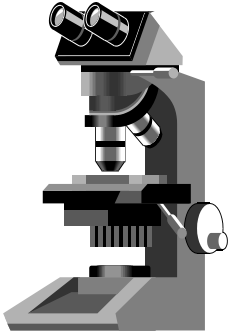


CALIFORNIA
TUMOR TISSUE REGISTRY



PROSTATE AND GU PATHOLOGY

Minutes – Subscription B

September 2000

SUGGESTED READING (General Topics from Recent Literature):

- Changing Concepts of Compensatory Renal Growth. From Humoral Pathology to Molecular Biology. Wolf, G. *Am J Nephrol* 1992; 12:369-373.
- Histopathologic Evaluation of Survival Time in Patients with Colorectal Carcinoma. Adachi, Y, Mori M, et al. *J of Surg Oncol* 1989; 42:219-224.
- Cancer—Nature, Nurture, or Both. Hoover RN. *New Eng J of Med* 2000; 343(2):135-136.
- World Health Organization and International Society of Urological Pathology Classification and Two-Number Grading System of Bladder Tumors. Oyasu R. *Cancer* 2000; 88(7):1509-1510.
- American Joint Committee on Cancer Prognostic Factors Consensus Conference. Colorectal Working Group. Compton C, Fenoglio-Preiser CM, et al. *Sem in Surg Oncol* 2000; 18:29-36.
- Cancer Heterogeneity and Its Biologic Implications in the Grading of Urothelial Carcinoma. Cheng L, Meumann RM, et al. *Cancer* 2000; 88(7):1663-1664.

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
Case of the Month: www.llu.edu/llu/cttr/cotm
Web: www.cttr.org

LLUMC Pathology Residents - Classic seminoma (5)
Mountain View (El Camino Hospital) - Seminoma
Bishop (Northern Inyo Hospital) - Seminoma, classical
Glendale (Glendale Pathology Associates) - Seminoma
Richmond - Seminoma
Nevada (Reno) - Classical seminoma
Colorado (Unipath) - Seminoma
Texas (San Angelo) - Seminoma
Texas (Lubbock) - Seminoma
Arkansas (UAMS) - Seminoma
Arkansas (Little Rock) - Seminoma arising in atrophic (cryptorchid?) testis
Louisiana (Metairie) - Seminoma
Illinois (Chicago) - Seminoma
Missouri (Joplin) - Spermatocytic seminoma
Indiana (Fort Wayne) - Seminoma, testis, classic type
Wisconsin (Middleton) - Seminoma
Michigan (Grand Rapids) - Seminoma (3)
Michigan (Foote Hospital) - Seminoma
Florida (Winter Haven) - Seminoma (3)
Florida (Miami) - Seminoma
Florida (Munroe Regional Medical Center) - Seminoma
Pennsylvania (Conemaugh Memorial Medical Center Residents) - Classic seminoma
Massachusetts (Longmeadow) - Seminoma, testis
Canada (Foothills Hospital) - Seminoma
Singapore - Classical seminoma
Japan (Shimada City) - Spermatocytic seminoma
Japan (Defense Hospital Sapporo) - Seminoma
Japan (Kawasaki Medical School Hospital) - Seminoma, classical (4)
Japan (Hamamatsu University School of Medicine) - Seminoma
China (Sir Run Run Shaw Hospital) - Seminoma
Italy (Istituto Ortopedico Rizzoli) - Seminoma (possible intratubular germ cell neoplasia?)

DIAGNOSIS:

Classic seminoma, testis
T-78000, M-90613

REFERENCES:

- Czaja T and Ulbright TM. Evidence of 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 of Early Detection of the Tumor. *Cancer* 1996; 77(3):429-430.
- deJong B, Oosterhuis JW, Castedo SM, et al. Pathogenesis of Adult Testicular Germ Cell Tumors. A Cytogenic Model. *Cancer Genet Cytogenet* 1990; 48(2):143-167.
- Hittmair A, Rogatsch H, Feichtinger H, et al. Testicular Seminomas are Aneuploid Tumors. *Lab Invest* 1995; 72(1):70-74.
- Nazeer T, Ro JY, Amato RJ, et al. Histologically Pure Seminoma with Elevated Alpha-Fetoprotein. A Clinicopathologic Study of Ten Cases. *Oncol Rep* 1998; 5(6):1425-1429.

