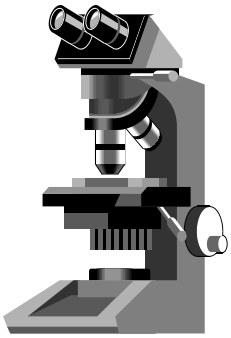
CALIFORNIA
TUMOR TISSUE REGISTRY

GENERAL PATHOLOGY

Minutes – Subscription B

February 2001



SUGGESTED READING (General Topics from Recent Literature):

Cellular Origin of Human B-Cell Lymphomas. Koppers R, Klein U, Hansmann M-L, et al. *New Eng J of Med* 1999; 341(20):1520-1528.

The Pathology of Late Recurrence of Testicular Germ Cell Tumors. Michael H, Lucia J, Foster RS and Ulbright TM. *Am J of Surg Pathol* 2000; 24(2):257-273.

Mesotheliomas with Deciduoid Morphology. A Morphologic Spectrum and a Variant Not Confined to Young Females. Shanks JH, Harris M, Banerjee SS, et al. *Am J of Surg Pathol* 2000; 24(2):285-294.

Adenocarcinoma of the Small Bowel. Review of the National Cancer Data Base, 1985-1995. Hose JR, Karnell LH, Menck HR and Scott-Conner C. *Cancer* 1999; 86(12):2693-2706.

Colorectal Carcinomas with High Microsatellite Instability. Defining a Distinct Immunologic and Molecular Entity with Respect to Prognostic Markers. Edmonston TB, Cuesta KH, Burkholder S, Barusevicius A, et al. *Hum Pathol* 2000; 31(12):1506-1514.

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 B February 2001

Case 1:

Lipoleiomyoma, uterus

T-82000, M-88900

Case 2:

Clear cell adenofibroma, ovary

T-87000, M-83130

Case 3:

Brenner tumor, ovary

T-86922, M-90000

Case 4:

Adult-type granulosa cell tumor, ovary

T-87000, M-95800

Case 5:

Merkel cell carcinoma (neuroendocrine carcinoma of skin), buttock

T-01000, M-80423

Case 6:

Classic seminoma, testicle

T-78000, M-90613

Case 7:

Neuroendocrine carcinoma ("carcinoid tumor") associated with a villous adenoma, cecum

T-67100, M-82401

Case 8:

Diffuse large B-cell lymphoma

T-07000, M-96303

Case 9:

Malignant Mesothelioma, peritoneum

T-Y4400, M-90503

Case 10:

Schwannoma, forearm

T-Y8500, M-95600

Glendale (Glendale Pathology Associates) - Lipoleiomyoma
LLUMC Pathology Residents - Well-differentiated liposarcoma (7)
Mountain View (El Camino Pathology Group) - Leiomyoma with massive hydropic degeneration
Orange (UCI Medical Center Residents) - Lipoleiomyoma, uterus
Richmond - Leiomyoma with cystic degeneration and hyalinization
Alabama (Cunningham Pathology) - Adenomatoid tumor
Arkansas (Little Rock) - Lipoleiomyoma, uterus
Colorado (Unipath) - Infarcted leiomyoma
Florida (Munroe Regional Medical Center) - Lipoleiomyoma
Florida (Winter Haven Hospital) - Lipomyoma (1); Lipoleiomyoma (1)
Illinois (Chicago) - Angiomyolipoma
Illinois (Marion Memorial Hospital) - Fibrotic lipoleiomyoma
Indiana (Fort Wayne) - Degenerating hyalinized lipoleiomyoma, uterus
Maryland (National Naval Medical Center) - Lipoleiomyoma (7)
Maryland (University of Maryland) - Fat metaplasia within a leiomyoma
Massachusetts (Providence Pathology Associates) - Lipoleiomyoma with myxoid degeneration
Michigan (Spectrum Health) - Atypical lipoma
Michigan (St. Mary's Mercy Medical Center) - Leiomyoma with degeneration (1); Leiomyoma (1)
Michigan (St. Joseph's Mercy Hospital) - Lipoleiomyoma
Mississippi (King's Daughters Hospital - Epithelioid leiomyoma with hyalinization
Missouri (Ferguson Labs) - Lipoleiomyoma
Nebraska (Good Samaritan Hospital) - Leiomyoma
New York (East Meadow) - Fibrolipoma, uterus
New York (Impath) - Lipoleiomyoma, degenerated
Ohio (University Hospital of Cleveland) - Myolipoma
Pennsylvania (Allegheny General Hospital) - Hyalinized lipoleiomyoma
Pennsylvania (Conemaugh Memorial Medical Center Residents) - Leiomyolipoma
Texas (Houston) - Lipoleiomyoma
Texas (Polly Ryan Memorial Hospital) - Degenerate leiomyoma
Texas (ProPath Associates) - Lipoleiomyoma
Utah (APA) - Lipoleiomyoma
Washington, DC - Angiofibrolipoma (choristoma)
Canada (CUSE, Site Fleurimont) - Lipoleiomyoma
Canada (Foothills Hospital) - Lipoleiomyoma
China (Sir Run Run Shaw Hospital) - Lipoleiomyoma
Japan (Hamamatsu University School of Medicine) - Lipoleiomyoma
Japan (Kawasaki Medical School Hospital) - Lipoleiomyoma
Japan (Minami-Ku Sapporo) - Lipoleiomyoma
Oman (Al-Khod) - Myxoid leiomyoma with fatty degeneration
Saudi Arabia (King Khalid University Hospital) - Lipoleiomyoma (hyalinized)
Singapore - Adenomatoid tumor
Spain (POVISA, Vigo) - Lipoleiomyoma

CASE 1 - DIAGNOSIS:

