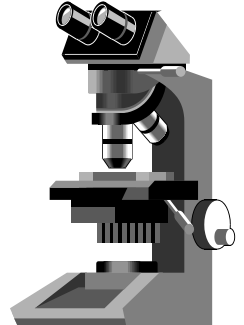


CALIFORNIA
TUMOR TISSUE REGISTRY

GENITOURINARY PATHOLOGY

Minutes – Subscription A

February 2012



SUGGESTED READING (General Topics from Recent Literature):

- Improved Detection of Mycobacteria Species in Formalin-Fixed Tissue Sections. Pedersen JS, Clarke I and Mills J. *Histopathol* 2011; 59:993-1005.
- P63 Immunohistochemical Staining Is Limited in Soft Tissue Tumors. Jo VY and Fletcher CDM. *Am J Clin Pathol* 2011; 136:762-766.
- Impact of Accidental Discovery of Renal Cell Carcinoma at Time of Renal Transplantation on Patient or Graft Survival. Sheashaa HA, Rennke HG, et al. *Transplantation* 2011; 92:1123-1128.
- Ossifying Fibromyxoid Tumor of Soft Parts: A Clinicopathologic, Proteomic, and Genomic Study. Graham RPD, Dry S, et al. *Am J Surg Pathol* 2011; 35:1615-1625.
- Cytologic Features of Epithelioid Hemangioendothelioma. Murali R, Zarka MA, et al. *Am J Clin Pathol* 2011; 136:739-746.

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

February 2012

Case 1:

Embryonal carcinoma, testis
T-78000, M-90703

Case 2:

Mixed germ cell tumor (teratoma, embryonal carcinoma, yolk sac carcinoma and choriocarcinoma),
testis
T-78000, M-89400

Case 3:

High grade urothelial carcinoma, bladder
T-74000, M-81203

Case 4:

Squamous carcinoma (likely Schistosomiasis-related), bladder
T-74000, M-80703

Case 5:

Autosomal recessive (infantile) polycystic kidney disease, kidney
T-71000, M-26740

Case 6:

Wilms tumor/nephroblastoma, kidney
T-71000, M-89603

Case 7:

Papillary renal cell carcinoma, kidney
T-71000, M-83123

Case 8:

Renal cell carcinoma, chromophobe type, kidney
T-71000, M-82703

Case 9:

Renal cell carcinoma (nos), favor collecting duct type, kidney
T-71000, M-83123

Case 10:

Cystic nephroma, kidney
T-71000, M-89601

Arcadia (ABC Laboratories) - Embryonal carcinoma
Baldwin Park (Kaiser Permanente) - Mixed germ cell tumor, yolk sac and seminoma (4)
Fontana (Kaiser Permanente) - Embryonal carcinoma
Glendale - Embryonal carcinoma
Hayward (St. Rose Hospital) - Embryonal carcinoma with IGCN
Long Beach (Long Beach Veterans Hospital) - Malignant germ cell tumor
Oakland (Alameda County Medical Center) - Germ cell tumor (mixed)
Orange (UCI Medical Center Residents) - Embryonal carcinoma
Orinda (Kaiser Permanente) - Embryonal carcinoma
Oxnard (St. John's Regional Medical Center) - Embryonal carcinoma
San Diego (Naval Medical Center) - Mixed germ cell tumor
Santa Barbara (Miramonte Laboratory) - Embryonal carcinoma
Woodland Hills (Kaiser Permanente) - Embryonal carcinoma
Arkansas (Associated Pathologist Laboratory) - Embryonal carcinoma
Colorado (McKee Medical Center) - Mixed germ cell tumor with yolk sac tumor , embryonal carcinoma & IGCN
Florida (GastroEnterology Associates of Ocala) - Embryonal cell carcinoma
Georgia, Atlanta - Embryonal carcinoma
Illinois (Heartland Regional Medical Center) - Embryonal carcinoma
Illinois, Oak Brook - Embryonal carcinoma
Maryland (University of Maryland Medical Systems) - Embryonal carcinoma
Massachusetts (Tufts Medical Center) - Embryonal carcinoma of testis
Minnesota (Fairview Ridges Hospital) - Mixed germ cell tumor, embryonal carcinoma/teratoma
Missouri (Missouri Delta Medical Center) - Embryonal carcinoma (2)
Nebraska (Creighton University Medical Center) - Embryonal carcinoma
New York (Buffalo General Hospital) - Non-seminomatous mixed germ cell tumor with embryonal and yolk sac components
New York (Stony Brook University Medical Center) - Mixed germ cell tumor
New York SUNY Downstate Medical Center) - Mixed germ cell tumor
North Carolina (Wake Forest University) - Mixed germ cell tumor
Ohio (Summa Health System) - Embryonal carcinoma per H&E but suspicious for yolk sac component due to positive AFP
Ohio (University of Toledo College of Medical Center Residents) - Teratocarcinoma
Pennsylvania (Drexel University College of Medicine) - Embryonal carcinoma
Pennsylvania (Lehigh Valley Hospital) - Mixed germ cell tumor, teratoma and embryonal carcinoma
Pennsylvania (Magee Womens Hospital of UPMC) - Embryonal carcinoma
South Carolina (Lexington Medical Center) - Embryonal carcinoma
Texas, Crystal Beach - Embryonal carcinoma
Texas, Lubbock - Embryonal carcinoma and seminoma
Washington (Seattle VAMC) - Malignant germ cell neoplasm; mostly embryonal & intratubular seminoma cells
West Virginia (Greenbrier Valley Medical Center) - Embryonal carcinoma
Wisconsin, Madison - Malignant mixed germ cell tumor (embryonal carcinoma and teratoma)
Wisconsin (Medical Assessment & Consultation, S.C.) - Embryonal carcinoma (tubular type)
Wisconsin (Medical College of Wisconsin) - Embryonal carcinoma
Australia (Royal Hobart Hospital) - Embryonal carcinoma
Australia (Royal Prince Alfred Hospital) - Embryonal carcinoma with intratubular germ cell neoplasia
Australia (Sullivan Nicolaides Pathology) - Embryonal carcinoma
Canada (Pasqua Hospital) - Embryonal carcinoma
Ireland (Kerry General Hospital) - Embryonal carcinoma
Ireland (University College Hospital) - Embryonal carcinoma with yolk sac element and intra-tubular germ cell neoplasia
Japan (Asahi General Hospital) - Embryonal carcinoma (1); Yolk sac tumor (1)
Japan, Tokyo - Embryonal carcinoma
Oman (Khoula Hospital) - Embryonal carcinoma
Puerto Rico (University of Puerto Rico) - Embryonal carcinoma

Saudi Arabia (King Khalid University Hospital) - Mixed germ cell tumor with a predominant embryonal carcinoma component
United Kingdom (Oxford University NHS Trust) - Embryonal carcinoma/ITGCNU

Case 1 - Diagnosis:

Embryonal carcinoma, testis
T-78000, M-90703

Case 1 - References:

Intratubular embryonal carcinoma. *Arch Pathol Lab Med* 2002; Apr;126(4):p487-90. Rakheja D; Hoang MP, et al.
Association of intratubular seminoma and intratubular embryonal carcinoma with invasive testicular germ cell tumors. *Am J Surg Pathol* 2007; Jul;31(7): p1045-9. Lau SK; Weiss LM; Chu PG.
Retroperitoneal mature teratoma after orchiectomy for a stage IB pure embryonal testicular carcinoma. *Int J Clin Oncol* 2008; Feb;13(1): p71-3. Beeker A; Boven E, et al.
The most common, clinically significant misdiagnoses in testicular tumor pathology, and how to avoid them. *Adv Anat Pathol* 2008; Jan;15(1): p18-27. Ulbright TM.
Carcinoma in situ testis, the progenitor of testicular germ cell tumours: a clinical review.. *Ann Oncol* 2005; Jun;16(6): p863-8. Hoei-Hansen CE; Rajpert-De Meyts E, et al.