LLUMC Pathology Residents - Seminoma, anaplastic type (5)
Mountain View (El Camino Hospital) - Seminoma
Bishop (Northern Inyo Hospital) - Seminoma—spermatocytic?
Glendale (Glendale Pathology Associates) - Seminoma
Richmond - Seminoma with adjacent intratubular seminoma
Nevada (Reno) - Classical seminoma
Colorado (Unipath) - Seminoma
Texas (San Angelo) - Seminoma
Texas (Lubbock) - Seminoma
Arkansas (UAMS) - Seminoma
Arkansas (Little Rock) - Seminoma
Louisiana (Metairie) - Seminoma
Illinois (Chicago) - Seminoma with increased mitoses, intratubular germ cell neoplasm
Missouri (Joplin) - Anaplastic seminoma
Indiana (Fort Wayne) - Seminoma, testis, classic type (focal lymphoid stroma)
Wisconsin (Middleton) - Seminoma
Michigan (Grand Rapids) - Rule out large cell lymphoma (vs. seminoma) (1); Seminoma (2)
Michigan (Foote Hospital) - Seminoma
Florida (Winter Haven) - Seminoma (3)
Florida (Miami) - Seminoma
Florida (Munroe Regional Medical Center) - Embryonal carcinoma
Pennsylvania (Conemaugh Memorial Medical Center Residents) - Seminoma /? anaplastic
Massachusetts (Longmeadow) - Seminoma, testis
Canada (Foothills Hospital) - Immunoblastic lymphoma
Singapore - Classical seminoma with intratubular germ cell neoplasm
Japan (Shimada City) - Seminoma
Japan (Defense Hospital Sapporo) - Anaplastic seminoma
Japan (Kawasaki Medical School Hospital) - Seminoma, classical, with pagetoid spreading (4)
Japan (Hamamatsu University School of Medicine) - Seminoma
China (Sir Run Run Shaw Hospital) - Seminoma
Italy (Istituto Ortopedico Rizzoli) - Seminoma

DIAGNOSIS:

Seminoma (nos), testis

Director's note: This tumor seemingly rests somewhere between classic seminoma and spermatocytic seminoma (drc)
T-78000, M90613

REFERENCES:

- Eble N. Spermatocytic Seminoma. *Hum Pathol* 1994; 25(10):1035-1042.
Codesal J, Panigua R, Regadera J, et al. Significance of DNA Quantification in Testicular Germ Cell Tumors. *Andrologia* 1991; 23(5):381-385.
True LD, Otis CN, Delprado W, et al. Spermatocytic Seminoma of Testis with Sarcomatous Transformation. A Report of Five Cases. *Am J Surg Pathol* 1988; 12(2):75-82.
Albores-Saavedra J, Huffman H, Alvarado-Cabrero I, et al. Anaplastic Variant of Spermatocytic Seminoma. *Hum Pathol* 1996; 27(7):650-655.
Rosenberg C, Mostert MC, Schut TB, et al. Chromosomal Constitution of Human Spermatocytic Seminomas. Comparative Genomic hybridization Supported by Conventional and interphase Cytogenetics. *Genes Chromosomes Cancer* 1998; 23(4):286-291.