Lipoleiomyoma, uterus

T-82000, M-88900

CASE 1 - REFERENCES:
Sieinski W. Lipomatous Neometaplasia of the Uterus. Report of 11 Cases with Discussion of Histogenesis and Pathogenesis. *Int J Gynecol Pathol* 1989; 8(4):357-363.
Resta L, Maiorano E, Piscitelli D, et al. Lipomatous Tumors of the Uterus. Clinico-Pathological Features of 10 Cases with Immunocytochemical Study of Histogenesis. *Pathol Res Pract* 1994; 190(4):378-183.
Hu J, Surti U and Tobon H. Cytogenetic Analysis of a Uterine Lipoleiomyoma. *Cancer Genet Cytogenet* 1992; 62(2):200-202.
Havel G, Wedell B, Dahlenfors R, et al. Cytogenetic Relationship Between Uterine Lipoleiomyomas and Typical Leiomyomas. *Virchows Arch B Cell Pathol Incl Mol Pathol* 1989; 57(1):77-79.

Case No. 2, Accession No. 28667 February 2001

Glendale (Glendale Pathology Associates) - Clear cell adenofibroma vs. LMP
LLUMC Pathology Residents - Cystic clear cell adenofibroma of borderline malignant potential (7)
Mountain View (El Camino Pathology Group) - Clear cell adenofibroma
Orange (UCI Medical Center Residents) - Clear cell LMP of ovary
Richmond - Cystadenofibroma
Alabama (Cunningham Pathology) - Endometrioid adenocarcinoma
Arkansas (Little Rock) - Atypically proliferating clear cell tumor
Colorado (Unipath) - Borderline serous cystadenoma
Florida (Munroe Regional Medical Center) - Sex cord tumor with annular tubules
Florida (Winter Haven Hospital) - Serous cystadenofibroma (1); Adenofibroma (1)
Illinois (Chicago) - Granulosa cell tumor
Illinois (Marion Memorial Hospital) - Clear cell adenofibroma of borderline malignancy
Indiana (Fort Wayne) - Serous cystadenofibroma, left ovary
Maryland (National Naval Medical Center) - Cystic granulosa cell tumor (2); Serous cyst adenofibroma (2); Struma ovarii (1); Sex cord stromal tumor (1); Surface epithelial tumor (1)
Maryland (University of Maryland) - Clear cell cystadenofibroma
Massachusetts (Providence Pathology Associates) - Clear cell adenocarcinoma borderline malignancy, ovary
Michigan (Spectrum Health) - ? [indecipherable]
Michigan (St. Mary's Mercy Medical Center) - Struma ovarii (2)
Michigan (St. Joseph's Mercy Hospital) - Clear cell carcinoma
Mississippi (King's Daughters Hospital - Clear cell adenofibroma of borderline malignancy
Missouri (Ferguson Labs) - Cystadenoma
Nebraska (Good Samaritan Hospital) - Clear cell adenocarcinoma
New York (East Meadow) - Struma ovarii with papillary carcinoma, ovary
New York (Impath) - Clear cell adenofibroma
Ohio (University Hospital of Cleveland) - Clear cell adenofibroma of borderline malignancy
Pennsylvania (Allegheny General Hospital) - Cystadenofibroma
Pennsylvania (Conemaugh Memorial Medical Center Residents) - Clear cell carcinoma
Texas (Houston) - Clear cell adenofibroma
Texas (Polly Ryan Memorial Hospital) - Granulosa cell tumor, macrofollicular pattern
Texas (ProPath Associates) - Clear cell adenofibroma (2)
Utah (APA) - Clear cell adenofibroma, borderline
Washington, DC - Struma ovarii
Canada (CUSE, Site Fleurimont) - Clear cell adenofibroma
Canada (Foothills Hospital) - Borderline clear cell adenofibroma
China (Sir Run Run Shaw Hospital) - Clear cell adenocarcinoma
Japan (Hamamatsu University School of Medicine) - Tumor of probable Wolffian origin
Japan (Kawasaki Medical School Hospital) - Clear cell tumor, borderline
Japan (Minami-Ku Sapporo) - Clear cell carcinoma

Oman (Al-Khod) - Cystadenofibroma
Saudi Arabia (King Khalid University Hospital) - Clear cell adenofibroma
Singapore - Clear cell adenofibroma
Spain (POVISA, Vigo) - Clear cell adenofibroma of borderline malignancy

CASE 2 - DIAGNOSIS:

Clear cell adenofibroma, ovary

T-87000, M-83130

CASE 2 - REFERENCES:

Norris HJ. Proliferative Endometrioid Tumors and Endometrioid Tumors of Low Malignant Potential. of the Ovary Int *J Gynecol Pathol* 1993; 12(2):134-140.

Gordon MD and Ireland K. Epithelial Neoplasms of the Ovary. An Update on Current Concepts. *Clin Lab Med* 1995; 15(3):575-593.

Bell DA. Mucinous Adenofibromas of the Ovary. A Report of 10 Cases. *Am J Surg Pathol* 1991; 15(3):227-232.

Tsurunaga T, Iwai E, Okamoto Y, et al. Ovarian Clear Cell Adenofibromatous Tumor. Report of 2 Cases. *Nippon Sanka Fujinka Gakai Zasshi* 1992; 44(1):105-108.

Fujiwara K, Moriya T, Mikami Y, Hiratsuka J, et al. Significant Increases in Serum CA125 and CA 19-9 Following Torsion from an Adenofibroma of the Ovary. A Case Report. *Jpn J Clin Oncol* 1994; 24(2):116-119.

