising in a congenital melanocytic nevus (8761/3)
  - d. Spindle cell melanoma (8772/3)
- 12. Which histology rule(s) would be used for case 4 (circle all that apply)?
  - a. H3
  - b. H4
  - c. H9
  - d. H10

# Case 5

13. Which mulitple primary rule would be used for case 5?

- a. M1 Single primary
- b. M2 Single Primary
- c. M4 Multiple Primaries
- d. M8 Single Primary
- 14. Which histology rule(s) would be used for case 1 (circle all that apply)?
  - a. H3
  - b. H4
  - c. H9
  - d. H10
- 15. Which answer below indicates the histology(ies)in case 3?
  - a. Nodular melanoma, NOS (8721/3)
  - b. Epithelioid cell melanoma (8771/3)
  - c. Malignant melanoma (8720/3)
  - d. Superficial spreading melanoma (8743/3)

#### Quiz 2 New Data Items

Case 1

# SURGICAL PATHOLOGY REPORT

Note: This case is One Primary with Multiple Tumors Reported as Single Primary

Surgical Pathology Report January 4, 2007

Surgical Specimen: Bladder, cystectomy

Final Diagnosis: Cystectomy

A. Poorly differentiated transitional cell carcinoma of the bladder trigone, 3.2cm, extending through muscular wall, margins free of tumor.

B. Two separate, 1.0cm moderately differentiated papillary transitional cell carcinomas of the bladder within the dome of the bladder.

# New Data Items - Case 2 SURGICAL PATHOLOGY REPORT

Note: This case is One Primary with Multiple Tumors Reported as Single Primary

Surgical Pathology Report July 27, 2007

Specimen: Left breast, mastectomy

Final Diagnosis:

Breast, left, mastectomy

- 1. Widespread, multicentric infiltrating lobular carcinoma associated with extensive multicentric lobular carcinoma in situ
  - Diameter of aggregate tumor foci greater than 5.0cm
  - Lymphovascular invasion not seen
  - Estrogen/Progesterone receptor and HER2/NEU expression assays pending
- 2. Infiltrating ductal carcinoma, grade 1
  - Tumor diameter 1.5cm
  - Small amount of low-grade ductal carcinoma in situ
  - Invasive or in situ tumor not seen to touch inked surgical margins
  - Lymphovascular invasion not seen
  - Estrogen/Progesterone receptor and HER2/NEU expression assays pending

## New Data Items - Case 3 SURGICAL PATHOLOGY REPORT #1

Surgical Pathology Report June 2, 2007

Specimen (s) received:

- A. Prostate right base x 2
- B. Prostate right middle x 2
- C. Prostate right apex x 2
- D. Prostate left base x 2
- E. Prostate left middle x 2
- F. Prostate left apex x 2

Final Diagnosis:

Prostate, biopsies as designated: focal atypical small glands suspicious for minimal prostatic adenocarcinoma associated with high grade prostatic intraepithelial neoplasia.

# New Data Items Case 3 SURGICAL PATHOLOGY REPORT #2

Surgical Pathology Report October 14, 2007

Specimen (s) received: Prostatectomy

Final Diagnosis: Prostate, prostatectomy: prostatic adenocarcinoma, well differentiated, Gleason 2+3=5

## New Data Items - Case 4 SURGICAL PATHOLOGY REPORT

Surgical Pathology Report June 2, 2007

Clinical History: Polyp

Specimen (s) received:

- A. Colon, sigmoid polyp, polypectomy
- B. Colon, biopsies

Gross Examination:

- A. Received in formalin, labeled "polyp is a piece of brown soft tissue compatible with mucosa. The tissue measures approximately  $1.0 \times 1.0 \times 0.4$  cm in greatest length. The tissue is submitted in toto in one cassette.
- B. Received in formalin, labeled "areas around polyp", are multiple pieces of brown sift tissue compatible with mucosa. The largest tissue approximately 0.3 x 0.2 x 0.1 cm in greatest diamter. The tissues are submitted in toto in one cassette.