LLUMC Pathology Residents - Mixed germ cell tumor (yolk sac/embryonal) (2); Embryonal carcinoma (3)
Mountain View (El Camino Hospital) - Mixed germ cell tumor; Embryonal carcinoma; Yolk sac tumor, choriocarcinoma
Bishop (Northern Inyo Hospital) - Embryonal carcinoma
Glendale (Glendale Pathology Associates) - Mixed non-seminomatous germ cell tumor; embryonal carcinoma and yolk sac
Richmond - Embryonal carcinoma
Nevada (Reno) - Embryonal carcinoma and yolk sac tumor
Colorado (Unipath) - Embryonal carcinoma
Texas (San Angelo) - Embryonal carcinoma
Texas (Lubbock) - Non-seminomatous germ cell tumor (yolk sac and embryonal)
Arkansas (UAMS) - Mixed germ cell tumor composed of embryonal carcinoma, yolk sac carcinoma and syncytiotrophoblast cells
Arkansas (Little Rock) - Non-seminomatous germ cell tumor with choriocarcinoma, embryonal carcinoma, yolk sac tumor and teratomatous elements
Louisiana (Metairie) - Embryonal carcinoma (favor pseudo-endodermal serous pattern)
Illinois (Chicago) - Choriocarcinoma
Missouri (Joplin) - Teratocarcinoma with choriocarcinoma
Indiana (Fort Wayne) - Embryonal carcinoma and focal yolk sac carcinoma, testis
Wisconsin (Middleton) - Embryonal carcinoma
Michigan (Grand Rapids) - Embryonal carcinoma (3)
Michigan (Foote Hospital) - Mixed germ cell tumor with embryonal yolk sac and choriocarcinoma
Florida (Winter Haven) - Teratoma—Choriocarcinoma—Yolk sac tumor (1); Choriocarcinoma (1); Mixed germ cell tumor (embryonal/choriocarcinoma) (1)
Florida (Miami) - Choriocarcinoma
Florida (Munroe Regional Medical Center) - Mixed germ cell tumor; Choriocarcinoma and embryonal carcinoma
Pennsylvania (Conemaugh Memorial Medical Center Residents) - Mixed germ cell tumor
Massachusetts (Longmeadow) - Choriocarcinoma, testis
Canada (Foothills Hospital) - Malignant mixed germ cell tumor (embryonal carcinoma and yolk sac tumor)
Singapore - Choriocarcinoma
Japan (Shimada City) - Embryonal carcinoma
Japan (Defense Hospital Sapporo) - Embryonal sarcoma
Japan (Kawasaki Medical School Hospital) - Mixed germ cell tumor (4)
Japan (Hamamatsu University School of Medicine) - Embryonal carcinoma
China (Sir Run Run Shaw Hospital) - Embryonal carcinoma with choriocarcinoma
Italy (Istituto Ortopedico Rizzoli) - Embryonal carcinoma (possible foci of choriocarcinoma?)

DIAGNOSIS:

Malignant mixed germ cell tumor (embryonal carcinoma and yolk sac tumor), testis

T-78000, M-90801

REFERENCES:

Prow DM. Germ Cell Tumors. Staging, Prognosis, and Outcome. *Semin Urol Oncol* 1998; 16(2):82-93.
Jacobsen GK, Jacobsen M and Clausen PP. Distribution of Tumor-Associated Antigens in the Various Histologic Components of Germ Cell Tumors of the Testis. *Am J Surg Pathol* 1981; 5(3):257-266.
Ahmed T, Bosl CJ and Haju SI. Teratoma with Malignant Transformation in Germ Cell Tumors in Men. *Cancer* 1985; 56(4):860-863.
Comiter CV, Kibel AS, Richie JP, et al. Prognostic Features of Teratomas with Malignant Transformation. A Clinicopathologic Study of 21 Cases. *J Urol* 1998; 159:859-863.

LLUMC Pathology Residents - Leydig cell tumor (5)
Mountain View (El Camino Hospital) - Leydig cell tumor
Bishop (Northern Inyo Hospital) - Leydig cell tumor
Glendale (Glendale Pathology Associates) - Leydig cell tumor
Richmond - Leydig cell tumor
Nevada (Reno) - Leydig cell tumor
Colorado (Unipath) - Embryonal carcinoma
Texas (San Angelo) - Leydig cell tumor
Texas (Lubbock) - Sertoli cell tumor
Arkansas (UAMS) - Leydig cell tumor
Arkansas (Little Rock) - Leydig cell tumor
Louisiana (Metairie) - Leydig cell tumor
Illinois (Chicago) - Leydig cell tumor
Missouri (Joplin) - Leydig cell tumor
Indiana (Fort Wayne) - Leydig cell carcinoma, testis
Wisconsin (Middleton) - Leydig cell tumor
Michigan (Grand Rapids) - Leydig cell tumor (3)
Michigan (Foote Hospital) - Leydig cell tumor
Florida (Winter Haven) - Leydig cell tumor (3)
Florida (Miami) - Leydig cell tumor
Florida (Munroe Regional Medical Center) - Leydig cell tumor
Pennsylvania (Conemaugh Memorial Medical Center Residents) - Yolk sac tumor
Massachusetts (Longmeadow) - Endodermal sinus tumor, testis
Canada (Foothills Hospital) - Leydig cell tumor
Singapore - Leydig cell tumor
Japan (Shimada City) - Leydig cell tumor
Japan (Defense Hospital Sapporo) - Rhabdomyosarcoma
Japan (Kawasaki Medical School Hospital) - Leydig cell tumor (2); Leydig cell tumor, malignant (2)
Japan (Hamamatsu University School of Medicine) - Leydig cell tumor
China (Sir Run Run Shaw Hospital) - Interstitial (Leydig) cell tumor
Italy (Istituto Ortopedico Rizzoli) - Leydig cell tumor