Case No. 3, Accession No. 29020 February 2001

Glendale (Glendale Pathology Associates) - Brenner tumor
LLUMC Pathology Residents - Benign Brenner tumor with cystic degeneration (7)
Mountain View (El Camino Pathology Group) - Brenner tumor
Orange (UCI Medical Center Residents) - Brenner tumor, ovary
Richmond - Brenner tumor
Alabama (Cunningham Pathology) - Granulosa cell tumor
Arkansas (Little Rock) - Cystic Brenner tumor
Colorado (Unipath) - Brenner cell tumor
Florida (Munroe Regional Medical Center) - Sertoli Leydig
Florida (Winter Haven Hospital) - Brenner tumor (2)
Illinois (Chicago) - Brenner tumor
Illinois (Marion Memorial Hospital) - Transitional cell tumor (Brenner tumor)
Indiana (Fort Wayne) - Proliferating Brenner tumor
Maryland (National Naval Medical Center) - Brenner tumor (7)
Maryland (University of Maryland) - Brenner tumor
Massachusetts (Providence Pathology Associates) - Brenner tumor, ovary
Michigan (Spectrum Health) - Brenner tumor
Michigan (St. Mary's Mercy Medical Center) - Brenner tumor (2)
Michigan (St. Joseph's Mercy Hospital) - Brenner tumor
Mississippi (King's Daughters Hospital - Brenner tumor
Missouri (Ferguson Labs) - Sertoli-Leydig cell tumor
Nebraska (Good Samaritan Hospital) - Brenner tumor
New York (East Meadow) - Sex cord tumor with annular tubules, ovary
New York (Impath) - Brenner tumor
Ohio (University Hospital of Cleveland) - Brenner tumor
Pennsylvania (Allegheny General Hospital) - Brenner tumor
Pennsylvania (Conemaugh Memorial Medical Center Residents) - Brenner tumor
Texas (Houston) - Brenner tumor
Texas (Polly Ryan Memorial Hospital) - Brenner tumor
Texas (ProPath Associates) - Brenner tumor (2)

Utah (APA) - Brenner tumor
Washington, DC - Brenner tumor
Canada (CUSE, Site Fleurimont) - Brenner tumor
Canada (Foothills Hospital) - Brenner tumor, benign
China (Sir Run Run Shaw Hospital) - Brenner tumor
Japan (Hamamatsu University School of Medicine) - Brenner tumor
Japan (Kawasaki Medical School Hospital) - Brenner tumor
Japan (Minami-Ku Sapporo) - Brenner tumor
Oman (Al-Khod) - Brenner tumor
Saudi Arabia (King Khalid University Hospital) - Brenner tumor
Singapore - Benign Brenner tumor
Spain (POVISA, Vigo) - Brenner tumor

CASE 3 - DIAGNOSIS:

Brenner tumor, ovary

T-86922, M-90000

CASE 3 - REFERENCES:

Austin RM and Norris HJ. Malignant Brenner Tumor and Transitional Cell Carcinoma of the Ovary. A Comparision. *Int Gynecol Pathol* 1987; 6(1); 6:29-39.

Santini D, Gelli MC, Mazzaleni G, Ricci M, et al. Brenner Tumor of the Ovary. A Correlation Histologic Histochemical, Immunohistochemical and Ultrastructural Investigation. *Hum Pathol* 1989; 20(8):787-795.

Woodruff JD, Dietrich D, Genadry R, and Parmley TH. Proliferative and Malignant Brenner Tumors. Review of 47 Cases. *Am J of Obstet and Gyncol* 1981; 141(2):118-125.

Roth LM, Gersell DJ and Ulbright TM. Ovarian Brenner Tumors and Transitional Cell Carcinoma. Recent Developments. *Int J Gynecol Pathol* 1993; 12(2):128-133.

Hampton HL, Huffman HT and Meeks GR. Extraovarian Brenner Tumor. *Obstet Gynecol* 1992; 79 (5 (Pt2)):844-846.

Case No. 4, Accession No. 28971 February 2001

Glendale (Glendale Pathology Associates) - Granulosa cell tumor, adult type
LLUMC Pathology Residents - Granulosa cell tumor (6); Stromal tumor with sex cord elements (1)
Mountain View (El Camino Pathology Group) - Granulosa cell tumor
Orange (UCI Medical Center Residents) - Ovary granulosa tumor
Richmond - Intermediate Sertoli-Leydig cell tumor
Alabama (Cunningham Pathology) - Sertoli-Leydig cell tumor
Arkansas (Little Rock) - Granulosa cell tumor
Colorado (Unipath) - Small cell carcinoma
Florida (Munroe Regional Medical Center) - Granulosa cell tumor
Florida (Winter Haven Hospital) - Granulosa cell tumor (2)
Illinois (Chicago) - Granulosa cell tumor
Illinois (Marion Memorial Hospital) - Granulosa cell tumor
Indiana (Fort Wayne) - Granulosa cell tumor, ovary
Maryland (National Naval Medical Center) - Endometrioid tumor with Sertoli form features (1); Sertoli cell tumor (2); Sertoli-Leydig cell tumor (4)
Maryland (University of Maryland) - Granulosa cell tumor
Massachusetts (Providence Pathology Associates) - Granulosa cell tumor, ovary
Michigan (Spectrum Health) - Sertoli-Leydig cell tumor, r/o metastatic carcinoma
Michigan (St. Mary's Mercy Medical Center) - Granulosa cell tumor (2)
Michigan (St. Joseph's Mercy Hospital) - Adult granulosa cell tumor
Mississippi (King's Daughters Hospital - Sertoli cell tumor (tubular type)
Missouri (Ferguson Labs) - Gynandroblastoma
Nebraska (Good Samaritan Hospital) - Granulosa cell tumor