Case No. 2, Accession No. 31100

February 2012

Arcadia (ABC Laboratories) - Choriocarcinoma
Baldwin Park (Kaiser Permanente) - Mixed germ cell tumor, choriocarcinoma, embryonal, teratocarcinoma and yolk sac (4)
Fontana (Kaiser Permanente) - Mixed germ cell tumor
Glendale - Mixed GCT with mature teratoma, seminoma, embryonal carcinoma and choriocarcinoma
Hayward (St. Rose Hospital) - Teratocarcinoma (embryonal and possible chorio)
Long Beach (Long Beach Veterans Hospital) - Malignant immature teratoma
Oakland (Alameda County Medical Center) - Germ cell tumor (mixed)
Orange (UCI Medical Center Residents) - Mixed germ cell tumor (teratoma, yolk sac)
Orinda (Kaiser Permanente) - Mixed germ cell tumor
Oxnard (St. John's Regional Medical Center) - Choriocarcinoma
San Diego (Naval Medical Center) - Mixed germ cell tumor, teratoma/embryonal/yolk sac and poly embryoma
Santa Barbara (Miramonte Laboratory) - Teratoma with embryonal carcinoma
Woodland Hills (Kaiser Permanente) - Mixed germ cell tumor (teratoma/embryonal carcinoma/choriocarcinoma/seminoma)
Arkansas (Associated Pathologist Laboratory) - Choriocarcinoma
Colorado (McKee Medical Center) - Mixed germ cell tumor (immature teratoma/embryonal carcinoma/seminoma and choriocarcinoma)
Florida (GastroEnterology Associates of Ocala) - Seminoma (traditional)
Georgia, Atlanta - Mixed germ cell tumor
Illinois (Heartland Regional Medical Center) - Malignant mixed germ cell neoplasm (teratoma/embryonal carcinoma/seminoma)
Illinois, Oak Brook - Teratoma
Maryland (University of Maryland Medical Systems) - Mixed germ cell tumor (teratoma/choriocarcinoma/seminoma)
Massachusetts (Tufts Medical Center) - Mixed germ cell tumor consistent with embryonal choriocarcinoma/yolk sac and immature teratomatous elements
Minnesota (Fairview Ridges Hospital) - Mixed germ cell tumor, teratoma/yolk sac tumor
Missouri (Missouri Delta Medical Center) - Seminoma consistent with teratoma (1); Mixed germ cell tumor (seminoma and teratoma)
Nebraska (Creighton University Medical Center) - Malignant mixed germ cell tumor
New York (Buffalo General Hospital) - Non-seminomatous germ cell tumor with teratoma, embryonal and yolk sac components
New York (Stony Brook University Medical Center) - Malignant teratoma with germinoma component
New York SUNY Downstate Medical Center) - Mixed germ cell tumor

North Carolina (Wake Forest University) - Mixed germ cell tumor
Ohio (Summa Health System) - Mixed germ cell tumor
Ohio (University of Toledo College of Medical Center Residents) - Teratoma
Pennsylvania (Drexel University College of Medicine) - Mixed germ cell tumor with choriocarcinoma, immature teratoma and yolk sac tumor components
Pennsylvania (Lehigh Valley Hospital) - Teratoma
Pennsylvania (Magee Womens Hospital of UPMC) - Mixed germ cell tumor, embryonal and teratoma
South Carolina (Lexington Medical Center) - Mixed germ cell tumor
Texas, Crystal Beach - Teratocarcinoma including choriocarcinoma
Texas, Lubbock - Teratoma, embryonal carcinoma and seminoma
Washington (Seattle VAMC) - Malignant germ cell neoplasm: embryonal/chorio/yolk sac/seminoma and teratoma
West Virginia (Greenbrier Valley Medical Center) - Mixed seminoma/embryonal carcinoma
Wisconsin, Madison - Malignant mixed germ cell tumor/teratoma/yolk sac tumor/choriocarcinoma and embryonal carcinoma
Wisconsin (Medical Assessment & Consultation, S.C.) - Malignant mixed germ cell neoplasm/mature teratoma with embryonal carcinoma and yolk sac tumor
Wisconsin (Medical College of Wisconsin) - Malignant mixed germ cell tumor (yolk sac predominant with immature teratoma)
Australia (Royal Hobart Hospital) - Mixed germ cell tumor (embryonal carcinoma/yolk sac carcinoma/teratoma)
Australia (Royal Prince Alfred Hospital) - Teratoma with yolk sac choriocarcinoma
Australia (Sullivan Nicolaides Pathology) - Mixed germ cell tumor, testis
Canada (Pasqua Hospital) - Mixed germ cell tumor with choriocarcinoma
Ireland (Kerry General Hospital) - Mixed non-seminomatous germ cell tumor, comprising EC and teratoma
Ireland (University College Hospital) - Mixed germ cell tumor (yolk sac, teratoma, choriocarcinoma)
Japan (Asahi General Hospital) - Mixed germ cell tumor (1); Seminoma (1)
Japan, Tokyo - Mixed germ cell tumor
Oman (Khoula Hospital) - Mixed germ cell tumor
Puerto Rico (University of Puerto Rico) - Probably embryonal carcinoma (1); Mature teratoma (1)
Saudi Arabia (King Khalid University Hospital) - Mixed germ cell tumor (teratoma 60%, seminoma 25% and yolk sac tumor 15%)
United Kingdom (Oxford University NHS Trust) - Mixed germ cell tumor (choriocarcinoma and teratoma)