DIAGNOSIS:

Leydig cell tumor, testis
T-78000, M-86503

REFERENCES:

Billings SD, Roth LM and Ulbright TM. Microcystic Leydig Cell Tumors Mimicking Yolk Sac Tumor. A Report of Four Cases. *Am J Surg Pathol* 1999; 23(5):546-551.
Cheville JC, Sebo TJ, Lager, DJ, et al. Leydig Cell Tumor of the Testis. A Clinicopathologic, DNA content, and MIB-1 Comparison of Nonmetastasizing and Metastasizing Tumors. *Am J Surg Pathol* 1998; 22(11):1361-1367.
Sugimura J, Suzuki Y, Tamaura G, et al. Metachronous Development of Malignant Leydig Cell Tumor. *Hum Pathol* 1997; 28(11):1318-1320.

LLUMC Pathology Residents - Inverted transitional cell papilloma (5)
Mountain View (El Camino Hospital) - Inverted papilloma
Bishop (Northern Inyo Hospital) - Inverted transitional cell papilloma
Glendale (Glendale Pathology Associates) - Inverted papilloma
Richmond - Inverted papilloma
Nevada (Reno) - Inverted papilloma
Colorado (Unipath) - Transitional cell carcinoma
Texas (San Angelo) - Inverted papilloma
Texas (Lubbock) - Inverted papilloma
Arkansas (UAMS) - Inverted papilloma
Arkansas (Little Rock) - Inverted papilloma
Louisiana (Metairie) - Inverted papilloma, bladder
Illinois (Chicago) - Urothelial cell neoplasm, low grade
Missouri (Joplin) - Papillary carcinoma of bladder, grade II
Indiana (Fort Wayne) - Inverted papilloma, urinary bladder
Wisconsin (Middleton) - Inverted papilloma
Michigan (Grand Rapids) - Inverted papilloma (3)
Michigan (Foote Hospital) - Inverted papilloma
Florida (Winter Haven) - Inverted papilloma (3)
Florida (Miami) - Inverted papilloma
Florida (Munroe Regional Medical Center) - Inverted papilloma
Pennsylvania (Conemaugh Memorial Medical Center Residents) - Transitional cell carcinoma (inverted)
Massachusetts (Longmeadow) - Inverted transitional cell papilloma, bladder
Canada (Foothills Hospital) - Inverted transitional cell papilloma
Singapore - Inverted papilloma
Japan (Shimada City) - Inverted papilloma
Japan (Defense Hospital Sapporo) - Inverted papilloma
Japan (Kawasaki Medical School Hospital) - Inverted papilloma (4)
Japan (Hamamatsu University School of Medicine) - Inverted transitional cell papilloma
China (Sir Run Run Shaw Hospital) - Inverted transitional cell tumor of bladder
Italy (Istituto Ortopedico Rizzoli) - Inverted papilloma

DIAGNOSIS:

Inverted transitional cell papilloma, bladder

T-74000, M-80530

REFERENCES:

- DeMeester LJ, Farrow GM and Utz DC. Inverted Papillomas of the Urinary Bladder. *Cancer* 1975; 36:505-513.
Caro DJ and Tessler A. Inverted Papilloma of the Bladder. A Distinct Lesion. *Cancer* 1978; 42(2):708-713.
Stein BS, Rosen S and Kendall AR. The Association of Inverted Papilloma and Transitional Cell Carcinoma of the Urothelium. *J Urol* 1984; 131(4):751-752.
Altaffer LF 3d, Wilkerson SY, Jordan GH and Lynch DF. Malignant Inverted Papilloma and Carcinoma In-Situ of the Bladder. *J Urol* 1982; 128(4): 816-818.
Grignon DJ and Sakr W. Inflammatory and Other Conditions That Can Mimic Carcinoma in the Urinary Bladder. *Pathol Annu* 1995; 30 (Pt 1):95-122.