New York (East Meadow) - Granulosa cell tumor, ovary
New York (Impath) - Adult granulosa cell tumor
Ohio (University Hospital of Cleveland) - Adult granulosa cell tumor, trabecular pattern
Pennsylvania (Allegheny General Hospital) - Granulosa cell tumor
Pennsylvania (Conemaugh Memorial Medical Center Residents) - Adult granulosa cell tumor
Texas (Houston) - Adult granulosa cell tumor, trabecular pattern
Texas (Polly Ryan Memorial Hospital) - Sertoli cell tumor
Texas (ProPath Associates) - Granulosa cell tumor (2)
Utah (APA) - Sertoli cell tumor
Washington, DC - Granulosa cell tumor
Canada (CUSE, Site Fleurimont) - Sertoli-Leydig cell tumor
Canada (Foothills Hospital) - Adult granulosa cell tumor
China (Sir Run Run Shaw Hospital) - Adult granulosa cell tumor (trabecular pattern)
Japan (Hamamatsu University School of Medicine) - Adult granulosa cell tumor
Japan (Kawasaki Medical School Hospital) - Granulosa cell tumor
Japan (Minami-Ku Sapporo) - Granulosa cell tumor
Oman (Al-Khod) - Adult granulosa cell tumor
Saudi Arabia (King Khalid University Hospital) - Adult granulosa cell tumor
Singapore - Granulosa cell tumor
Spain (POVISA, Vigo) - Granulosa cell tumor vs. endometrioid stromal sarcoma

CASE 4 - DIAGNOSIS:

Adult-type granulosa cell tumor, ovary

T-87000, M-95800

CASE 4 - REFERENCES:

Otis CN, Powell JL, Barbuto D and Carcangiu ML. Intermediate Filamentous Proteins in Adult Granulosa Cell Tumors. An Immunohistochemical Study of 25 Cases. *Am J of Surg Pathol* 1992; 16(10):962-968.

Costa M, DeRose PB, Roth LM, Brescia R, et al. Immunohistochemical Phenotype of Ovarian Granulosa Cell Tumors. Absence of Epithelial Membrane Antigen has Diagnostic Value. *Hum Pathol* 1994; 25(1):60-66.

Fox H, Agawal K and Langley FA. A Clinicopathologic Study of 92 Cases of Granulosa Cell Tumors of the Ovary with Special Reference to the Factors Influencing Prognosis. *Cancer* 1975; 35(1):231-241.

Kurman RJ, Goebelsmann U and Taylor CR. Steroid Localization in Granulosa Theca Tumors of the Ovary. *Cancer* 1979; 43(6):2377-2384.

Costa MJ, Walls J, Ames P and Roth LM. Transformation in Recurrent Ovarian Granulosa Cell Tumors. Ki67 (MIB-1) and p53 Immunohistochemistry Demonstrates a Possible Molecular Basis for the Poor Histopathologic Prediction of Clinical Behavior. *Hum Pathol* 1996; 27(3):274-281.

Case No. 5, Accession No. 28984 February 2001

Glendale (Glendale Pathology Associates) - Merkel cell tumor
LLUMC Pathology Residents - Merkel cell carcinoma (7)
Mountain View (El Camino Pathology Group) - Merkel cell carcinoma
Orange (UCI Medical Center Residents) - Merkel cell carcinoma
Richmond - Merkel cell carcinoma
Alabama (Cunningham Pathology) - Merkel cell carcinoma
Arkansas (Little Rock) - Merkel cell carcinoma
Colorado (Unipath) - Neuroendocrine carcinoma
Florida (Munroe Regional Medical Center) - Merkel cell carcinoma
Florida (Winter Haven Hospital) - Merkel cell carcinoma (2)
Illinois (Chicago) - Merkel cell carcinoma
Illinois (Marion Memorial Hospital) - Small cell anaplastic carcinoma vs. PNET
Indiana (Fort Wayne) - Merkel cell carcinoma, right buttock
Maryland (National Naval Medical Center) - Merkel cell tumor (7)

Maryland (University of Maryland) - Merkel cell carcinoma
Massachusetts (Providence Pathology Associates) - Merkel cell tumor, skin
Michigan (Spectrum Health) - Small cell carcinoma
Michigan (St. Mary's Mercy Medical Center) - Merkel cell tumor (2)
Michigan (St. Joseph's Mercy Hospital) - Merkel cell carcinoma
Mississippi (King's Daughters Hospital - Merkel cell tumor
Missouri (Ferguson Labs) - Merkel cell carcinoma
Nebraska (Good Samaritan Hospital) - Merkel cell carcinoma
New York (East Meadow) - Merkel cell tumor, buttock
New York (Impath) - Merkel cell carcinoma
Ohio (University Hospital of Cleveland) - Merkel cell carcinoma
Pennsylvania (Allegheny General Hospital) - Merkel cell carcinoma
Pennsylvania (Conemaugh Memorial Medical Center Residents) - Merkel cell carcinoma
Texas (Houston) - Merkel cell carcinoma
Texas (Polly Ryan Memorial Hospital) - Small cell neuroendocrine carcinoma, possibly metastatic from lung
Texas (ProPath Associates) - Peripheral neuroectodermal tumor (2)
Utah (APA) - Merkel cell carcinoma/neuroendocrine carcinoma
Washington, DC - Merkel cell carcinoma
Canada (CUSE, Site Fleurimont) - Merkel cell tumor
Canada (Foothills Hospital) - Merkel cell carcinoma
China (Sir Run Run Shaw Hospital) - PNET (Merkel cell carcinoma)
Japan (Hamamatsu University School of Medicine) - Merkel cell carcinoma
Japan (Kawasaki Medical School Hospital) - Merkel cell carcinoma
Japan (Minami-Ku Sapporo) - Merkel cell carcinoma
Oman (Al-Khod) - Neuroendocrine carcinoma, r/o glomus tumor
Saudi Arabia (King Khalid University Hospital) - Merkel cell carcinoma (neuroendocrine carcinoma)
Singapore - Trabecular carcinoma (Merkel's carcinoma)
Spain (POVISA, Vigo) - Merkel cell carcinoma