Case 2 - Diagnosis:

Mixed germ cell tumor (teratoma, embryonal carcinoma, yolk sac carcinoma and choriocarcinoma), testis
 T-78000, M-89400

Director's note: Not all components were present in each slide (drc)

Case 2 - References:

Histology in mixed germ cell tumors. Is there a favorite pairing? *J Urol* 2004; Apr;171(4): p1471-3. Mosharafa AA; Foster, et al..
 Expression of CD34 antigen in testicular mixed germ cell tumor. *Pathol Int* 2003; Dec;53(12): p853-7. Hamazaki S; Okada S.
 An overview of testicular germ cell tumors.. *Arch Pathol Lab Med* 2007; Aug;131(8): p1267-80. Bahrami A; Ro JY; Ayala AG.
 Extragonadal germ cell tumors: a review with emphasis on pathologic features, clinical prognostic variables, and differential diagnostic considerations. *Adv Anat Pathol* 2007; Mar;14(2): p69-92. McKenney JK; Heerema-McKenney A; Rouse RV.
 Germ cell tumors with sarcomatous components: a clinicopathologic and immunohistochemical study of 46 cases. *Am J Surg Pathol* 2007; Sep;31(9): p1356-62. Malagon HD; Valdez AM, et al.

Case No. 3, Accession No. 31347

February 2012

Arcadia (ABC Laboratories) - Carcinoid
Baldwin Park (Kaiser Permanente) - High grade urothelial carcinoma, deeply invasive (4)