LLUMC Pathology Residents - Invasive high grade transitional cell carcinoma with squamous and mucinous differentiation (3); Invasive transitional cell carcinoma (2)

Mountain View (El Camino Hospital) - Transitional cell carcinoma, high grade, with myoinvasion

Bishop (Northern Inyo Hospital) - Transitional cell carcinoma, high grade with mixed squamous carcinoma

Glendale (Glendale Pathology Associates) - High grade transitional cell carcinoma with adenosquamous differentiation

Richmond - High grade papillary urothelial carcinoma with focal micropapillary features, at least superficially

Nevada (Reno) - Invasive transitional cell carcinoma

Colorado (Unipath) - Papillary transitional cell carcinoma III/IV

Texas (San Angelo) - Invasive transitional cell carcinoma, high grade

Texas (Lubbock) - High grade transitional cell carcinoma

Arkansas (UAMS) - Transitional cell carcinoma, grade III/IV

Arkansas (Little Rock) - Transitional cell carcinoma, grade III of IV, with lymphatic/vascular involvement and invasion into muscle wall

Louisiana (Metairie) - Invasive papillary transitional cell carcinoma, grade III

Illinois (Chicago) - Urothelial cell neoplasm, high grade

Missouri (Joplin) - Invasive squamous carcinoma of bladder

Indiana (Fort Wayne) - High grade (invasive) urothelial carcinoma with pseudoglandular features, urinary bladder

Wisconsin (Middleton) - High grade urothelial carcinoma, muscle

Michigan (Grand Rapids) - High grade transitional cell carcinoma (1); Infiltrating urothelial carcinoma, high grade (1); Infiltrating and in-situ high grade papillary urothelial carcinoma (1)

Michigan (Foote Hospital) - Invasive high grade transitional cell carcinoma

Florida (Winter Haven) - Invasive, grade III/IV, transitional cell carcinoma (3)

Florida (Miami) - Transitional cell carcinoma with squamous features

Florida (Munroe Regional Medical Center) - Transitional cell carcinoma, muscle invasive, grade III

Pennsylvania (Conemaugh Memorial Medical Center Residents) - High grade invasive transitional cell carcinoma

Massachusetts (Longmeadow) - Invasive papillary transitional cell carcinoma, high grade, bladder

Canada (Foothills Hospital) - Invasive, high grade transitional cell carcinoma

Singapore - Invasive transitional cell carcinoma, grade III

Japan (Shimada City) - Transitional cell carcinoma, high grade

Japan (Defense Hospital Sapporo) - Transitional cell carcinoma

Japan (Kawasaki Medical School Hospital) - Urothelial carcinoma, high grade (4)

Japan (Hamamatsu University School of Medicine) - Transitional cell carcinoma, high grade

China (Sir Run Run Shaw Hospital) - Transitional cell carcinoma (high grade with squamous differentiation)

Italy (Istituto Ortopedico Rizzoli) - High grade transitional cell carcinoma with squamous and glandular metaplasia

DIAGNOSIS:**Invasive high grade transitional cell carcinoma**

T-74000, M-81303

REFERENCES:

- Angulo JC, Lopez JJ, Grigmon DJ, Sanchez-Chapado, et al. Muscularis Mucosa Differentiates Two Populations with Different Prognosis in Stage T1 Bladder Cancer. *Urol* 1995; 45(1):47-53.
- Glick SH, Howell LP, and White RW. Relationship of p53 and bcl-2 to Prognosis in Muscle-Invasive Transitional Cell Carcinoma of the Bladder. *J Urol* 1996; 155(5):1754-1757.
- Lapham RL, Ro JY, Staerke GA, et al. Pathology of Transitional Cell Carcinoma of the Bladder and Its Clinical Implications. *Semin Surg Oncol* 1997; 13(5):307-318.
- Soresman WH and Messing EM. Bladder Cancer. Natural History, Tumor Markers, and Early Detection Strategies. *Semin Surg Oncol* 1997; 13(5):299-306.
- Bochner BH, Nichols PW and Skinner DG. Overstaging of Transitional Cell Carcinoma. Clinical Significance of Lamina Propria Fat Within the Urinary Bladder. *Urol* 1995; 45(3):528-531.