CASE 5 - DIAGNOSIS:

Merkel cell carcinoma (neuroendocrine carcinoma of skin), buttock
T-01000, M-80423

CASE 5 - REFERENCES:

Skelton HG, Smith KJ, Hitchcock CL, et al. Merkel Cell Carcinoma. Analysis of Clinical, Histologic, and Immunohistologic Features of 132 Cases with Relation to Survival. *J Am Acad Dermatol* 1997; 37(5 Pt 1):734-739.
al-Kaisi NK. Fine-Needle Aspiration Cytology of a Metastatic Merkel-Cell Carcinoma. *Diagn Cytopathol* 1991; 7(2):184-188.
Raaf JH, Urmacher C, Knapper WK, et al. Trabecular (Merkel Cell) Carcinoma of the Skin. Treatment of Primary, Recurrent, and Metastatic Disease. *Cancer* 1986; 57(1):178-182.

Case No. 6, Accession No. 28363 February 2001

Glendale (Glendale Pathology Associates) - Seminoma
LLUMC Pathology Residents - Seminoma with focal intratubular germ cell neoplasia (7)
Mountain View (El Camino Pathology Group) - Seminoma
Orange (UCI Medical Center Residents) - Seminoma
Richmond - Seminoma
Alabama (Cunningham Pathology) - Spermatocytic seminoma
Arkansas (Little Rock) - Seminoma (anaplastic seminoma)
Colorado (Unipath) - Large cell lymphoma
Florida (Munroe Regional Medical Center) - Seminoma

Florida (Winter Haven Hospital) - Seminoma (2)
Illinois (Chicago) - Seminoma
Illinois (Marion Memorial Hospital) - Seminoma, classic type
Indiana (Fort Wayne) - Classic seminoma, left testis
Maryland (National Naval Medical Center) - Seminoma (6); Mixed germ cell tumor (embryonal seminoma) (1)
Maryland (University of Maryland) - Seminoma
Massachusetts (Providence Pathology Associates) - Seminoma testis
Michigan (Spectrum Health) - Mixed GCT seminoma, embryonal carcinoma
Michigan (St. Mary's Mercy Medical Center) - Seminoma (2)
Michigan (St. Joseph's Mercy Hospital) - Seminoma
Mississippi (King's Daughters Hospital - Seminoma
Missouri (Ferguson Labs) - Seminoma
Nebraska (Good Samaritan Hospital) - Seminoma
New York (East Meadow) - Seminoma, testicle
New York (Impath) - Seminoma (anaplastic for some)
Ohio (University Hospital of Cleveland) - Classic seminoma
Pennsylvania (Allegheny General Hospital) - Anaplastic seminoma
Pennsylvania (Conemaugh Memorial Medical Center Residents) - Anaplastic seminoma
Texas (Houston) - Seminoma
Texas (Polly Ryan Memorial Hospital) - Seminoma
Texas (ProPath Associates) - Seminoma (2)
Utah (APA) - Seminoma
Washington, DC - Classical seminoma
Canada (CUSE, Site Fleurimont) - Seminoma
Canada (Foothills Hospital) - Seminoma
China (Sir Run Run Shaw Hospital) - Seminoma
Japan (Hamamatsu University School of Medicine) - Seminoma
Japan (Kawasaki Medical School Hospital) - Seminoma, classical
Japan (Minami-Ku Sapporo) - Anaplastic seminoma
Oman (Al-Khod) - Seminoma
Saudi Arabia (King Khalid University Hospital) - Seminoma
Singapore - Seminoma
Spain (POVISA, Vigo) - Seminoma and intratubular tumor

CASE 6 - DIAGNOSIS:

Classic seminoma, testicle

T-78000, M-90613

CASE 6 - REFERENCES:

Czaja JT and Ulbright TM. Evidence for Transformation of Seminoma to Yolk Sac Tumor, with Histogenetic Considerations. *Am J Clin Pathol* 1992; 97(4):468-477.
Hadziselimovic F, Herzog B and Emmons LR. The Expression of CD44 Adhesion Molecules on Seminoma Cells. A New Marker for Early Detection of the Tumor. *Cancer* 1996; 77(3):429-430.
Kelty P, Frazier H, O'Connell K and Ghosh BC. Germ Cell Testis Cancer 15-Year Review . *J of Surg Oncol* 1996; 62:30-33.
Michael H, Lucia J, Foster RS and Ulbright TM. The Pathology of Late Recurrence of Testicular Germ Cell Tumors. *Am J Surg Pathol* 2000; 24(2):257-273.

Case No. 7, Accession No. 25737 February 2001

Glendale (Glendale Pathology Associates) - Composite adenocarcinoma/small cell carcinoma
LLUMC Pathology Residents - Collision tumor-villous adenoma with focal intramucosal carcinoma and undifferentiated neuroendocrine carcinoma (7)
Mountain View (El Camino Pathology Group) - Small cell neuroendocrine carcinoma associated with villous adenoma