Fontana (Kaiser Permanente) - Carcinoid tumor
Glendale - Urothelial carcinoma
Hayward (St. Rose Hospital) - Transitional cell carcinoma, high grade
Long Beach (Long Beach Veterans Hospital) - Poorly differentiated carcinoma consistent with extension into perineural spaces consistent with prostate
Oakland (Alameda County Medical Center) - Poorly differentiated carcinoma (urothelial vs. prostate)
Orange (UCI Medical Center Residents) - Invasive urothelial carcinoma
Orinda (Kaiser Permanente) - Invasive high grade urothelial carcinoma
Oxnard (St. John's Regional Medical Center) - High grade urothelial carcinoma vs. neuroendocrine
San Diego (Naval Medical Center) - Invasive urothelial carcinoma
Santa Barbara (Miramonte Laboratory) - High grade urothelial carcinoma
Woodland Hills (Kaiser Permanente) - Invasive urothelial carcinoma with focal signet ring cell features
Arkansas (Associated Pathologist Laboratory) - Invasive urothelial carcinoma, high grade
Colorado (McKee Medical Center) - Invasive squamous cell carcinoma
Florida (GastroEnterology Associates of Ocala) - Transitional cell carcinoma, invasive
Georgia, Atlanta - Invasive urothelial carcinoma
Illinois (Heartland Regional Medical Center) - Invasive urothelial carcinoma
Illinois, Oak Brook - Invasive adenocarcinoma
Maryland (University of Maryland Medical Systems) - Urothelial carcinoma with nested features
Massachusetts (Tufts Medical Center) - Transitional cell carcinoma
Minnesota (Fairview Ridges Hospital) - Urothelial carcinoma, invading muscularis
Missouri (Missouri Delta Medical Center) - Transitional cell carcinoma
Nebraska (Creighton University Medical Center) - Invasive urothelial carcinoma, high grade
New York (Buffalo General Hospital) - High grade invasive urothelial carcinoma
New York (Stony Brook University Medical Center) - Urothelial carcinoma, invasive, nested/micropapillary
New York SUNY Downstate Medical Center) - Neuroendocrine carcinoma
North Carolina (Wake Forest University) - Invasive urothelial carcinoma
Ohio (Summa Health System) - Infiltrating urothelial carcinoma, nested variant
Ohio (University of Toledo College of Medical Center Residents) - Invasive urothelial cell carcinoma
Pennsylvania (Drexel University College of Medicine) - High grade urothelial carcinoma
Pennsylvania (Lehigh Valley Hospital) - Nested variant of invasive urothelial carcinoma
Pennsylvania (Magee Womens Hospital of UPMC) - Transitional cell carcinoma
South Carolina (Lexington Medical Center) - Invasive urothelial carcinoma
Texas, Crystal Beach - Transitional carcinoma
Texas, Lubbock - High grade urothelial carcinoma
Washington (Seattle VAMC) - Urothelial carcinoma consistent with transitional invasion
West Virginia (Greenbrier Valley Medical Center) - Infiltrative urothelial carcinoma, high grade
Wisconsin, Madison - Low grade urothelial carcinoma
Wisconsin (Medical Assessment & Consultation, S.C.) - Carcinoma, favor malignant carcinoid tumor (do IHC)
Wisconsin (Medical College of Wisconsin) - Urothelial carcinoma, high grade, with plasmacytoid features
Australia (Royal Hobart Hospital) - High grade urothelial carcinoma
Australia (Royal Prince Alfred Hospital) - Urothelial carcinoma (TCC)
Australia (Sullivan Nicolaides Pathology) - Invasive urothelial carcinoma
Canada (Pasqua Hospital) - Urothelial carcinoma
Ireland (Kerry General Hospital) - Well-differentiated neuroendocrine tumor
Ireland (University College Hospital) - High grade urothelial carcinoma
Japan (Asahi General Hospital) - Invasive urothelial carcinoma (2)
Japan, Tokyo - Urothelial carcinoma
Oman (Khoula Hospital) - Infiltrative urothelial carcinoma (1); Neuroendocrine tumor (1)
Puerto Rico (University of Puerto Rico) - Infiltrating urothelial carcinoma
Saudi Arabia (King Khalid University Hospital) - High grade transitional cell carcinoma
United Kingdom (Oxford University NHS Trust) - High grade urothelial carcinoma

Case 3 - Diagnosis:

High grade urothelial carcinoma, bladder
 T-74000, M-81203

Case 3 - References:

Development and progression of urothelial carcinoma. *Cancer Sci* 2006; Sep;97(9): p821-8. Kakizoe T.
A renal cancer with intermediate characteristics between collecting (Bellini) duct carcinoma and urothelial carcinoma: case report and review of the literature. *Tumori* 2006; Nov-Dec;92(6): p545-8. Maestroni U; Ferretti S, et al.
Urothelial carcinoma with villoglandular differentiation: a study of 14 cases. *Mod Pathol* 2009; Oct;22(10): p1280-6. Lim M; Adsay NV, et al.
Divergent differentiation in urothelial carcinoma and other bladder cancer subtypes with selected mimics. *Histopathology* 2009; Jun;54(7): p885-900. Shanks JH; Iczkowski KA.
Polypoid/papillary cystitis: a series of 41 cases misdiagnosed as papillary urothelial neoplasia. *Am J Surg Pathol* 2008; May;32(5): p758-64. Lane Z; Epstein JI.

