

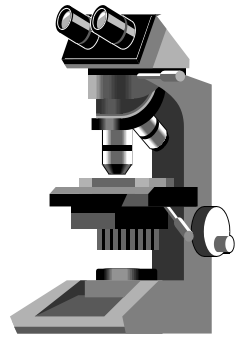


CALIFORNIA
TUMOR TISSUE REGISTRY

GENERAL PATHOLOGY

Minutes – Subscription A

May, 2010



SUGGESTED READING (General Topics from Recent Literature):

- Brimo F, Robinson B, et al. Renal Epithelioid Angiomyolipoma With Atypia: A Series of 40 Cases With Emphasis on Clinicopathologic Prognostic Indicators of Malignancy. *Am J Surg Pathol* 2010;34:715-722.
- van der Vegt B, Wesseling J, et al. Aggressiveness of ‘True’ Interval Invasive Ductal Carcinomas of the Breast in Postmenopausal Women. *Mod Pathol* 2010;23:629-636.
- Horbinski C, Hamilton RL, et al. Impact of Morphology, MIB-1, p53 and MGMT on Outcome in Pilocytic Astrocytomas. *Brain Pathol* 2010;20:581-588.
- Luzar B, Calonje E. Morphological and Immunohistochemical Characteristics of Atypical Fibroxanthoma With a Special Emphasis on Potential Diagnostic Pitfalls: A Review. *J Cutan Pathol* 2010;37:301-309.
- Little L, Stewart CJR. Cyclin D1 Immunoreactivity in Normal Endocervix and Diagnostic Value in Reactive and Neoplastic Endocervical Lesions. *Mod Pathol* 2010; 23:611-618.
- Welch HG, Black WC. Overdiagnosis in Cancer. *J Natl Cancer Inst* 2010;102:605-613.

California Tumor Tissue Registry
c/o: Department of Pathology and Human Anatomy
Loma Linda University School of Medicine
11021 Campus Avenue, AH 335
Loma Linda, California 92350
(909) 558-4788
FAX: (909) 558-0188
E-mail: cttr@linkline.com/Web site
Case of the Month www.cttr.org

FILE DIAGNOSES

CTTR Subscription A

May 2010

Case 1:

Giant cell tumor of tendon sheath, wrist
T-Y8600, M-92501

Case 2:

Spermatocytic seminoma, testis
T-78000, M-90633

Case 3:

High grade neuroendocrine carcinoma, possibly variant of GIST, gastri fundus
T-6Y030, D-2040

Case 4:

Merkel cell carcinoma (cutaneous small cell carcinoma), submental region
T-02156, M-80423

Case 5:

High grade carcinoma with acinic features arising from a pleomorphic adenoma (“carcinoma ex-pleomorphic adenoma”), parotid
T-55120, M-85503

Case 6:

Dedifferentiated liposarcoma (with “MFH” features), retroperitoneum
T-Y4600, M-88503

Case 7:

Hepatocellular carcinoma, liver
T-56000, M-81703

Case 8:

Small cell carcinoma, hypercalcemic type, ovary
T-87000, M-80413

Case 9:

Leiomyosarcoma, uterus
T-82000, M-88003

Case 10:

Uterine carcinosarcoma (MMMT), myometrium and cervix
T-82000, M-89503

Alameda County Medical Center (Alameda County Medical Center) - Giant cell tumor
Fontana (Kaiser Permanente) - Giant cell tumor
Long Beach (Long Beach Veterans Medical Center) - Giant cell tumor (2)
Oakland (Kaiser Permanente) - Giant cell tumor of bone
Orange (Orange County Pathology Medical Group) - Giant cell osteosarcoma
Santa Barbara (Miramonte Laboratory) - Giant cell tumor
Woodland Hills (Kaiser Permanente) - Giant cell tumor
Colorado (McKee Medical Center) - Giant cell tumor of tendon sheath
Colorado (University of Colorado) - Giant cell tumor of bone
Colton (Arrowhead Medical Center) - Giant cell tumor
Florida (Naples Pathology Associates) - Giant cell tumor of bone
Florida, Tallahassee - Giant cell tumor, rule out hyperparathyroidism
Georgia, Atlanta - Giant cell tumor
Illinois, Burr Ridge - Giant cell tumor, bone
Illinois, Chicago - Giant cell tumor (2)
Illinois (Heartland Regional Medical Center) - Giant cell tumor
Illinois (MacNeal Hospital) - Giant cell tumor, wrist
Illinois (St. Mary's Hospital) - Giant cell tumor of bone
Kansas (Cytocheck Laboratory) - Solid aneurysmal bone cyst
Louisiana (LSUHSC Pathology) - Giant cell tumor of bone
Maryland (University of Maryland Pathology Residents) - Giant cell tumor
Michigan (University of Michigan) - Juvenile xanthogranuloma
Minnesota (Fairview Ridges Hospital) - Giant cell tumor
Nebraska (Creighton University Medical Center) - Giant cell tumor
New York (Albany Medical Center) - Giant cell tumor
New York (Erie County Medical Center) - Giant cell tumor of tendon sheath, localized type
New York (Long Island Jewish Medical Center) - Giant cell tumor
New York (St. Joseph Hospital) - Giant cell tumor of tendon sheath
New York (SUNY Downstate Medical Center) - Giant cell tumor (2)
New York (Westchester Medical Center) - Giant cell tumor of bone
North Carolina (Winston-Salem) - Tenosynovial giant cell tumor
Ohio, Columbus - Giant cell tumor
Ohio, Union Town - Giant cell tumor of bone
Ohio, University of Toledo Medical Center - Giant cell tumor of tendon sheath
Pennsylvania (Conemaugh Memorial Medical Center) - Giant cell tumor of tendon sheath (2)
Pennsylvania (Drexel University) - Giant cell tumor
Pennsylvania (Lehigh Valley Hospital) - Giant cell tumor of bone
Pennsylvania (Magee Women's Hospital) - Giant cell tumor
Pennsylvania (York Hospital) - Giant cell tumor
Puerto Rico (University of Puerto Rico) - Giant cell tumor of bone
Texas (Carl R. Darnall Army Medical Center) - Giant cell tumor
Texas, Crystal Beach - Non-caseating granuloma (sarcoid probable)
Texas, Lubbock - Giant cell tumor
Texas (Scott & White Memorial Hospital) - Giant cell tumor
Texas (UTHSC San Antonio Residents) - Giant cell tumor
Washington, Bothell - Granuloma cell tumor
Washington (Seattle VAMC) - Giant cell tumor of tendon
West Virginia (Greenbrier Valley Medical Center) - Giant cell tumor
Australia (Royal Hobart Hospital) - Giant cell tumor of bone
Australia (St. Vincent's Hospital, Sydney) - Giant cell tumor of bone
Canada (Pasqua Hospital) - Giant cell tumor
Canada (University of Sherbrooke) - Malignant giant cell tumor
Ireland (Kerry General Hospital) - Giant cell tumor
Japan (Asahi General Hospital) - Giant cell tumor
Japan (University of Yamanashi) - Giant cell tumor

Singapore (Freelance/Locum Practice) - Giant cell tumor
The Netherlands, Amstelveen - Giant cell tumor of tendon sheath
United Kingdom (Princes Risborough Study Group) - Giant cell rich osteosarcoma

Case 1 - Diagnosis:

Giant cell tumor of tendon sheath, wrist
T-Y8600, M-92501

Case 1 - References:

Anazawa U; Hanaoka H, et al. Similarities between giant cell tumor of bone, giant cell tumor of tendon sheath, and pigmented villonodular synovitis concerning ultrastructural cytochemical features of multinucleated giant cells and mononuclear stromal cells. *Ultrastruct Pathol* 2006 May-Jun;30(3): p151-8.