Orange (UCI Medical Center Residents) - Colon small cell carcinoma
Richmond - Neuroendocrine carcinoma arising in villous adenoma
Alabama (Cunningham Pathology) - Malignant carcinoid tumor
Arkansas (Little Rock) - Small cell carcinoma, arising in villous adenoma, colon
Colorado (Unipath) - Neuroendocrine carcinoma
Florida (Munroe Regional Medical Center) - Anaplastic carcinoid vs small cell carcinoma
Florida (Winter Haven Hospital) - Adenocarcinoma (1); Carcinoid with atypical tubulovillous adenoma (1)
Illinois (Chicago) - Carcinoid, adenomatous polyp
Illinois (Marion Memorial Hospital) - Small cell anaplastic carcinoma associated with a villous adenoma with focal moderate to severe atypia
Indiana (Fort Wayne) - Villous adenoma with associated (underlying) high grade neuroendocrine carcinoma, cecum
Maryland (National Naval Medical Center) - Atypical carcinoid (well-differentiated neuroendocrine carcinoma) arising in a tubular-villous adenoma with high grade dysplasia
Maryland (University of Maryland) - Neuroendocrine carcinoma
Massachusetts (Providence Pathology Associates) - Tubulovillous carcinoma , cecum
Michigan (Spectrum Health) - Small cell carcinoma
Michigan (St. Mary's Mercy Medical Center) - Carcinoid (1); Small cell carcinoma arising from tubulovillous adenoma (1)
Michigan (St. Joseph's Mercy Hospital) - Mixed adenocarcinoma and neuroendocrine carcinoma
Mississippi (King's Daughters Hospital - Adenomatous polyp with malignant neuroendocrine tumor
Missouri (Ferguson Labs) - Malignant carcinoid
Nebraska (Good Samaritan Hospital) - Poorly differentiated neuroendocrine carcinoma
New York (East Meadow) - Neuroendocrine carcinoma and villous adenoma/severe dysplasia
New York (Impath) - Villoglandular adenoma with associated neuroendocrine carcinoma
Ohio (University Hospital of Cleveland) - Small cell carcinoma arising in a villous adenoma
Pennsylvania (Allegheny General Hospital) - Villous adenoma with underlying small cell carcinoma
Pennsylvania (Conemaugh Memorial Medical Center Residents) - Malignant carcinoid, colonic adenocarcinoma in-situ
Texas (Houston) - Adenocarcinoma and neuroendocrine carcinoma
Texas (Polly Ryan Memorial Hospital) - Small cell carcinoma associated with tubulovillous polyp
Texas (ProPath Associates) - Carcinoid tumor in tubulovillous adenoma (2)
Utah (APA) - Neuroendocrine carcinoma in tubulovillous adenoma with intramucosal adenocarcinoma
Washington, DC - Composite villous adenoma – Small cell carcinoma
Canada (CUSE, Site Fleurimont) - Villous adenoma high grade and carcinoid tumor, malignant
Canada (Foothills Hospital) - Small cell carcinoma arising in a tubulovillous adenoma (r/o metastasizing)
China (Sir Run Run Shaw Hospital) - Villous adenoma with malignant change of focal area and neuroendocrine carcinoma (small cell carcinoma)
Japan (Hamamatsu University School of Medicine) - Poorly differentiated adenocarcinoma with tubulovillous adenocarcinoma
Japan (Kawasaki Medical School Hospital) - Neuroendocrine carcinoma
Japan (Minami-Ku Sapporo) - Small cell carcinoma, villous adenoma
Oman (Al-Khod) - Small cell carcinoma
Saudi Arabia (King Khalid University Hospital) - Adenocarcinoma with neuroendocrine features and villous adenoma
Singapore - Small cell carcinoma
Spain (POVISA, Vigo) - Small cell carcinoma and villous adenoma

CASE 7 - DIAGNOSIS:

Neuroendocrine carcinoma ("carcinoid tumor") associated with a villous adenoma, cecum
T-67100, M-82401

CASE 7 - REFERENCES:

Gould VE and Chejfec G. Neuroendocrine Carcinomas of the Colon. Ultrastructural and Biochemical Evidence of their Secretory Function. *Am J Surg Pathol* 1978; 2(1):31-38.
Staren ED, Gould VE, Warren WH, et al. Neuroendocrine Carcinomas of the Colon and Rectum. A Clinicopathologic Evaluation. *Surg* 1988; 104(6):1080-1090.
Sarsfield P and Anthony PP. Small Cell Undifferentiated ("Neuroendocrine") Carcinoma of the Colon. *Histopathol* 1990; 16(4):357-363.

Salmeron M and Lanitis G. Adenoma and Neuroendocrine Carcinoma. 2 Adjacent Intestinal Neoplasias. Simple Coincidence? Report of 2 Cases. *Rev Med Suisse Romande* 1997; 117(2):143-146.