Case No. 4, Accession No. 31184

February 2012

Arcadia (ABC Laboratories) - Squamous cell carcinoma
Baldwin Park (Kaiser Permanente) - Squamous cell carcinoma, bladder (4)
Fontana (Kaiser Permanente) - Squamous cell carcinoma
Glendale - Squamous cell carcinoma
Hayward (St. Rose Hospital) - Squamous carcinoma
Long Beach (Long Beach Veterans Hospital) - Squamous cell carcinoma with necrosis
Oakland (Alameda County Medical Center) - Squamous proliferation, atypical, cannot rule out squamous cell carcinoma
Orange (UCI Medical Center Residents) - Squamous cell carcinoma
Orinda (Kaiser Permanente) - Squamous cell carcinoma
Oxnard (St. John's Regional Medical Center) - Squamous cell carcinoma
San Diego (Naval Medical Center) - Squamous cell carcinoma
Santa Barbara (Miramonte Laboratory) - Squamous carcinoma
Woodland Hills (Kaiser Permanente) - Invasive squamous cell carcinoma
Arkansas (Associated Pathologist Laboratory) - Squamous cell carcinoma
Colorado (McKee Medical Center) - Invasive squamous cell carcinoma
Florida (GastroEnterology Associates of Ocala) - Cystitis consistent with associated calcification "encrusted"
Georgia, Atlanta - Squamous cell carcinoma of urinary bladder
Illinois (Heartland Regional Medical Center) - Squamous cell carcinoma
Illinois, Oak Brook - Squamous carcinoma
Maryland (University of Maryland Medical Systems) - Squamous cell carcinoma
Massachusetts (Tufts Medical Center) - Squamous cell carcinoma
Minnesota (Fairview Ridges Hospital) - Squamous cell carcinoma
Missouri (Missouri Delta Medical Center) - Squamous cell carcinoma (2)
Nebraska (Creighton University Medical Center) - Invasive squamous cell carcinoma
New York (Buffalo General Hospital) - Squamous cell carcinoma
New York (Stony Brook University Medical Center) - Squamous cell carcinoma with extensive necrosis
New York SUNY Downstate Medical Center - Squamous cell carcinoma
North Carolina (Wake Forest University) - Squamous cell carcinoma
Ohio (Summa Health System) - Squamous cell carcinoma in-situ, can not rule out invasion
Ohio (University of Toledo College of Medical Center Residents) - Squamous cell carcinoma
Pennsylvania (Drexel University College of Medicine) - Squamous cell carcinoma
Pennsylvania (Lehigh Valley Hospital) - Squamous cell carcinoma
Pennsylvania (Magee Womens Hospital of UPMC) - Invasive squamous cell carcinoma
South Carolina (Lexington Medical Center) - Squamous cell carcinoma, secondary to Schistosomiasis infection
Texas, Crystal Beach - Squamous cell carcinoma
Texas, Lubbock - Squamous cell carcinoma
Washington (Seattle VAMC) - Squamous cell carcinoma
West Virginia (Greenbrier Valley Medical Center) - Squamous cell carcinoma
Wisconsin, Madison - Squamous cell carcinoma
Wisconsin (Medical Assessment & Consultation, S.C.) - Low grade keratinizing squamous carcinoma
Wisconsin (Medical College of Wisconsin) - Squamous cell carcinoma, urinary bladder

Australia (Royal Hobart Hospital) - Keratinizing squamous cell carcinoma
Australia (Royal Prince Alfred Hospital) - Squamous differentiated papillary neoplasm
Australia (Sullivan Nicolaides Pathology) - Squamous cell carcinoma
Canada (Pasqua Hospital) - Squamous cell carcinoma
Ireland (Kerry General Hospital) - Keratinizing squamous cell carcinoma
Ireland (University College Hospital) - Squamous cell carcinoma
Japan (Asahi General Hospital) - Squamous cell carcinoma (1); Urothelial carcinoma with squamous differentiation (1)
Japan, Tokyo - Squamous cell carcinoma
Oman (Khoula Hospital) - Well-differentiated squamous cell carcinoma
Puerto Rico (University of Puerto Rico) - Squamous cell carcinoma
Saudi Arabia (King Khalid University Hospital) - Well-differentiated keratinizing carcinoma secondary to schistosomiasis
United Kingdom (Oxford University NHS Trust) - Keratinizing squamous cell carcinoma