Batra VV; Jain S, et al. Cytomorphologic spectrum of giant cell tumor of tendon sheath. *Acta Cytol* 2008 Mar-Apr;52(2): p152-8.

Hsu CS; Hentz VR, et al. Tumours of the hand. *Lancet Oncol* 2007 Feb;8(2): p157-66.

Ramos RY; Haupt HM, et al. Giant cell tumors: inquiry into immunohistochemical expression of CD117 (c-Kit), microphthalmia transcription factor, tartrate-resistant acid phosphatase, and HAM-56. *Arch Pathol Lab Med* 2005 Mar;129(3): p360-5

Parker WL; Beckenbaugh RR, et al. Calcifying aponeurotic fibroma of the hand: radiologic differentiation from giant cell tumors of the tendon sheath. *J Hand Surg Am* 2006 Jul-Aug;31(6): p1024-8

Case No. 2, Accession No. 24126

May 2010

Alameda County Medical Center (Alameda County Medical Center) - Seminoma
Fontana (Kaiser Permanente) - Seminoma
Long Beach (Long Beach Veterans Medical Center) - Seminoma (1); Classic seminoma (1)
Oakland (Kaiser Permanente) - Seminoma (2); Spermatocytic seminoma (3)
Orange (Orange County Pathology Medical Group) - Seminoma
Santa Barbara (Miramonte Laboratory) - Seminoma
Woodland Hills (Kaiser Permanente) - Spermatocytic seminoma
Colorado (McKee Medical Center) - Classic seminoma
Colorado (University of Colorado) - Spermatocytic seminoma
Colton (Arrowhead Medical Center) - Seminoma, testis
Florida (Naples Pathology Associates) - Seminoma
Florida, Tallahassee - Seminoma
Georgia, Atlanta - Spermatocytic seminoma
Illinois, Burr Ridge - Seminoma
Illinois, Chicago - Spermatocytic seminoma (2)
Illinois (Heartland Regional Medical Center) - Spermatocytic seminoma
Illinois (MacNeal Hospital) - Spermatocytic seminoma, testis
Illinois (St. Mary's Hospital) - Spermatocytic seminoma
Kansas (Cytocheck Laboratory) - Seminoma
Louisiana (LSUHSC Pathology) - Spermatocytic seminoma
Maryland (University of Maryland Pathology Residents) - Spermatocytic seminoma
Michigan (University of Michigan) - GCT tendon sheath
Minnesota (Fairview Ridges Hospital) - Spermatocytic seminoma
Nebraska (Creighton University Medical Center) - Spermatocytic seminoma
New York (Albany Medical Center) - Spermatocytic seminoma
New York (Erie County Medical Center) - Spermatocytic seminoma
New York (Long Island Jewish Medical Center) - Spermatocytic seminoma

New York (St. Joseph Hospital) - Spermatic seminoma
New York (SUNY Downstate Medical Center) - Spermatocytic seminoma (2)
New York (Westchester Medical Center) - Spermatocytic seminoma
North Carolina (Winston-Salem) - Seminoma
Ohio, Columbus - Seminoma
Ohio, Union Town - Spermatocytic seminoma
Ohio, University of Toledo Medical Center - Seminoma of the testis
Pennsylvania (Conemaugh Memorial Medical Center) - Seminoma, classic type (2)
Pennsylvania (Drexel University) - Spermatocytic seminoma
Pennsylvania (Lehigh Valley Hospital) - Spermatocytic seminoma
Pennsylvania (Magee Women's Hospital) - Spermatocytic seminoma
Pennsylvania (York Hospital) - Spermatocytic seminoma
Puerto Rico (University of Puerto Rico) - Spermatocytic seminoma
Texas (Carl R. Darnall Army Medical Center) - Seminoma
Texas, Crystal Beach - Spermatocytic seminoma
Texas, Lubbock - Spermatocytic seminoma
Texas (Scott & White Memorial Hospital) - Seminoma
Texas (UTHSC San Antonio Residents) - Spermatocytic seminoma
Washington, Bothell - Seminoma
Washington (Seattle VAMC) - Spermatocytic type, seminoma
West Virginia (Greenbrier Valley Medical Center) - Spermatocytic seminoma
Australia (Royal Hobart Hospital) - Spermatocytic seminoma
Australia (St. Vincent's Hospital, Sydney) - Spermatocytic seminoma
Canada (Pasqua Hospital) - Spermatocytic seminoma
Canada (University of Sherbrooke) - Seminoma and intratubular germ cell neoplasia
Ireland (Kerry General Hospital) - Spermatocytic seminoma
Japan (Asahi General Hospital) - Spermatocystic seminoma
Japan (University of Yamanashi) - Seminoma
Singapore (Freelance/Locum Practice) - Seminoma
The Netherlands, Amstelveen - Spermatocytic seminoma
United Kingdom (Princes Risborough Study Group) - Classic seminoma

Case 2 - Diagnosis:

Spermatocytic seminoma, testis
 T-78000, M-90633

Case 2 - References:

- Carriere P; Baade P; Fritschi L. Population based incidence and age distribution of spermatocytic seminoma. *J Urol* 2007 Jul;178(1): p125-8.
- Dundr P; Pesl M, et al. Anaplastic variant of spermatocytic seminoma. *Pathol Res Pract* 2007;203(8): p621-4.
- Aggarwal N; Parwani AV. Spermatocytic seminoma. *Arch Pathol Lab Med* 2009 Dec;133(12): p1985-8.
- Looijenga LH; Oosterhuis JW. Are all testicular seminomas of animals in fact spermatocytic seminomas? *Vet Pathol* 2007 Jan;44(1): p126.
- Ulbright TM. The most common, clinically significant misdiagnoses in testicular tumor pathology, and how to avoid them. *Adv Anat Pathol* 2008 Jan;15(1): p18-27.
- Bomeisl PE; MacLennan GT. Spermatocytic seminoma. *J Urol* 2007 Feb;177(2): p734.