LLUMC Pathology Residents - Inflammatory sarcoma (MFH vs. Leiomyosarcoma) (3); Inflammatory pseudotumor vs. postop spindle cell nodule (2)
Mountain View (El Camino Hospital) - Sarcomatoid carcinoma
Bishop (Northern Inyo Hospital) - Carcinoma with spindle cell stroma/squamous carcinoma (need immunoperoxidase)
Glendale (Glendale Pathology Associates) - Sarcomatoid transitional cell carcinoma
Richmond - Sarcomatoid carcinoma
Nevada (Reno) - Sarcomatoid carcinoma
Colorado (Unipath) - Sarcomatoid transitional cell carcinoma
Texas (San Angelo) - Sarcomatoid transitional cell carcinoma
Texas (Lubbock) - Leiomyosarcoma
Arkansas (UAMS) - Spindle and giant cell carcinoma
Arkansas (Little Rock) - Sarcomatoid carcinoma, urinary bladder
Louisiana (Metairie) - Myxoid leiomyosarcoma vs. sarcomatoid carcinoma
Illinois (Chicago) - Angiosarcoma
Missouri (Joplin) - Invasive squamous carcinoma
Indiana (Fort Wayne) - Sarcomatoid carcinoma/carcinosarcoma, urinary bladder
Wisconsin (Middleton) - Sarcomatoid carcinoma
Michigan (Grand Rapids) - Sarcomatoid carcinoma (1); Inflammatory pseudotumor (1); Pseudotumor (1)
Michigan (Foote Hospital) - Sarcomatoid carcinoma, rule out MMMT, ovary
Florida (Winter Haven) - Inflammatory pseudotumor (3)
Florida (Miami) - SCC
Florida (Munroe Regional Medical Center) - Sarcomatoid TCC
Pennsylvania (Conemaugh Memorial Medical Center Residents) - Sarcoma, NOS
Massachusetts (Longmeadow) - Spindle cell carcinoma, bladder
Canada (Foothills Hospital) - Myxoid leiomyosarcoma
Singapore - Angiosarcoma
Japan (Shimada City) - Sarcomatoid carcinoma
Japan (Defense Hospital Sapporo) - Carcinosarcoma
Japan (Kawasaki Medical School Hospital) - Sarcomatoid carcinoma (4)
Japan (Hamamatsu University School of Medicine) - Squamous cell carcinoma
China (Sir Run Run Shaw Hospital) - Spindle (giant) cell carcinoma of bladder
Italy (Istituto Ortopedico Rizzoli) - Sarcomatoid carcinoma vs. carcinosarcoma

DIAGNOSIS:

Sarcomatoid carcinoma, bladder

T-74000, M-81223

REFERENCES:

Young RH and Eble JN. Unusual Forms of Carcinoma of the Urinary Bladder. *Hum Pathol* 1991; 22(10):948-965.
Young RH, Wich MR and Mills SE. Sarcomatoid Carcinoma of the Urinary Bladder. A Clinicopathologic Analysis of 12 Cases and Review of the Literature. *Am J Clin Pathol* 1988; 90(6):653-661.
Russell PJ, Brown JL, Grimmond SM and Logothetis CJ. Molecular Biology of Urological Tumours. *Br J Urol* 1990; 65(2):121-130.
Jones EC and Young RH. Myxoid and Sclerosing Sarcomatoid Transitional Cell Carcinoma of the Urinary Bladder. A Clinicopathologic and Immunohistochemical Study of 25 Cases. *Mod Pathol* 1997; 10(9):908-916.

