

Other Sites Case 1
SURGICAL PATHOLOGY REPORT

Surgical Pathology Report
August 1, 2007

Specimen: Right testicle

Gross Description:

The specimen is received in a formalin-filled container labeled with the patient's name. The specimen is designated as "right testicle" and consists of a testicle with attached spermatic cord, which together weighs 65 gm. The spermatic cord measures 8.0 cm in length by 2.0 cm in diameter. The tunica vaginalis is baggy and has a stringy appearance. The outer portion of the testicle measures 7.0 x 3.5 x 3.5 cm. Prior to dissection, the entire outer surface is marked with black ink. The specimen is then bisected. The tunica vaginalis is noted to contain a small amount of straw-colored fluid. The testicle measures 4.3 x 3.0 x 3.0 cm. The testicular parenchyma displays two tumors. The first tumor (tumor #1) measures 3.2 x 2.1 x 2.0 cm and is soft and pink. The second tumor is firm, yellow-pink-tan with areas of focal hemorrhage and measures 2.7 x 1.7 x 1.2 cm (this will be called tumor #2). Both tumor #1 and #2 extend to the tunica albuginea. The tumors measure approximately 0.1cm from one another. However, the tumors do not appear to invade through the tunica albuginea. The tumors do not appear to extend to the spermatic cord. The epididymis measures 3.0 cm in length by up to 1.0 cm in diameter. The remaining testicular parenchyma appears normal.

Final Diagnosis:

Right testicle, radical orchiectomy: Mixed germ cell tumor with the following features: Composed of two nodules measuring 3.2 cm. and 2.7 cm.- the larger tumor nodule is composed of seminoma.- the smaller nodule is composed of 80% embryonal carcinoma and 20% seminoma.- definite angiolymphatic invasion is not identified.- the nodules are confined to the testis without invasion into the epididymis or through the tunica albuginea.- the spermatic cord margin is free of malignancy.- the background testicular parenchyma shows intratubular germ cell neoplasia.

END Other Sites Case 1

Other Sites Case 2
SURGICAL PATHOLOGY REPORT

Surgical Pathology Report
January 12, 2007

Clinical History: 57 year old man with melanoma of right eye with orbital hemorrhage.

Specimen: Enucleation, right eye

Gross Description:

Received in formalin designated "enucleation right eye" is a 2.5 x 2.6 x 2.2 cm eye globe, including a 0.4 cm in length x average diameter 0.4 cm optic nerve stump and a 1.1 x 1.0 cm, somewhat depressed, opaque cornea. The sclera is blue-white, with a minimal amount of attached soft tissue. The optic nerve margin is inked blue and the vortex veins are stripped. The eye globe is bisected in the transverse plane, revealing a dark brown, 0.7 x 0.4 x 0.4 cm mass, apparently located between the retina and the sclera, at least 0.7 cm from the optic nerve.

Microscopic Description:

Sections show globe in which there is a large nodular choroidal mass near the optic nerve. The mass is composed of sheets of spindle cells (predominantly Callender spindle B cell type) having central vesicular nuclei with prominent nucleoli and variably abundant amphophilic cytoplasm. Only rare cells with epithelioid features are noted. Some neoplastic cells contain granular brown pigment compatible with melanin. The lesion extends locally into the sclera following a myelinated nerve twig and traversing half to two thirds of the way through the sclera, but not to the scleral surface. There is no vascular invasion or infiltration of the optic nerve.

Final Diagnosis:

Right eye, enucleation: Choroidal spindle cell malignant melanoma with the following features: Mixed cell type, predominantly Callender spindle B cell type 0.7 cm maximum diameter with 0.4 cm maximum thickness. Extension into but not through the sclera. No vascular or optic nerve invasion.

END Other Sites Case 2

Other Sites Case 3
RADIOLOGY REPORT

Radiology Report
May 3, 2007

MRI Left Femur

Technique: Axial T1, fat saturated T2 and a sagittal and coronal saturated T2-weighted sequence is being evaluated. In addition, a coronal T1-weighted sequence is being evaluated.

No other films are available for comparison.

Findings: Images reveal a diffuse infiltration involving the distal one-half of the femur. This extends over a segment of approximately 18 cm. The bone marrow is of heterogeneous increased signal intensity on T2-weighted sequences and of heterogeneous low marginal intensity on T1-weighted sequences. There is transgression of the cortex. There is edema within the surrounding soft tissues.

A fracture is not clearly identified. Please note that the epiphysis is relatively spared of this process. This lesion is predominately within the diaphysis and metaphysis of the femur.

Impression: Diffusely infiltrating lesion of the distal aspect of the femur shaft. There is surrounding soft tissue masses due to breakdown of the cortex. There is surrounding edema within this region. The exact etiology of this finding is uncertain but it is felt to represent malignant neoplasm.