Case 4 - Diagnosis:

Squamous carcinoma (likely Schistosomiasis-related), bladder
 T-74000, M-80703

Case 4 - References:

Squamous cell carcinoma of the urinary bladder: a clinicopathologic and immunohistochemical study of 16 cases. *Hum Pathol* 2009; Oct;40(10): p1448-52. Guo CC; Gomez E, et al.
 Urothelial carcinoma versus squamous cell carcinoma of bladder: is survival different with stage adjustment? *Urology* 2009; Apr;73(4): p822-7. Scosyrev E; Yao J; Messing E.
 Squamous cell carcinoma of the bladder: a clinicopathologic analysis of 45 cases. *Am J Surg Pathol* 2007; Dec;31(12): p1777-87. Lagwinski N; Thomas A, et al.
 Divergent differentiation in urothelial carcinoma and other bladder cancer subtypes with selected mimics. *Histopathology* 2009; Jun;54(7): p885-900. Shanks JH; Iczkowski KA.
 Noninvasive squamous lesions in the urinary bladder: a clinicopathologic analysis of 29 cases. *Am J Surg Pathol* 2006; Jul;30(7): p883-91. Guo CC; Fine SW; Epstein JI.

Case No. 5, Accession No. 31231

February 2012

Arcadia (ABC Laboratories) - Polycystic kidney
Baldwin Park (Kaiser Permanente) - Polycystic kidney (4)
Fontana (Kaiser Permanente) - Polycystic kidney disease
Glendale - Cystic nephroma
Hayward (St. Rose Hospital) - ADPCD, asymmetric onset vs. localized cystic disease
Long Beach (Long Beach Veterans Hospital) - Congenital polycystic kidney
Oakland (Alameda County Medical Center) - Polycystic kidney disease vs. cystic nephroblastoma
Orange (UCI Medical Center Residents) - Autosomal dominant polycystic kidney disease
Orinda (Kaiser Permanente) - Polycystic kidney disease, favor autosomal recessive type
Oxnard (St. John's Regional Medical Center) - Polycystic
San Diego (Naval Medical Center) - Autosomal recessive polycystic kidney disease
Santa Barbara (Miramonte Laboratory) - Infantile polycystic kidney disease
Woodland Hills (Kaiser Permanente) - Infantile polycystic kidney disease
Arkansas (Associated Pathologist Laboratory) - Cystic nephroma
Colorado (McKee Medical Center) - Multicystic nephroma
Florida (GastroEnterology Associates of Ocala) - Polycystic kidney, autosomal recessive
Georgia, Atlanta - Cystic nephroma
Illinois (Heartland Regional Medical Center) - Renal dysplasia with diffuse cystic change vs. polycystic disease of infancy
Illinois, Oak Brook - Cystic nephroma
Maryland (University of Maryland Medical Systems) - Cystic partially differentiated nephroblastoma
Massachusetts (Tufts Medical Center) - Multicystic renal dysplasia