LLUMC Pathology Residents - Small cell carcinoma of the bladder (5)
Mountain View (El Camino Hospital) - Small cell neuroendocrine carcinoma
Bishop (Northern Inyo Hospital) - Poorly differentiated carcinoma, spindle cell type
Glendale (Glendale Pathology Associates) - Small cell undifferentiated carcinoma
Richmond - Poorly differentiated carcinoma, small cell type
Nevada (Reno) - Small cell carcinoma
Colorado (Unipath) - Transitional cell carcinoma III/IV
Texas (San Angelo) - Small cell carcinoma
Texas (Lubbock) - Neuroblastoma
Arkansas (UAMS) - Small cell (neuroendocrine) carcinoma
Arkansas (Little Rock) - Small cell carcinoma, urinary bladder
Louisiana (Metairie) - Small cell undifferentiated carcinoma
Illinois (Chicago) - PNET
Missouri (Joplin) - Malt lymphoma
Indiana (Fort Wayne) - Neuroendocrine carcinoma, urinary bladder
Wisconsin (Middleton) - Poorly differentiated carcinoma, small cell type
Michigan (Grand Rapids) - Small cell carcinoma (3)
Michigan (Foote Hospital) - Small cell carcinoma
Florida (Winter Haven) - Small cell carcinoma (3)
Florida (Miami) - Neuroendocrine carcinoma
Florida (Munroe Regional Medical Center) - Small cell carcinoma
Pennsylvania (Conemaugh Memorial Medical Center Residents) - Small cell carcinoma
Massachusetts (Longmeadow) - Small cell carcinoma, bladder
Canada (Foothills Hospital) - PNET/Ewings
Singapore - Small cell neuroendocrine carcinoma with component of papillary transitional cell carcinoma, grade II
Japan (Shimada City) - Small cell carcinoma
Japan (Defense Hospital Sapporo) - Small cell carcinoma
Japan (Kawasaki Medical School Hospital) - Small cell carcinoma (4)
Japan (Hamamatsu University School of Medicine) - Poorly differentiated carcinoma, small cell type
China (Sir Run Run Shaw Hospital) - Small cell carcinoma of bladder
Italy (Istituto Ortopedico Rizzoli) - Small cell/neuroendocrine carcinoma

DIAGNOSIS:**Small cell carcinoma, bladder**

T-74000, M-80413

REFERENCES:

- Iczkowski KA, Shanks JH, Allsbrook WC, et al. Small Cell Carcinoma of Urinary Bladder is Differentiated from Urothelial Carcinoma by Chromogranin Expression, Absence of CD44 Variant 6 Expression, a Unique Pattern of Cytokeratin Expression, and More Intense Gamma-Eolase Expression. *Histopathol* 1999; 35(2):150-156.
- Mackey JR, Au HJ, Hugh J, et al. Genitourinary Small Cell Carcinoma. Determination of Clinical and Therapeutic Factors Associated with Survival. *J Urol* 1998; 159(5):1624-1629.
- McRae S and Garcia BM. Cytologic Diagnosis of a Primary Pure Oat Cell Carcinoma of the Bladder in Voided Urine. A Case Report. *Acta Cytol* 1997; 41 (4 Suppl):1279-1283.
- Ali SZ, Reuter VE and Zakowski MF. Small Cell Neuroendocrine Carcinoma of the Urinary Bladder. A Clinicopathologic Study with Emphasis on Cytologic Features. *Cancer* 1997; 79(2):356-361.
- Cheng DL, Unger P, Forscher CA, et al. Successful Treatment of Metastatic Small Cell Carcinoma of the Bladder with Methotrexate, Vinblastine, Doxorubicin and Cisplatin Therapy. *J Urol* 1995; 153(2):417-419.
- Holmang S, Borghede G and Johansson SL. Primary Small Cell Carcinoma of the Bladder. A Report of 25 Cases. *J Urol* 1995; 153(6):1820-1822.

LLUMC Pathology Residents - Angiomyolipoma (5)
Mountain View (El Camino Hospital) - Angiomyolipoma
Bishop (Northern Inyo Hospital) - Angiomyolipoma
Glendale (Glendale Pathology Associates) - Angiomyolipoma
Richmond - Angiomyolipoma
Nevada (Reno) - Angiomyolipoma
Colorado (Unipath) - Sarcomatoid renal cell carcinoma
Texas (San Angelo) - Angiomyolipoma
Texas (Lubbock) - Angiomyolipoma
Arkansas (UAMS) - Angiomyolipoma
Arkansas (Little Rock) - Angiomyolipoma, kidney
Louisiana (Metairie) - Angiomyolipoma
Illinois (Chicago) - Angiomyolipoma
Missouri (Joplin) - Angiomyolipoma
Indiana (Fort Wayne) - Angiomyolipoma, right kidney
Wisconsin (Middleton) - Angiomyolipoma
Michigan (Grand Rapids) - Angiomyolipoma (3)
Michigan (Foote Hospital) - Angiomyolipoma
Florida (Winter Haven) - Angiomyolipoma (3)
Florida (Miami) - Angiomyolipoma
Florida (Munroe Regional Medical Center) - Angiomyolipoma
Pennsylvania (Conemaugh Memorial Medical Center Residents) - Angiomyolipoma
Massachusetts (Longmeadow) - Angiomyolipoma, kidney
Canada (Foothills Hospital) - Angiomyolipoma
Singapore - Angiomyolipoma
Japan (Shimada City) - Angiomyolipoma
Japan (Defense Hospital Sapporo) - Angiolipoma
Japan (Kawasaki Medical School Hospital) - Angiomyolipoma (4)
Japan (Hamamatsu University School of Medicine) - Angiomyolipoma
China (Sir Run Run Shaw Hospital) - Angiomyolipoma
Italy (Istituto Ortopedico Rizzoli) - Angiomyolipoma