Alameda County Medical Center (Alameda County Medical Center) - Malignant GIST
Fontana (Kaiser Permanente) - Neuroendocrine carcinoma
Long Beach (Long Beach Veterans Medical Center) - High grade neuroendocrine carcinoma (2)
Oakland (Kaiser Permanente) - GIST neuroendocrine differentiation
Orange (Orange County Pathology Medical Group) - PNET
Santa Barbara (Miramonte Laboratory) - Neuroendocrine carcinoma
Woodland Hills (Kaiser Permanente) - High grade neuroendocrine carcinoma
Colorado (McKee Medical Center) - Gastrointestinal stromal tumor
Colorado (University of Colorado) - Malignant GIST, epithelioid
Colton (Arrowhead Medical Center) - Neuroendocrine tumor (carcinoid)
Florida (Naples Pathology Associates) - Malignant gastrointestinal stromal tumor
Florida, Tallahassee - High grade gastric endocrine tumor
Georgia, Atlanta - Malignant gastrointestinal stromal tumor
Illinois, Burr Ridge - Malignant GIST
Illinois, Chicago - Neuroendocrine tumor (2)
Illinois (Heartland Regional Medical Center) - Malignant epithelioid GIST
Illinois (MacNeal Hospital) - GIST, stomach
Illinois (St. Mary's Hospital) - Poorly differentiated neuroendocrine carcinoma (small cell carcinoma)
Kansas (Cytocheck Laboratory) - Neuroendocrine carcinoma
Louisiana (LSUHSC Pathology) - Malignant carcinoid
Maryland (University of Maryland Pathology Residents) - Neuroendocrine carcinoma
Michigan (University of Michigan) - Ossifying fibroma
Minnesota (Fairview Ridges Hospital) - Gastrointestinal stromal tumor
Nebraska (Creighton University Medical Center) - GANT
New York (Albany Medical Center) - PNET
New York (Erie County Medical Center) - High grade neuroendocrine tumor
New York (Long Island Jewish Medical Center) - High grade neuroendocrine carcinoma
New York (St. Joseph Hospital) - Malignant GIST
New York (SUNY Downstate Medical Center) - Neuroendocrine carcinoma (1); Large cell neuroendocrine carcinoma (1)
New York (Westchester Medical Center) - Malignant neuroendocrine carcinoma
North Carolina (Winston-Salem) - GIST, malignant
Ohio, Columbus - Poorly differentiated neuroendocrine carcinoma
Ohio, Union Town - Small cell carcinoma
Ohio, University of Toledo Medical Center - Gastrointestinal autonomic nerve tumor, a variant of GIST
Pennsylvania (Conemaugh Memorial Medical Center) - Neuroendocrine carcinoma (2)
Pennsylvania (Drexel University) - GIST
Pennsylvania (Lehigh Valley Hospital) - Small blue cell tumor, favor PNET
Pennsylvania (Magee Women's Hospital) - Large cell neuroendocrine carcinoma
Pennsylvania (York Hospital) - Malignant epithelioid GIST
Puerto Rico (University of Puerto Rico) - Large cell neuroendocrine carcinoma (PNET)/malignant epithelioid gastric stromal tumor
Texas (Carl R. Darnall Army Medical Center) - High grade GIST
Texas, Crystal Beach - Small cell malignancy, possibly epithelioid GIST (gastrointestinal stromal tumor)
Texas, Lubbock - Neuroendocrine carcinoma
Texas (Scott & White Memorial Hospital) - Neuroendocrine carcinoma
Texas (UTHSC San Antonio Residents) - Poorly differentiated neuroendocrine carcinoma
Washington, Bothell - GIST
Washington (Seattle VAMC) - High grade malignant neoplasm, poorly differentiated endocrine
West Virginia (Greenbrier Valley Medical Center) - Gastric neuroendocrine carcinoma
Australia (Royal Hobart Hospital) - High grade neuroendocrine, carcinoma stomach
Australia (St. Vincent's Hospital, Sydney) - Favor chloroma (granulocytic sarcoma)
Canada (Pasqua Hospital) - Myeloid sarcoma
Canada (University of Sherbrooke) - High grade neuroendocrine carcinoma
Ireland (Kerry General Hospital) - High grade neuroendocrine tumor

Japan (Asahi General Hospital) - Small cell carcinoma
Japan (University of Yamanashi) - Neuroendocrine carcinoma
Singapore (Freelance/Locum Practice) - Malignant neuroendocrine tumor
The Netherlands, Amstelveen - GIST
United Kingdom (Princes Risborough Study Group) - Malignant GIST

Case 3 - Diagnosis:

High grade neuroendocrine carcinoma, possibly variant of GIST, gastric fundus
T-6Y030, D-2040

Case 3 - References:

Jiang SX; Mikami T, et al. Gastric large cell neuroendocrine carcinomas: a distinct clinicopathologic entity. *Am J Surg Pathol* 2006 Aug;30(8): p945-53.

Qvigstad G; Kolbjornsen O, et al. Gastric neuroendocrine carcinoma associated with atrophic gastritis in the Norwegian lundehund. *J Comp Pathol* 2008 Nov;139(4): p194-201.

Horne G; Ming-Lum C, et al. High-grade neuroendocrine carcinoma arising in a gastric duplication cyst: a case report with literature review. *Int J Surg Pathol* 2007 Apr;15(2): p187-91.

Kuroda N; Oonishi K, et al. Gastric carcinosarcoma with neuroendocrine differentiation as the carcinoma component and leiomyosarcomatous and myofibroblastic differentiation as the sarcomatous component. *APMIS* 2006 Mar;114(3): p234-8.

Spigel DR, Hainsworth JD and Greco FA. Neuroendocrine carcinoma of unknown primary site. *Semin Oncol* 2009 Feb;36(1): p52-9.

Case No. 4, Accession No. 31002

May 2010

Alameda County Medical Center (Alameda County Medical Center) - Merkel cell carcinoma
Fontana (Kaiser Permanente) - Merkel cell carcinoma
Long Beach (Long Beach Veterans Medical Center) - Merkel cell carcinoma (2)
Oakland (Kaiser Permanente) - Merkel cell carcinoma
Santa Barbara (Miramonte Laboratory) - Merkel cell carcinoma
Woodland Hills (Kaiser Permanente) - Merkel cell carcinoma
Colorado (McKee Medical Center) - Merkel cell carcinoma
Colorado (University of Colorado) - Merkel cell carcinoma
Colton (Arrowhead Medical Center) - Neuroendocrine tumor
Florida (Naples Pathology Associates) - Merkel cell carcinoma
Florida, Tallahassee - Merkel cell carcinoma
Georgia, Atlanta - Merkel cell carcinoma
Illinois, Burr Ridge - Neuroendocrine carcinoma
Illinois, Chicago - Medullary carcinoma (2)
Illinois (Heartland Regional Medical Center) - Small cell anaplastic carcinoma, favor Merkel cell tumor
Illinois (MacNeal Hospital) - Merkel cell carcinoma, submental skin
Illinois (St. Mary's Hospital) - Poorly differentiated neuroendocrine carcinoma (small cell carcinoma)
Kansas (Cytocheck Laboratory) - Neuroendocrine carcinoma
Louisiana (LSUHSC Pathology) - Merkel cell tumor
Maryland (University of Maryland Pathology Residents) - Merkel cell tumor
Michigan (University of Michigan) - Ameloblastoma
Minnesota (Fairview Ridges Hospital) - Neuroendocrine carcinoma, high grade
Nebraska (Creighton University Medical Center) - Merkel cell carcinoma
New York (Albany Medical Center) - Merkel cell carcinoma
New York (Erie County Medical Center) - Merkel cell (neuroendocrine) carcinoma