END Other Sites Case 3

Other Sites Case 4
SURGICAL PATHOLOGY REPORT

Surgical Pathology Report

March 22, 2007

Clinical History: Multiple liver lesions

Specimen:

- A. Liver-Liver core biopsy for frozen section
- B. Liver-Liver core biopsy

Frozen Section Diagnosis:

Malignant spindle cell tumor with features suspicious of metastatic leiomyosarcoma

Comments

In view of the CT scan findings, the morphologic features of the neoplasm are consistent with a metastasis from a primary gastric neoplasm. The differential diagnosis includes leiomyosarcoma/malignant gastro-intestinal stromal tumor (G.I.S.T.) and malignant fibrous histiocytoma. A paraffin block will be sent to Impath for immunohistochemistry.

Final Diagnosis:

Ultrasound guided core biopsies of a lesion in the liver: Malignant spindle cell tumor, metastatic

Amended Diagnosis based on additional Studies Requested from Impath: Metastatic malignant GIST.

END Other Sites Case 4

Questions

1. Which answer below indicates the number of primaries and the histology for each primary in case 1?
 - a. One primary/ mixed germ cell tumor (9085/3)
 - b. One primary/ embryonal carcinoma (9070/3)
 - c. Two primaries/ seminoma (9061/3) and embryonal carcinoma (9070/3)
 - d. Two primaries/ seminoma (9601/3) and mixed germ cell tumor (9085/3)

2. Which answer below indicates the number of primaries and the histology for each primary in case 2?
 - a. One primary/ spindle cell melanoma, type B (8774/3)
 - b. One primary/ spindle cell melanoma (8772/3)
 - c. One primary/ mixed epitheloid and spindle cell melanoma (8770/3)
 - d. One primary/ malignant melanoma (8720/3)

3. Which answer below indicates the number of primaries and the histology for each primary in case 3?
 - a. No primaries/ non-reportable case
 - b. One primary/ malignant neoplasm (8000/3)
 - c. One primary/ carcinoma (8010/3)
 - d. One primary/ malignant soft tissue tumor (8800/3)

4. Which answer below indicates the number of primaries and the histology for each primary in case 4?
 - a. One primary/ leiomyosarcoma (8890/3)
 - b. One primary/ malignant fibrous histiocyoma (8830/3)
 - c. One primary/ malignant spindle cell tumor (8004/3)
 - d. One primary/ malignant gastrointestinal stromal tumor (8936/3)

Melanoma Case 1
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 in 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 1

Melanoma Case 2
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 2
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 2

Melanoma Case 3
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 3

Melanoma Case 4
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 4
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 4

Melanoma Case 5
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 5
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 5

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.

END New Data Items Case 1

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

END New Data Items Case 2

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 with 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

END New Data Items Case 3

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 x 1.0 x 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 soft tissue compatible with mucosa. The largest tissue approximately 0.3 x 0.2 x 0.1 cm in greatest diameter. 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.

END New Data Items Case 4

New Data Items - Case 5
SURGICAL PATHOLOGY REPORT

Note: This case is One Primary when unknown whether single or multiple melanomas on scalp, default to single melanoma and single primary – See Melanoma Case 2.

Surgical 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:

- C. 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.
- D. 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 in 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. Lesion B is clearly ulcerated. If these shave biopsies represent portions of the same lesion, the stage would be at least pT2b.

END New Data Items Case 5

Worksheet for New Data Items

1. Quiz question

- a. Ambiguous Terminology _____
- b. Date of Conclusive Terminology _____ / _____ / _____
- c. Multiplicity Counter _____
- d. Date of Multiple Tumors _____ / _____ / _____
- e. Type of Multiple Tumors _____

2. Quiz question

- a. Ambiguous Terminology _____
- b. Date of Conclusive Terminology _____ / _____ / _____
- c. Multiplicity Counter _____
- d. Date of Multiple Tumors _____ / _____ / _____
- e. Type of Multiple Tumors _____

3. Quiz question

- a. Ambiguous Terminology _____
- b. Date of Conclusive Terminology _____ / _____ / _____
- c. Multiplicity Counter _____
- d. Date of Multiple Tumors _____ / _____ / _____
- e. Type of Multiple Tumors _____

4. Quiz question

- a. Ambiguous Terminology _____
- b. Date of Conclusive Terminology _____ / _____ / _____
- c. Multiplicity Counter _____
- d. Date of Multiple Tumors _____ / _____ / _____
- e. Type of Multiple Tumors _____

5. Quiz question

- a. Ambiguous Terminology _____
- b. Date of Conclusive Terminology _____ / _____ / _____
- c. Multiplicity Counter _____
- d. Date of Multiple Tumors _____ / _____ / _____
- e. Type of Multiple Tumors _____