Case No. 8, Accession No. 28666 February 2001

Glendale (Glendale Pathology Associates) - Diffuse large cell lymphoma
LLUMC Pathology Residents - High grade lymphoma (7)
Mountain View (El Camino Pathology Group) - Large cell lymphoma and extramedullary hematopoesis
Orange (UCI Medical Center Residents) - Large B-cell lymphoma vs. malignant melanoma
Richmond - Hairy cell leukemia
Alabama (Cunningham Pathology) - Anaplastic large cell lymphoma
Arkansas (Little Rock) - Large cell lymphoma, probably T-cell type, with hemophagocytic syndrome
Colorado (Unipath) - Large cell lymphoma
Florida (Munroe Regional Medical Center) - Large cell lymphoma
Florida (Winter Haven Hospital) - Immunoblastic lymphoma (1); Lymphoma (1)
Illinois (Chicago) - Diffuse large cell lymphoma, immunoblastic
Illinois (Marion Memorial Hospital) - Malignant lymphoma, diffuse, large cell type
Indiana (Fort Wayne) - Large cell lymphoma, spleen
Maryland (National Naval Medical Center) - Malignant large cell lymphoma (6); Granulocytic sarcoma (1)
Maryland (University of Maryland) - Lymphoma
Massachusetts (Providence Pathology Associates) - Large cell lymphoma, spleen
Michigan (Spectrum Health) - Large cell immunoblastic lymphoma
Michigan (St. Mary's Mercy Medical Center) - Large cell high grade lymphoma (2)
Michigan (St. Joseph's Mercy Hospital) - Large cell lymphoma
Mississippi (King's Daughters Hospital - Large cell malignant lymphoma
Missouri (Ferguson Labs) - Anaplastic Ki-1 lymphoma
Nebraska (Good Samaritan Hospital) - Diffuse large cell lymphoma
New York (East Meadow) - Malignant lymphoma, favor immunoblastic type
New York (Impath) - Malignant lymphoma, large cell, ? immunoblastic
Ohio (University Hospital of Cleveland) - Lymphoma, favor large cell immunoblastic
Pennsylvania (Allegheny General Hospital) - Large cell lymphoma
Pennsylvania (Conemaugh Memorial Medical Center Residents) - Malignant lymphoma, large cell type
Texas (Houston) - Diffuse large cell lymphoma
Texas (Polly Ryan Memorial Hospital) - Malignant undifferentiated round cell neoplasm
Texas (ProPath Associates) - Large cell lymphoma (2)
Utah (APA) - Diffuse large cell lymphoma
Washington, DC - Malignant lymphoma, large cell
Canada (CUSE, Site Fleurimont) - Large cell lymphoma
Canada (Foothills Hospital) - Immunoblastic lymphoma
China (Sir Run Run Shaw Hospital) - Chronic leukemia or non-Hodgkin's malignant lymphoma
Japan (Hamamatsu University School of Medicine) - Large cell lymphoma
Japan (Kawasaki Medical School Hospital) - Signet-ring cell carcinoma
Japan (Minami-Ku Sapporo) - Granulocytic sarcoma
Oman (Al-Khod) - Myelolipoma
Saudi Arabia (King Khalid University Hospital) - Large cell lymphoma
Singapore - Large cell lymphoma
Spain (POVISA, Vigo) - Large cell lymphoma

CASE 8 - DIAGNOSIS:

Diffuse large B-Cell lymphoma

(Note: Tumor cells were positive for CD20 and CD45RO, and CD30. There was no evidence for kappa, lambda, gamma, alpha or mu immunoglobulin components. Milton Drackenberg, M.D.)
T-07000, M-96303

CONSULTATION: Milton Drackenberg, M.D., "Diffuse large B-cell lymphoma."

CASE 8 - REFERENCES:

Palutke M, Eisenberg L, Narang S, Han LL, et al. B Lymphocytic Lymphoma (Large Cell) of Possible Splenic Marginal Zone Origin Presenting with Prominent Splenomegaly and Unusual Cordal Red Pulp Distribution. *Cancer* 1988; 62:593-600.

Silverman JF, Geisinger KR, Raab SS and Stanley MW. Fine Needle Aspiration Biopsy of the Spleen in the Evaluation of Neoplastic Disorders. *Acta Cytol* 1993; 37(2):158-162.

Dyomin VG, Rao PH, Dalla-Favera R, et al. BCL8 A Novel Gene Involved in Translocations Affecting Band 15q11-13 in Diffuse Large Cell Lymphoma. *Proc Natl Acad Sci USA* 1997; 94 (11):5728-5732.

Greiner TC, Moynihan MJ, Chan WC, et al. p53 Mutations in Mantel Cell Lymphoma are Associated with Variant Cytology and Predict a Poor Prognosis. *Blood* 1996; 87(10):4302-4310.

Sanchez E, Chacon MM, Plaza MM, et al. Clinical Outcome in Diffuse Large B-Cell Lymphoma is Dependent on the Relationship Between Different Cell-Cycle Regulator Protein. *J Clin Oncol* 1998; 16(5):1931-1939.

Case No. 9, Accession No. 28952 February 2001

Glendale (Glendale Pathology Associates) - Malignant mesothelioma
LLUMC Pathology Residents - Malignant epithelioid mesothelioma (3)
Mountain View (El Camino Pathology Group) - Malignant mesothelioma
Orange (UCI Medical Center Residents) - Mesothelioma
Richmond - Malignant mesothelioma
Alabama (Cunningham Pathology) - Malignant mesothelioma
Arkansas (Little Rock) - Malignant mesothelioma, epithelioid type, peritoneum
Colorado (Unipath) - Malignant mesothelioma
Florida (Munroe Regional Medical Center) - Malignant mesothelioma
Florida (Winter Haven Hospital) - Pseudoglandular acantholytic squamous cell carcinoma (1); Mesothelioma (1)
Illinois (Chicago) - Epithelioid mesothelioma
Illinois (Marion Memorial Hospital) - Malignant mesothelioma, epithelial type
Indiana (Fort Wayne) - Malignant peritoneal mesothelioma
Maryland (National Naval Medical Center) - Epithelial mesothelioma
Maryland (University of Maryland) - Malignant mesothelioma, epithelial type
Massachusetts (Providence Pathology Associates) - Malignant mesothelioma
Michigan (Spectrum Health) - Mesothelioma
Michigan (St. Mary's Mercy Medical Center) - Mesothelioma (2)
Michigan (St. Joseph's Mercy Hospital) - Mesothelioma
Mississippi (King's Daughters Hospital - Malignant mesothelioma
Missouri (Ferguson Labs) - Mesothelioma
Nebraska (Good Samaritan Hospital) - Malignant mesothelioma, epithelial type
New York (East Meadow) - Malignant mesothelioma, peritoneum
New York (Impath) - Mesothelioma
Ohio (University Hospital of Cleveland) - Malignant epithelial mesothelioma
Pennsylvania (Allegheny General Hospital) - Mesothelioma
Pennsylvania (Conemaugh Memorial Medical Center Residents) - Mesothelioma, malignant, epithelioid type
Texas (Houston) - Diffuse malignant mesothelioma
Texas (Polly Ryan Memorial Hospital) - Deciduoid mesothelioma
Texas (ProPath Associates) - Mesothelioma (2)
Utah (APA) - Mesothelioma