New York (Long Island Jewish Medical Center) - Merkel cell carcinoma
New York (St. Joseph Hospital) - Neuroendocrine tumor
New York (SUNY Downstate Medical Center) - Merkel cell carcinoma (2)
New York (Westchester Medical Center) - Merkel cell carcinoma
North Carolina (Winston-Salem) - Merkel cell carcinoma
Ohio, Columbus - Merkel cell carcinoma
Ohio, Union Town - Small cell carcinoma
Ohio, University of Toledo Medical Center - Merkel cell carcinoma
Pennsylvania (Conemaugh Memorial Medical Center) - Merkel cell carcinoma (2)
Pennsylvania (Drexel University) - Merkel cell carcinoma
Pennsylvania (Lehigh Valley Hospital) - Merkel cell carcinoma
Pennsylvania (Magee Women's Hospital) - Merkel cell carcinoma (small cell carcinoma) Merkel cell type
Pennsylvania (York Hospital) - Metastatic Merkel cell carcinoma
Puerto Rico (University of Puerto Rico) - Merkel carcinoma
Texas (Carl R. Darnall Army Medical Center) - Merkel cell carcinoma
Texas, Crystal Beach - Neuroectodermal cell carcinoma
Texas, Lubbock - Merkel cell tumor
Texas (Scott & White Memorial Hospital) - Merkel cell carcinoma
Texas (UTHSC San Antonio Residents) - Lymphoma
Washington, Bothell - Lymphoma
Washington (Seattle VAMC) - High grade carcinoma, Merkel
West Virginia (Greenbrier Valley Medical Center) - Primary cutaneous neuroendocrine carcinoma
Australia (Royal Hobart Hospital) - Merkel cell carcinoma skin
Australia (St. Vincent's Hospital, Sydney) - Merkel cell carcinoma
Canada (Pasqua Hospital) - Merkel cell tumor
Canada (University of Sherbrooke) - High grade neuroendocrine carcinoma
Ireland (Kerry General Hospital) - Merkel cell carcinoma
Japan (Asahi General Hospital) - Small cell carcinoma
Japan (University of Yamanashi) - Merkel cell carcinoma
Singapore (Freelance/Locum Practice) - Small cell carcinoma
The Netherlands, Amstelveen - Merkel cell carcinoma
United Kingdom (Princes Risborough Study Group) - Merkel cell carcinoma

Case 4 - Diagnosis:

Merkel cell carcinoma (cutaneous small cell carcinoma), submental region
 T-02156, M-80423

Case 4 - References:

- Duncavage EJ; Le BM, et al. Merkel cell polyomavirus: a specific marker for Merkel cell carcinoma in histologically similar tumors. *Am J Surg Pathol* 2009 Dec;33(12): p1771-7.
- Busam KJ; Jungbluth AA, et al. Merkel cell polyomavirus expression in merkel cell carcinomas and its absence in combined tumors and pulmonary neuroendocrine carcinomas. *Am J Surg Pathol* 2009 Sep;33(9): p1378-85.
- Brown JA; Smoller BR. Merkel cell carcinoma: what is it, what will it do and where will it go? What role should the pathologist play in reporting this information? *J Cutan Pathol* 2009 Aug;36(8): p924-7.
- De Caprio JA. Does detection of Merkel cell polyomavirus in Merkel cell carcinoma provide prognostic information? *J Natl Cancer Inst* 2009 Jul 1;101(13): p905-7.
- Pulitzer MP; Amin BD, et al. Merkel cell carcinoma: review. *Adv Anat Pathol* 2009 May;16(3): p135-44.

Alameda County Medical Center (Alameda County Medical Center) - Salivary gland carcinoma with myoepithelial differentiation

Fontana (Kaiser Permanente) - Malignant mixed tumor

Long Beach (Long Beach Veterans Medical Center) - Adenocarcinoma (2)

Oakland (Kaiser Permanente) - Acinic cell carcinoma

Santa Barbara (Miramonte Laboratory) - Acinic cell carcinoma

Woodland Hills (Kaiser Permanente) - Acinic cell carcinoma

Colorado (McKee Medical Center) - Mucoepidermoid carcinoma

Colorado (University of Colorado) - Myoepithelial carcinoam

Colton (Arrowhead Medical Center) - Mixed tumor

Florida (Naples Pathology Associates) - Myoepithelial carcinoma

Florida, Tallahassee - Carcinoma ex-pleomorphic adenoma

Georgia, Atlanta - Acinic cell carcinoma

Illinois, Burr Ridge - Carcinoma ex-pleomorphic adenoma

Illinois, Chicago - Adenoid cystic carcinoma (2)

Illinois (Heartland Regional Medical Center) - Adenocarcinoma, favor basal cell adenocarcinoma

Illinois (MacNeal Hospital) - Acinic cell carcinoma, parotid

Illinois (St. Mary's Hospital) - Polymorphous low grade adenocarcinoma

Kansas (Cytocheck Laboratory) - Acinic cell carcinoma

Louisiana (LSUHSC Pathology) - Carcinoma with pleomorphic adenoma

Maryland (University of Maryland Pathology Residents) - Acinic cell carcinoma

Michigan (University of Michigan) - Meningioma

Minnesota (Fairview Ridges Hospital) - Acinic cell carcinoma (ex-pleomorphic adenoma)

Nebraska (Creighton University Medical Center) - Myoepithelial carcinoma

New York (Albany Medical Center) - Acinic cell carcinoma

New York (Erie County Medical Center) - De-differentiated acinic cell carcinoma

New York (Long Island Jewish Medical Center) - Salivary duct carcinoma

New York (St. Joseph Hospital) - Acinic cell carcinoma

New York (SUNY Downstate Medical Center) - Myoepithelial carcinoma (1); Acinic cell carcinoma (1)

New York (Westchester Medical Center) - Polymorphous low grade carcinoma

North Carolina (Winston-Salem) - Mucoepidermoid carcinoma

Ohio, Columbus - Myoepithelial carcinoma

Ohio, Union Town - Malignant myoepithelioma

Ohio, University of Toledo Medical Center - Acinar cell carcinoma of parotid gland

Pennsylvania (Conemaugh Memorial Medical Center) - Mucoepidermoid carcinoma, high grade (2)

Pennsylvania (Drexel University) - Carcinoma ex-pleomorphic adenoma

Pennsylvania (Lehigh Valley Hospital) - Myoepithelial carcinoma

Pennsylvania (Magee Women's Hospital) - Acinic cell carcinoma

Pennsylvania (York Hospital) - Acinic cell carcinoma

Puerto Rico (University of Puerto Rico) - Epithelial-myoepithelioid carcinoma

Texas (Carl R. Darnall Army Medical Center) - Acinic cell carcinoma

Texas, Crystal Beach - Acinic cell carcinoma

Texas, Lubbock - Acinic carcinoma

Texas (Scott & White Memorial Hospital) - Acinic cell carcinoma

Texas (UTHSC San Antonio Residents) - Acinic cell carcinoma

Washington, Bothell - Polymorphous low grade adenocarcinoma

Washington (Seattle VAMC) - High grade adenocarcinoma

West Virginia (Greenbrier Valley Medical Center) - Adenoid cystic carcinoma

Australia (Royal Hobart Hospital) - Adenocarcinoma (probable acinic cell adenocarcinoma)

Australia (St. Vincent's Hospital, Sydney) - High grade mucoepidermoid carcinoma

Canada (Pasqua Hospital) - Acinic cell carcinoma

Canada (University of Sherbrooke) - Acinic cell carcinoma

Ireland (Kerry General Hospital) - Acinic cell carcinoma

Japan (Asahi General Hospital) - Acinic cell adenocarcinoma

Japan (University of Yamanashi) - Acinic cell carcinoma

Singapore (Freelance/Locum Practice) - Malignant, favor basal cell adenocarcinoma
The Netherlands, Amstelveen - Acinic cell carcinoma
United Kingdom (Princes Risborough Study Group) - Acinic cell carcinoma

Case 5 - Diagnosis:

High grade carcinoma with acinic features arising from a pleomorphic adenoma (“carcinoma ex-pleomorphic adenoma”), parotid

T-55120, M-85503

Consultation: Dr. Mia Perez, LLUMC (same diagnosis)

Case 5 - References:

Sheedy SP; Welker KM, et al. CNS metastases of carcinoma ex pleomorphic adenoma of the parotid gland. *AJNR Am J Neuroradiol* 2006 Aug;27(7): p1483-5.