DIAGNOSIS:

Angiomyolipoma, kidney
T-71000, M-88600

CONSULTATION: J. Bruce Beckwith, M.D., Former Director of National Wilms Tumor Study Group (NWTS).
“Angiomyolipoma.”

REFERENCES:

- Ferry JA, Malt RA and Young RH. Renal Angiomyolipoma with Sarcomatous Transformation and Pulmonary Metastasis. *Am J Surg Pathol* 1991; 15(11):1083-1088.
- Kutcher R, Rosenblatt R, Mitsudo SM, Goldman M and Kogan S. Renal Angiomyolipoma with Sonographic Demonstration of Extension into the Inferior Vena Cava. *Radiol* 1982; 143(3):755-756.
- Silpananta P, Michel RP, Oliver JA. Simultaneous Occurrence of angiomyolipoma and Renal Cell Carcinoma. Clinical and Pathologic (Including Ultrastructural) Features. *Urol* 1984; 23(2):200-204.
- Weeks DA, Malott RL, et al. Hepatic Angiomyolipoma with Striated Granules and Positivity with Melanoma—Specific Antibody (HMB-45). A Report of Two Cases. *Ultrastruct Pathol* 1991; 15(4-5):563-571.

LLUMC Pathology Residents - Papillary renal cell carcinoma (5)
Mountain View (El Camino Hospital) - Collecting duct carcinoma
Bishop (Northern Inyo Hospital) - Renal cell carcinoma, collecting duct type
Glendale (Glendale Pathology Associates) - Collecting duct carcinoma
Richmond - Renal cell carcinoma, chromophil type, Furman, grade 3
Nevada (Reno) - Collecting duct carcinoma
Colorado (Unipath) - High grade renal cell carcinoma
Texas (San Angelo) - Papillary renal cell carcinoma
Texas (Lubbock) - Collecting duct carcinoma
Arkansas (UAMS) - Renal cell carcinoma (tubular variant)
Arkansas (Little Rock) - Collecting duct carcinoma, kidney
Louisiana (Metairie) - Collecting duct carcinoma, Bellini's duct carcinoma
Illinois (Chicago) - Collecting duct carcinoma
Missouri (Joplin) - Adenocarcinoma of kidney
Indiana (Fort Wayne) - Collecting duct carcinoma, right kidney
Wisconsin (Middleton) - Renal cell carcinoma, collecting duct type
Michigan (Grand Rapids) - Collecting duct carcinoma (3)
Michigan (Foote Hospital) - Collecting duct carcinoma
Florida (Winter Haven) - Collecting duct carcinoma (2); Renal cell carcinoma (1)
Florida (Miami) - Renal cell carcinoma
Florida (Munroe Regional Medical Center) - Papillary renal cell carcinoma
Pennsylvania (Conemaugh Memorial Medical Center Residents) - Renal cell carcinoma, papillary
Massachusetts (Longmeadow) - Renal cell carcinoma, papillary type
Canada (Foothills Hospital) - Collecting duct carcinoma
Singapore - Collecting duct carcinoma
Japan (Shimada City) - Renal cell carcinoma, collecting duct type
Japan (Defense Hospital Sapporo) - Renal cell carcinoma
Japan (Kawasaki Medical School Hospital) - Collecting duct carcinoma (2); Carcinoma, unclassifiable (1); Carcinoma, NOS (1)
Japan (Hamamatsu University School of Medicine) - Renal cell carcinoma, granular cell type
China (Sir Run Run Shaw Hospital) - Renal cell carcinoma (collecting type)
Italy (Istituto Ortopedico Rizzoli) - Papillary (chromophil) renal cell carcinoma

DIAGNOSIS:

**Collecting duct carcinoma ("Bellini duct carcinoma"), kidney
T-71000, M-85003**

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