Washington, DC - Mesothelioma
Canada (CUSE, Site Fleurimont) - Malignant mesothelioma
Canada (Foothills Hospital) - Mesothelioma
China (Sir Run Run Shaw Hospital) - Malignant mesothelioma
Japan (Hamamatsu University School of Medicine) - Malignant mesothelioma, epithelial
Japan (Kawasaki Medical School Hospital) - Malignant mesothelioma
Japan (Minami-Ku Sapporo) - Malignant mesothelioma
Oman (Al-Khod) - Mesothelioma
Saudi Arabia (King Khalid University Hospital) - Mesothelioma
Singapore - Mesothelioma
Spain (POVISA, Vigo) - Papillary mesothelioma

CASE 9 - DIAGNOSIS:

Malignant Mesothelioma, peritoneum

T-Y4400, M-90503

CONSULTATION: Andrew Churg, M.D., US-Canadian Mesothelioma Reference Panel, Vancouver, BC Canada. "Mesothelioma."

CASE 9 - REFERENCES:

Battifora H and McCaughey WTE. Atlas of Tumor Pathology Third Series Fascicle 15. Tumors of the Serosal Membranes. *Armed Forces Institute of Pathology*, Washington, DC 1995; 17-88.
Kannerstein N and Chung J. Peritoneal Mesothelioma. *Hum Pathol* 1977; 8(1):83-94.
Craighead JE. Current Pathologentic Concepts of Diffuse Malignant Mesothelioma. *Hum Pathol* 1987; 18(6):544-557.
Cantin R, Al-Jabi M and McCaughey WT. Desmoplastic Diffuse Mesothelioma. *Am J Surg Pathol* 1982; 6(3):215-222.

Case No. 10, Accession No. 28995 February 2001

Glendale (Glendale Pathology Associates) - Schwannoma
LLUMC Pathology Residents - Schwannoma (7)
Mountain View (El Camino Pathology Group) - Benign Schwannoma
Orange (UCI Medical Center Residents) - Schwannoma
Richmond - Schwannoma
Alabama (Cunningham Pathology) - Schwannoma with ancient changes
Arkansas (Little Rock) - Neurilemmoma (Schwannoma)
Colorado (Unipath) - Schwannoma
Florida (Munroe Regional Medical Center) - Schwannoma
Florida (Winter Haven Hospital) - Schwannoma (2)
Illinois (Chicago) - Angiomyoma
Illinois (Marion Memorial Hospital) - Neurilemmoma (Schwannoma)
Indiana (Fort Wayne) - Schwannoma, left forearm
Maryland (National Naval Medical Center) - Schwannoma
Maryland (University of Maryland) - Schwannoma
Massachusetts (Providence Pathology Associates) - Neurilemmoma, forearm
Michigan (Spectrum Health) - Schwannoma
Michigan (St. Mary's Mercy Medical Center) - Schwannoma (2)
Michigan (St. Joseph's Mercy Hospital) - Schwannoma
Mississippi (King's Daughters Hospital - Neurilemmoma
Missouri (Ferguson Labs) - Schwannoma/liposarcoma
Nebraska (Good Samaritan Hospital) - Schwannoma
New York (East Meadow) - Schwannoma with degenerative changes
New York (Impath) - Schwannoma
Ohio (University Hospital of Cleveland) - Schwannoma
Pennsylvania (Allegheny General Hospital) - Schwannoma

Pennsylvania (Conemaugh Memorial Medical Center Residents) - Schwannoma
Texas (Houston) - Schwannoma
Texas (Polly Ryan Memorial Hospital) - Neurilemmoma
Texas (ProPath Associates) - Schwannoma (2)
Utah (APA) - Schwannoma
Washington, DC - Schwannoma
Canada (CUSE, Site Fleurimont) - Schwannoma
Canada (Foothills Hospital) - Neurilemmoma
China (Sir Run Run Shaw Hospital) - Neurilemmoma
Japan (Hamamatsu University School of Medicine) - Schwannoma
Japan (Kawasaki Medical School Hospital) - Schwannoma, benign
Japan (Minami-Ku Sapporo) - Schwannoma
Oman (Al-Khod) - Schwannoma
Saudi Arabia (King Khalid University Hospital) - Schwannoma
Singapore - Schwannoma
Spain (POVISA, Vigo) - Schwannoma

CASE 10 - DIAGNOSIS:

Schwannoma, forearm

T-Y8500, M-95600

CASE 10 - REFERENCES:

Rao UN, Surti U, Hoffner L and Yaw K. Cytogenetic and Histologic Correlation of Peripheral Nerve Sheath Tumors of Soft Tissue. *Cancer Genet Cytogenet* 1996; 88(1):17-25.

Mertens F, Dal Cin P, De Wever I, Fletcher CD, Mandahl N, et al. Cytogenetic Characterization of Peripheral Nerve Sheath Tumours. A Report of the CHAMP Study Group. *J Pathol* 2000; 190(1):31-38.

Bijlsma EK, Brouwer-Mladin R, Bosch DA, et al. Molecular Characterization of Chromosome 22 Deletions in Schwannomas. *Genes Chromosomes Cancer* 1992; 5(3):201-205.

Turc-Carel C, Pedeutour F and Durieux E. Characteristic Chromosome Abnormalities and Karyotype Profiles in Soft Tissue Tumors. *Curr Top Pathol* 1995; 89:73-94.

Orndal C, Rydholm A, Willen H, et al. Cytogenetic Intratumor Heterogeneity in Soft Tissue Tumors. *Cancer Genet Cytogenet* 1994; 78(2):127-137.