Ilhan HD; Oner FH, et al. Bilateral choroidal metastasis from carcinoma ex pleomorphic adenoma of the parotid gland. *Clin Experiment Ophthalmol* 2005 Feb;33(1): p70-2.

McHugh JB; Visscher DW, et al. Update on selected salivary gland neoplasms. *Arch Pathol Lab Med* 2009 Nov;133(11): p1763-74.

Altmani A; Martins MT, et al. Carcinoma ex pleomorphic adenoma (CXP): immunoprofile of the cells involved in carcinomatous progression. *Histopathology* 2005 Jun;46(6): p635-41.

Parwani AV; Lujan G, et al. Myoepithelial carcinoma arising in a pleomorphic adenoma of the parotid gland: report of a case with cytopathologic findings. *Acta Cytol* 2006 Jan-Feb;50(1): p93-6.

Case No. 6, Accession No. 30266/30517

May 2010

Alameda County Medical Center (Alameda County Medical Center) - Myxoid MFH
Fontana (Kaiser Permanente) - Malignant solitary fibrous tumor
Long Beach (Long Beach Veterans Medical Center) - Liposarcoma (2)
Oakland (Kaiser Permanente) - Fibrosarcoma (3); Sarcoma (2)
Santa Barbara (Miramonte Laboratory) - Malignant fibrous histiocytoma
Woodland Hills (Kaiser Permanente) - Hemangiopericytoma
Colorado (McKee Medical Center) - Hemangiopericytoma
Colorado (University of Colorado) - Solitary fibrous tumor
Colton (Arrowhead Medical Center) - Leiomyosarcoma
Florida (Naples Pathology Associates) - Mxofibrosarcoma
Florida, Tallahassee - Spindled cell sarcoma, get stains
Georgia, Atlanta - Malignant spindle cell neoplasm, rule out MPNST
Illinois, Burr Ridge - Storiform, pleomorphic malignant fibrous histiocytoma
Illinois, Chicago - Myxoid liposarcoma (2)
Illinois (Heartland Regional Medical Center) - Spindle cell sarcoma, favor rhabdomyosarcoma
Illinois (MacNeal Hospital) - MFH
Illinois (St. Mary's Hospital) - Malignant fibrous histiocytoma
Kansas (Cytocheck Laboratory) - Fibrosarcoma
Louisiana (LSUHSC Pathology) - Malignant fibrous histiocytosis
Maryland (University of Maryland Pathology Residents) - Myxofibrosarcoma
Michigan (University of Michigan) - Thymoma
Minnesota (Fairview Ridges Hospital) - Malignant peripheral nerve sheath tumor
Nebraska (Creighton University Medical Center) - Myxoid MFTT
New York (Albany Medical Center) - High grade myxofibrosarcoma
New York (Erie County Medical Center) - Sarcoma, favor liposarcoma

New York (Long Island Jewish Medical Center) - Undifferentiated pleomorphic sarcoma
New York (St. Joseph Hospital) - Myxoid fibrosarcoma
New York (SUNY Downstate Medical Center) - Myxoid malignant fibrous histiocytoma (1); Malignant fibrous histiocytoma (1)
New York (Westchester Medical Center) - Synovial sarcoma or spindle cell melanoma
North Carolina (Winston-Salem) - Sarcoma
Ohio, Columbus - Malignant fibrous histiocytoma
Ohio, Union Town - Malignant fibrous histiocytoma
Ohio, University of Toledo Medical Center - Dedifferentiated liposarcoma
Pennsylvania (Conemaugh Memorial Medical Center) - Malignant solitary fibrous tumor/hemangiopericytoma (2)
Pennsylvania (Drexel University) - Undifferentiated high grade pleomorphic sarcoma
Pennsylvania (Lehigh Valley Hospital) - Dedifferentiated liposarcoma
Pennsylvania (Magee Women's Hospital) - Myxofibrosarcoma
Pennsylvania (York Hospital) - Gliosarcoma, extracranial metastasis
Puerto Rico (University of Puerto Rico) - Pleomorphic malignant fibrous histiocytoma/dedifferentiated liposarcoma
Texas (Carl R. Darnall Army Medical Center) - Malignant fibrous histiocytoma
Texas, Crystal Beach - Solitary fibrous tumor vs. hemangiopericytoma
Texas, Lubbock - Malignant fibrous histiocytoma
Texas (Scott & White Memorial Hospital) - Dedifferentiated liposarcoma
Texas (UTHSC San Antonio Residents) - Leiomyosarcoma
Washington, Bothell - Spindle cell tumor (rhabdo/leiomyo)
Washington (Seattle VAMC) - Sarcoma, high grade
West Virginia (Greenbrier Valley Medical Center) - Sarcoma, NOS
Australia (Royal Hobart Hospital) - High grade pleomorphic sarcoma (MFH-Like)
Australia (St. Vincent's Hospital, Sydney) - Dedifferentiated liposarcoma
Canada (Pasqua Hospital) - Dedifferentiated liposarcoma
Canada (University of Sherbrooke) - Dedifferentiated liposarcoma with high grade sarcoma
Ireland (Kerry General Hospital) - Myxofibrosarcoma
Japan (Asahi General Hospital) - Leiomyosarcoma
Japan (University of Yamanashi) - Pleomorphic sarcoma
Singapore (Freelance/Locum Practice) - Malignant sarcoma, favor MPNST
The Netherlands, Amstelveen - Sarcoma, NOS
United Kingdom (Princes Risborough Study Group) - Pleomorphic rhabdomyosarcoma

Case 6- Diagnosis:

Dedifferentiated liposarcoma (with "MFH" features) retroperitoneum
 T-Y4600, M-88503

Case 6 - References:

- Wanchick K; Lucha P. Dedifferentiated retroperitoneal liposarcoma presenting as lower gastrointestinal bleeding, a case report and review of the literature. *Mil Med* 2009 Mar;174(3): p328-30.
- Dominguez E; Lopez de Cenarruzabeitia I, et al. Giant dedifferentiated retroperitoneal liposarcoma. *Int Surg* 2008 Jul-Aug;93(4): p247-9.
- Macarenco RS; Erickson-Johnson M, et al. Cytogenetic and molecular cytogenetic findings in dedifferentiated liposarcoma with neural-like whorling pattern and metaplastic bone formation. *Cancer Genet Cytogenet* 2007 Jan 15;172(2): p147-50.
- Chung L; Lau SK, et al. Overlapping features between dedifferentiated liposarcoma and undifferentiated high-grade pleomorphic sarcoma. *Am J Surg Pathol* 2009 Nov;33(11): p1594-600.
- Binh MB; Guillou L, et al. Dedifferentiated liposarcomas with divergent myosarcomatous differentiation developed in the internal trunk: a study of 27 cases and comparison to conventional dedifferentiated liposarcomas and leiomyosarcomas. *Am J Surg Pathol* 2007 Oct;31(10): p1557-66.

Evans HL. Atypical lipomatous tumor, its variants, and its combined forms: a study of 61 cases, with a minimum follow-up of 10 years. *Am J Surg Pathol* 2007 Jan;31(1): p1-14.