Final Diagnosis:

- A. Colon, sigmoid, polyp, polypectomy: Tubular adenoma with focus suspicious for invasive adenocarcinoma.
- B. Colon biopsies: fragments of colonic mucosa with no specific pathologic change. No dysplasia seen.

Notes/Comments: The foci suspicious for invasive adenocarcinoma are characterized by groups of glands invading below the apparent muscularis mucosa. These glands come within 1 mm of the deep cauterized margin. These glands in addition arise from a tubular adenoma with both architectural and cytologic features of high grade dysplasia. A more definitive diagnosis of invasive adenocarcinoma is not possible on the current material given the cautery artifact.

# New Data Items - Case 5 RENAL ULTRASOUND

Renal Ultrasound October 16, 2007

Reason for Exam: Patient with chronic hypertension and more recently right flank pain for the past two months, increasing in severity.

Renal Ultrasound: 5cm mass in the upper pole right kidney, suspicious for renal cell carcinoma

Assessment: Probable renal cell carcinoma, however benign cyst is included in the differential diagnosis.

## New Data Items Case 5 SURGICAL PATHOLOGY REPORT

Surgical Pathology Report October 17, 2007

Specimen: Right kidney, radical nephrectomy

Final diagnosis: Adenocarcinoma, probable clear cell type of renal cell carcinoma

# Worksheet for New Data Items

1.	<ul> <li>Quiz question <ul> <li>a. Ambiguous Terminology</li> <li>b. Date of Conclusive Terminology</li> <li>c. Multiplicity Counter</li> <li>d. Date of Multiple Tumors</li> <li>e. Type of Multiple Tumors</li> </ul> </li> </ul>	//  //
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## **Collaborative Stage Quiz**

- 1. The patient had an excisional biopsy of a melanoma of the skin of the forehead. The operative report documented the tumor size as 3.0 cm, and the pathology report documented the tumor size as 2.5. The code for CS tumor size is:
  - a. 025
  - b. 030
  - c. 993
  - d. 999
- 2. An excisional biopsy of skin lesion of the left shin diagnosed nodular melanoma, Clark's level IV, papillary-reticular dermis invaded, and 0.8 mm thickness. The CS extension code is:
  - a. 20
  - b. 30
  - c. 40
  - d. 99
- 3. In the example above the codes for CS SSF1 and CS SSF2 are:
  - a. 008;000
  - b. 008; 999
  - c. 080;000
  - d. 040; 999
- 4. Liver lesion was biopsied and diagnosed metastatic melanoma. No skin lesions were identified. CS extension and CS mets at dx codes are:
  - a. 99; 40
  - b. 95;99
  - c. 95; 44
  - d. 95;40
- 5. Patient is diagnosed with a melanoma on the upper lip with a metastatic lesion on the skin above the lip 1.5 cm from the lip lesion. One buccinator lymph node was excised and metastatic. The CS lymph nodes code is:
  - a. 12
  - b. 14
  - c. 18
  - d. 22

# Melanoma Treatment Quiz

- 1. A patient had an excisional biopsy performed at another facility then came to your facility for a wide excision of the lesion, margins less than 1 cm. What surgery code would you use?
  - a. 27
  - b. 30
  - c. 45
  - d. 46
- 2. A patient had a melanoma and a shave type biopsy performed at another facility. They then went to your facility for a wide excision of the lesion, margins less than 1cm. What is Surgery of the primary site?
  - a. 30
  - b. 31
  - c. 45
  - d. 46
- 3. For melanoma with amputation of the toe, but with no margins specified, how is surgery coded?
  - a. 30
  - b. 31
  - c. 45
  - d. 46
- 4. A malignant melanoma was removed with close margins on a punch biopsy. It was followed by re-excision that showed not residual. The punch biopsy should be coded as a diagnostic procedure and the re-excision codes as surgery to the primary site.
  - a. True
  - b. False
- 5. Interferon-alpha is coded as a:
  - a. Chemotherapy
  - b. Hormone
  - c. Biologic Response Modifier
  - d. Other Treatment