Case No. 7, Accession No. 31056

May 2010

Alameda County Medical Center (Alameda County Medical Center) - Hepatocellular carcinoma
Fontana (Kaiser Permanente) - Hepatocellular carcinoma
Long Beach (Long Beach Veterans Medical Center) - Hepatocellular carcinoma (2)
Oakland (Kaiser Permanente) - Hepatocellular carcinoma
Santa Barbara (Miramonte Laboratory) - Hepatocellular carcinoma
Woodland Hills (Kaiser Permanente) - Hepatocellular carcinoma
Colorado (McKee Medical Center) - Hepatocellular carcinoma
Colorado (University of Colorado) - Hepatocellular carcinoma, fibrolamellar
Colton (Arrowhead Medical Center) - Hepatocellular carcinoma
Florida (Naples Pathology Associates) - Hepatocellular carcinoma
Florida, Tallahassee - Hepatoma
Georgia, Atlanta - Hepatocellular carcinoma
Illinois, Burr Ridge - Hepatocellular carcinoma
Illinois, Chicago - Severe chronic viral hepatitis (2)
Illinois (Heartland Regional Medical Center) - Hepatocellular carcinoma
Illinois (MacNeal Hospital) - Hepatocellular carcinoma, liver
Illinois (St. Mary's Hospital) - Hepatocellular carcinoma
Kansas (Cytocheck Laboratory) - Hepatocellular carcinoma
Louisiana (LSUHSC Pathology) - Hepatocellular carcinoma
Maryland (University of Maryland Pathology Residents) - Hepatocellular carcinoma
Michigan (University of Michigan) - Thymoma consistent with fat
Minnesota (Fairview Ridges Hospital) - Hepatocellular carcinoma
Nebraska (Creighton University Medical Center) - Hepatocellular carcinoma, conventional type
New York (Albany Medical Center) - Well-differentiated hepatocellular carcinoma
New York (Erie County Medical Center) - Hepatocellular carcinoma
New York (Long Island Jewish Medical Center) - Well-differentiated hepatocellular carcinoma
New York (St. Joseph Hospital) - Moderately differentiated hepatocellular carcinoma
New York (SUNY Downstate Medical Center) - Hepatocellular carcinoma (2)
New York (Westchester Medical Center) - Hepatocellular carcinoma
North Carolina (Winston-Salem) - Hepatocellular carcinoma
Ohio, Columbus - Hepatocellular carcinoma
Ohio, Union Town - Hepatocellular carcinoma
Ohio, University of Toledo Medical Center - Hepatocellular carcinoma (trabecular type)
Pennsylvania (Conemaugh Memorial Medical Center) - Hepatic cellular carcinoma, well-differentiated (2)
Pennsylvania (Drexel University) - Hepatocellular carcinoma
Pennsylvania (Lehigh Valley Hospital) - Hepatocellular carcinoma
Pennsylvania (Magee Women's Hospital) - Hepatocellular carcinoma
Pennsylvania (York Hospital) - Hepatocellular carcinoma
Puerto Rico (University of Puerto Rico) - Hepatocellular carcinoma
Texas (Carl R. Darnall Army Medical Center) - Hepatocellular carcinoma
Texas, Crystal Beach - Hepatocellular carcinoma
Texas, Lubbock - Hepatocellular carcinoma
Texas (Scott & White Memorial Hospital) - Well-differentiated hepatocellular carcinoma
Texas (UTHSC San Antonio Residents) - Hepatocellular carcinoma
Washington, Bothell - Hepatocellular carcinoma
Washington (Seattle VAMC) - Hepatocellular carcinoma
West Virginia (Greenbrier Valley Medical Center) - Hepatocellular carcinoma
Australia (Royal Hobart Hospital) - Hepatocellular carcinoma
Australia (St. Vincent's Hospital, Sydney) - Hepatocellular carcinoma (chronic active hepatitis consistent with hepatitis B)

Canada (Pasqua Hospital) - Hepatocellular carcinoma
Canada (University of Sherbrooke) - Hepatocarcinoma
Ireland (Kerry General Hospital) - Hepatocellular carcinoma
Japan (Asahi General Hospital) - Hepatoma
Japan (University of Yamanashi) - Hepatocellular carcinoma
Singapore (Freelance/Locum Practice) - Hepatocellular carcinoma, moderately differentiated
The Netherlands, Amstelveen - Hepatocellular carcinoma
United Kingdom (Princes Risborough Study Group) - Hepatocellular carcinoma

Case 7 - Diagnosis:

Hepatocellular carcinoma, liver
 T-56000, M-81703

Case 7 - References:

Siegel AB; Zhu AX. Metabolic syndrome and hepatocellular carcinoma: two growing epidemics with a potential link. *Cancer* 2009 Dec 15;115(24): p5651-61.

 Morris-Stiff G; Gomez D, et al. Surgical management of hepatocellular carcinoma: is the jury still out? *Surg Oncol* 2009 Dec;18(4): p298-321.

 Tanahashi C; Nagae H, et al. Combined hepatocellular carcinoma and osteoclast-like giant cell tumor of the liver: possible clue to histogenesis. *Pathol Int* 2009 Nov;59(11): p813-6.

 White SA; Manas DM, et al. Optimal treatment for hepatocellular carcinoma in the cirrhotic liver. *Ann R Coll Surg Engl* 2009 Oct;91(7): p545-50.

 Bravi F; Bosetti C, et al. Coffee drinking and hepatocellular carcinoma: an update. *Hepatology* 2009 Oct;50(4): p1317-8.

 Rampone B; Schiavone B, et al. Current management strategy of hepatocellular carcinoma. *World J Gastroenterol* 2009 Jul 14;15(26): p3210-6.

Case No. 8, Accession No. 30608

May 2010

Alameda County Medical Center (Alameda County Medical Center) - Small cell carcinoma, hypercalcemic type
Fontana (Kaiser Permanente) - Granulosa cell tumor
Long Beach (Long Beach Veterans Medical Center) - Granulosa cell tumor (2); Granulosa cell tumor, juvenile type (1)
Oakland (Kaiser Permanente) - Juvenile granulosa cell tumor
Santa Barbara (Miramonte Laboratory) - Small cell carcinoma
Woodland Hills (Kaiser Permanente) - Small cell carcinoma
Colorado (McKee Medical Center) - Juvenile granulosa cell tumor
Colorado (University of Colorado) - Small cell carcinoma, hypercalcemic type
Colton (Arrowhead Medical Center) - Germ cell tumor
Florida (Naples Pathology Associates) - Undifferentiated carcinoma
Florida, Tallahassee - Granulosa cell tumor
Georgia, Atlanta - Small cell carcinoma of hypercalcemic type
Illinois, Burr Ridge - Dysgerminoma
Illinois, Chicago - Yolk sac tumor (2)
Illinois (Heartland Regional Medical Center) - Small cell carcinoma
Illinois (MacNeal Hospital) - Small cell carcinoma, ovary, stain to rule out lymphoma
Illinois (St. Mary's Hospital) - Small cell carcinoma, hypercalcemic type
Kansas (Cytocheck Laboratory) - Dysgerminoma
Louisiana (LSUHSC Pathology) - Small cell carcinoma of hypercalcemic type
Maryland (University of Maryland Pathology Residents) - Small cell carcinoma with hypercalcemia

Michigan (University of Michigan) - Thecoma
Minnesota (Fairview Ridges Hospital) - Small cell carcinoma, hypercalcemic type
Nebraska (Creighton University Medical Center) - Granulosa cell tumor, juvenile
New York (Albany Medical Center) - Adult granulosa cell tumor
New York (Erie County Medical Center) - Embryonal carcinoma
New York (Long Island Jewish Medical Center) - Undifferentiated small cell carcinoma
New York (St. Joseph Hospital) - Small cell carcinoma of ovary
New York (SUNY Downstate Medical Center) - Small cell carcinoma of ovary, hypercalcemic type (2)
New York (Westchester Medical Center) - Granulosa cell tumor
North Carolina (Winston-Salem) - Solid yolk sac tumor
Ohio, Columbus - Embryonal carcinoma
Ohio, Union Town - Small cell carcinoma of hypercalcemic type
Ohio, University of Toledo Medical Center - Small cell carcinoma of ovary
Pennsylvania (Conemaugh Memorial Medical Center) - Small cell carcinoma, hypercalcemic type (2)
Pennsylvania (Drexel University) - Juvenile granulosa cell tumor
Pennsylvania (Lehigh Valley Hospital) - Juvenile granulosa cell tumor
Pennsylvania (Magee Women's Hospital) - Small cell carcinoma, hypercalcemic type
Pennsylvania (York Hospital) - Granulosa cell tumor
Puerto Rico (University of Puerto Rico) - Undifferentiated carcinoma
Texas (Carl R. Darnall Army Medical Center) - Small cell carcinoma, hypercalcemic type
Texas, Crystal Beach - Sex cord tumor, malignant
Texas, Lubbock - Granulosa cell tumor
Texas (Scott & White Memorial Hospital) - Granulosa cell tumor
Texas (UTHSC San Antonio Residents) - Small cell carcinoma, hypercalcemic type
Washington, Bothell - Sertoli-Leydig cell tumor
Washington (Seattle VAMC) - High grade malignant neoplasia (small cell)
West Virginia (Greenbrier Valley Medical Center) - Sertoli cell tumor
Australia (Royal Hobart Hospital) - Sertoli cell carcinoma (hypercalcemic type)
Australia (St. Vincent's Hospital, Sydney) - Granulosa cell tumor
Canada (Pasqua Hospital) - Small blue cell tumor
Canada (University of Sherbrooke) - Undifferentiated carcinoma (small cell hypercalcemic type)
Ireland (Kerry General Hospital) - Small cell carcinoma of hypercalcemic type
Japan (Asahi General Hospital) - Small cell carcinoma
Japan (University of Yamanashi) - Carcinoma, NOS
Singapore (Freelance/Locum Practice) - Small cell carcinoma, hypercalcemic type
The Netherlands, Amstelveen - Small cell hypercalcemic carcinoma
United Kingdom (Princes Risborough Study Group) - Small cell carcinoma, hypercalcemic type

Case 8 - Diagnosis:

Small cell carcinoma, hypercalcemic type, ovary
 T-87000, M-80413

Case 8 - References:

Toledo G; Oliva E. Smooth muscle tumors of the uterus: a practical approach. *Arch Pathol Lab Med* 2008 Apr;132(4): p595-605.

Botsis D; Koliopoulos C, et al. Myxoid leiomyosarcoma of the uterus in a patient receiving tamoxifen therapy: a case report. *Int J Gynecol Pathol* 2006 Apr;25(2): p173-5.

Fadare O. Perivascular Epithelioid Cell Tumors (PEComas) and Smooth Muscle Tumors of the Uterus. *Am J Surg Pathol* 2007 Sep;31(9): p1454-5; author reply 1455-6.

Silva EG; Bodurka DC, et al. A uterine leiomyosarcoma that became positive for HMB45 in the metastasis. *Ann Diagn Pathol* 2005 Feb;9(1): p43-5.

Fadare O; Liang SX. Epithelioid smooth muscle tumors of the uterus do not express CD1a: a potential immunohistochemical adjunct in their distinction from uterine perivascular epithelioid cell tumors. *Ann Diagn Pathol* 2008 Dec;12(6): p401-5.

Case No. 9, Accession No. 30917

May 2010

Alameda County Medical Center (Alameda County Medical Center) - Leiomyosarcoma
Fontana (Kaiser Permanente) - Leiomyosarcoma
Long Beach (Long Beach Veterans Medical Center) - Leiomyosarcoma (2)
Oakland (Kaiser Permanente) - Leiomyosarcoma
Santa Barbara (Miramonte Laboratory) - Leiomyosarcoma
Woodland Hills (Kaiser Permanente) - Leiomyosarcoma
Colorado (McKee Medical Center) - Leiomyosarcoma
Colorado (University of Colorado) - Myxoid leiomyosarcoma
Colton (Arrowhead Medical Center) - Leiomyosarcoma
Florida (Naples Pathology Associates) - Myxoid leiomyosarcoma
Florida, Tallahassee - Leiomyosarcoma
Georgia, Atlanta - Leiomyosarcoma
Illinois, Burr Ridge - Leiomyosarcoma with giant cells
Illinois, Chicago - Leiomyosarcoma (2)
Illinois (Heartland Regional Medical Center) - Leiomyosarcoma
Illinois (MacNeal Hospital) - Leiomyosarcoma, uterus
Illinois (St. Mary's Hospital) - Leiomyosarcoma
Kansas (Cytocheck Laboratory) - Leiomyosarcoma
Louisiana (LSUHSC Pathology) - Undifferentiated endometrial sarcoma
Maryland (University of Maryland Pathology Residents) - Leiomyosarcoma
Michigan (University of Michigan) - Granulosa cell tumor
Minnesota (Fairview Ridges Hospital) - Myxoid leiomyosarcoma
Nebraska (Creighton University Medical Center) - Leiomyosarcoma, myxoid
New York (Albany Medical Center) - Leiomyosarcoma
New York (Erie County Medical Center) - Leiomyosarcoma
New York (Long Island Jewish Medical Center) - High grade leiomyosarcoma
New York (St. Joseph Hospital) - Leiomyosarcoma
New York (SUNY Downstate Medical Center) - Leiomyosarcoma (1); PEComa (1)
New York (Westchester Medical Center) - Leiomyosarcoma
North Carolina (Winston-Salem) - Leiomyosarcoma
Ohio, Columbus - Leiomyosarcoma
Ohio, Union Town - Leiomyosarcoma
Ohio, University of Toledo Medical Center - Leiomyosarcoma of the uterus
Pennsylvania (Conemaugh Memorial Medical Center) - Leiomyosarcoma with osteoid and chondroid metaplasia (2)
Pennsylvania (Drexel University) - Leiomyosarcoma
Pennsylvania (Lehigh Valley Hospital) - Leiomyosarcoma with heterologous elements
Pennsylvania (Magee Women's Hospital) - Leiomyosarcoma with heterologous differentiation
Pennsylvania (York Hospital) - Leiomyosarcoma
Puerto Rico (University of Puerto Rico) - Leiomyosarcoma
Texas (Carl R. Darnall Army Medical Center) - Leiomyosarcoma
Texas, Crystal Beach - Leiomyosarcoma
Texas, Lubbock - Leiomyosarcoma
Texas (Scott & White Memorial Hospital) - Leiomyosarcoma
Texas (UTHSC San Antonio Residents) - Leiomyosarcoma
Washington, Bothell - Low grade stromal sarcoma
Washington (Seattle VAMC) - Sarcoma, leiomyosarcoma
West Virginia (Greenbrier Valley Medical Center) - Myxoid leiomyosarcoma
Australia (Royal Hobart Hospital) - Myxoid leiomyosarcoma
Australia (St. Vincent's Hospital, Sydney) - Leiomyosarcoma

Canada (Pasqua Hospital) - Myxoid rhabdomyosarcoma
Canada (University of Sherbrooke) - Leiomyosarcoma
Ireland (Kerry General Hospital) - Leiomyosarcoma
Japan (Asahi General Hospital) - Myxoid leiomyosarcoma
Japan (University of Yamanashi) - Leiomyosarcoma
Singapore (Freelance/Locum Practice) - Leiomyosarcoma
The Netherlands, Amstelveen - Leiomyosarcoma
United Kingdom (Princes Risborough Study Group) - Leiomyosarcoma

Case 9 - Diagnosis:

Leiomyosarcoma, uterus
 T-82000, M-88003

Case 9 - References:

Toledo G; Oliva E. Smooth muscle tumors of the uterus: a practical approach. *Arch Pathol Lab Med* 2008 Apr;132(4): p595-605.

 Botsis D; Koliopoulos C, et al. Myxoid leiomyosarcoma of the uterus in a patient receiving tamoxifen therapy: a case report. *Int J Gynecol Pathol* 2006 Apr;25(2): p173-5.

 Fadare O. Perivascular Epithelioid Cell Tumors (PEComas) and Smooth Muscle Tumors of the Uterus. *Am J Surg Pathol* 2007 Sep;31(9): p1454-5; author reply 1455-6.

 Silva EG; Bodurka DC, et al. A uterine leiomyosarcoma that became positive for HMB45 in the metastasis. *Ann Diagn Pathol* 2005 Feb;9(1): p43-5.

 Fadare O; Liang SX. Epithelioid smooth muscle tumors of the uterus do not express CD1a: a potential immunohistochemical adjunct in their distinction from uterine perivascular epithelioid cell tumors. *Ann Diagn Pathol* 2008 Dec;12(6): p401-5.

Case No. 10, Accession No. 31118

May 2010

Alameda County Medical Center (Alameda County Medical Center) - Rhabdomyosarcoma vs. MMMT with rhabdomyosarcoma component
Fontana (Kaiser Permanente) - Rhabdomyosarcoma
Long Beach (Long Beach Veterans Medical Center) - Mixed mullerian tumor (2)
Oakland (Kaiser Permanente) - Carcinosarcoma consistent with rhabdomyosarcoma
Santa Barbara (Miramonte Laboratory) - Leiomyosarcoma
Woodland Hills (Kaiser Permanente) - Rhabdomyosarcoma
Colorado (McKee Medical Center) - Leiomyosarcoma
Colorado (University of Colorado) - Heterologous malignant mixed mullerian tumor
Colton (Arrowhead Medical Center) - Smooth muscle cell tumor
Florida (Naples Pathology Associates) - Epithelioid leiomyosarcoma
Florida, Tallahassee - Carcinosarcoma with rhabdomyosarcoma
Georgia, Atlanta - Rhabdomyosarcoma
Illinois, Burr Ridge - Leiomyosarcoma, epithelioid
Illinois, Chicago - Rhabdomyosarcoma (2)
Illinois (Heartland Regional Medical Center) - Leiomyosarcoma with epithelial elements (MMMS)
Illinois (MacNeal Hospital) - Rhabdomyosarcoma, uterus
Illinois (St. Mary's Hospital) - Malignant mixed mullerian tumor
Kansas (Cytocheck Laboratory) - Stromal sarcoma
Louisiana (LSUHSC Pathology) - Leiomyosarcoma
Maryland (University of Maryland Pathology Residents) - Carcinosarcoma with rhabdomyosarcoma component
Michigan (University of Michigan) - Chorangioma

Minnesota (Fairview Ridges Hospital) - Malignant mixed mullerian tumor, with rhabdomyosarcomatous heterologous component
Nebraska (Creighton University Medical Center) - Rhabdomyosarcoma
New York (Albany Medical Center) - Rhabdomyosarcoma
New York (Erie County Medical Center) - High grade sarcoma, favor rhabdomyosarcoma
New York (Long Island Jewish Medical Center) - Rhabdomyosarcoma (most likely MMMT)
New York (St. Joseph Hospital) - Leiomyosarcoma
New York (SUNY Downstate Medical Center) - Malignant mixed mullerian tumor (1); Carcinosarcoma (1)
New York (Westchester Medical Center) - Rhabdomyosarcoma
North Carolina (Winston-Salem) - Malignant mixed mullerian tumor with rhabdoid differentiation
Ohio, Columbus - Rhabdomyosarcoma
Ohio, Union Town - Leiomyosarcoma
Ohio, University of Toledo Medical Center - Pleomorphic rhabdomyosarcoma of the uterus
Pennsylvania (Conemaugh Memorial Medical Center) - Rhabdomyosarcoma (2)
Pennsylvania (Drexel University) - High grade endometrial stromal sarcoma
Pennsylvania (Lehigh Valley Hospital) - Rhabdomyosarcoma, possibly MMMT
Pennsylvania (Magee Women's Hospital) - Carcinosarcoma with heterologous elements with rhabdomyosarcomatous differentiation (MMMT)
Pennsylvania (York Hospital) - Rhabdomyosarcoma
Puerto Rico (University of Puerto Rico) - Carcinosarcoma (malignant mixed mullerian tumor)
Texas (Carl R. Darnall Army Medical Center) - Rhabdomyosarcoma
Texas, Crystal Beach - Rhabdomyosarcoma
Texas, Lubbock - Mixed malignant mullerian tumor
Texas (Scott & White Memorial Hospital) - Carcinosarcoma (MMMT)
Texas (UTHSC San Antonio Residents) - Carcinosarcoma with rhabdoid differentiation vs. pleomorphic rhabdomyosarcoma
Washington, Bothell - High grade stromal sarcoma
Washington (Seattle VAMC) - Sarcoma, rhabdomyosarcoma component
West Virginia (Greenbrier Valley Medical Center) - Pleomorphic leiomyosarcoma
Australia (Royal Hobart Hospital) - Malignant mixed mullerian tumor with heterologous elements (rhabdomyosarcoma)
Australia (St. Vincent's Hospital, Sydney) - MMMT
Canada (Pasqua Hospital) - Rhabdomyosarcoma
Canada (University of Sherbrooke) - Rhabdomyosarcoma
Ireland (Kerry General Hospital) - Leiomyosarcoma
Japan (Asahi General Hospital) - Rhabdomyosarcoma
Japan (University of Yamanashi) - Carcinosarcoma
Singapore (Freelance/Locum Practice) - Rhabdomyosarcoma
The Netherlands, Amstelveen - Carcinosarcoma heterologous type (rhabdomyoblast differentiation)
United Kingdom (Princes Risborough Study Group) - Carcinosarcoma

Case 10 - Diagnosis:

Uterine carcinosarcoma (MMMT), myometrium and cervix
 T-82000, M-89503

Case 10 - References:

- Horn LC; Dallacker M, et al. [Carcinosarcomas (malignant mixed Mullerian tumors) of the uterus. Morphology, pathogenetic aspects and prognostic factors]. *Pathologie* 2009 Jul;30(4): p292-301.
- Zamecnik M; Sokol L, et al. Low-grade metaplastic adenocarcinoma (carcinosarcoma) of the uterus: report of an unusual case. *Ann Diagn Pathol* 2005 Dec;9(6): p335-9.
- Kajo K; Zubor P, et al. Carcinosarcoma of the uterus with melanocytic differentiation. *Pathol Res Pract* 2007;203(10): p753-8.

Cimbaluk D; Rotmensch J, et al. Uterine carcinosarcoma: immunohistochemical studies on tissue microarrays with focus on potential therapeutic targets. *Gynecol Oncol* 2007 Apr;105(1): p138-44.