Minnesota (Fairview Ridges Hospital) - Autosomal recessive polycystic kidney disease
Missouri (Missouri Delta Medical Center) - Cystic nephroma (2)
Nebraska (Creighton University Medical Center) - Autosomal recessive polycystic carcinoma
New York (Buffalo General Hospital) - Autosomal recessive polycystic kidney disease
New York (Stony Brook University Medical Center) - Cystic renal dysplasia
New York SUNY Downstate Medical Center) - Polycystic kidney disease
North Carolina (Wake Forest University) - Polycystic kidney disease
Ohio (Summa Health System) - Infantile (recessive) polycystic kidney disease
Ohio (University of Toledo College of Medical Center Residents) - Autosomal recessive polycystic kidney disease
Pennsylvania (Drexel University College of Medicine) - Autosomal recessive polycystic kidney disease
Pennsylvania (Lehigh Valley Hospital) - Autosomal recessive (infantile) polycystic kidney disease
Pennsylvania (Magee Womens Hospital of UPMC) - Multicystic nephroma
South Carolina (Lexington Medical Center) - Infantile polycystic kidney disease
Texas, Crystal Beach - Polycystic disease
Texas, Lubbock - Cystic nephroma
Washington (Seattle VAMC) - Recessive polycystic kidney disease
West Virginia (Greenbrier Valley Medical Center) - Cystic nephroma
Wisconsin, Madison - Polycystic kidney disease, adult type
Wisconsin (Medical Assessment & Consultation, S.C.) - Infantile polycystic kidney disease
Wisconsin (Medical College of Wisconsin) - Polycystic kidney disease
Australia (Royal Hobart Hospital) - Infantile (autosomal-recessive) polycystic disease
Australia (Royal Prince Alfred Hospital) - Renal dysplasia
Australia (Sullivan Nicolaides Pathology) - Polycystic disease of kidney
Canada (Pasqua Hospital) - Infantile polycystic disease
Ireland (Kerry General Hospital) - Multicystic renal dysplasia
Ireland (University College Hospital) - Autosomal recessive polycystic kidney disease
Japan (Asahi General Hospital) - Multicystic dysplasia (1); Polycystic kidney disease (1)
Japan, Tokyo - Cystic nephroma
Oman (Khoula Hospital) - Autosomal recessive infantile polycystic disease
Puerto Rico (University of Puerto Rico) - Multicystic renal dysplasia
Saudi Arabia (King Khalid University Hospital) - Polycystic kidney disease (infantile type)
United Kingdom (Oxford University NHS Trust) - Autosomal recessive polycystic kidney disease, infantile

Case 5 - Diagnosis:

Autosomal recessive (infantile) polycystic kidney disease, kidney
 T-71000, M-26740

Case 5 - References:

Autosomal recessive polycystic kidney disease associated with nephrogenic rests: a possible consequence of arrested renal maturation. *Pediatr Dev Pathol* 2009; Nov-Dec;12(6): p493-4. Henry A; Reyes-Mugica M.
 Clinical and molecular characterization defines a broadened spectrum of autosomal recessive polycystic kidney disease (ARPKD). *Medicine* (Baltimore 2006; Jan;85(1): p1-21. Adeva M; El-Youssef M, et al.
 Autosomal recessive polycystic kidney disease and congenital hepatic fibrosis (*ARPKD/CHF*). Turkbey B; Ocak I; Daryanani K; Font-Montgomery. et al.
 Molecular and cellular pathophysiology of autosomal recessive polycystic kidney disease (ARPKD). *Cell Tissue Res* 2006; Dec;326(3): p671-85. Sweeney WE; Avner ED.
 Cystic diseases of the kidney: molecular biology and genetics. *Arch Pathol Lab Med* 2010; Apr;134(4): p569-82. Deltas C; Papagregoriou G.
 Renal cystic diseases: a review. *Adv Anat Pathol* 2006; Jan;13(1): p26-56. Bisceglia M; Galliani CA; Senger C; Stallone C; Sessa A.

Case No. 6, Accession No. 31206

February 2012

Arcadia (ABC Laboratories) - Neuroblastoma
Baldwin Park (Kaiser Permanente) - Wilms tumor (4)

Fontana (Kaiser Permanente) - Wilms tumor
Glendale - Wilms tumor
Hayward (St. Rose Hospital) - Wilms tumor
Long Beach (Long Beach Veterans Hospital) - Wilms tumor
Oakland (Alameda County Medical Center) - Nephroblastoma
Orange (UCI Medical Center Residents) - Wilms tumor, favorable histology
Orinda (Kaiser Permanente) - Wilms tumor
Oxnard (St. John's Regional Medical Center) - Wilms tumor
San Diego (Naval Medical Center) - Wilms tumor
Santa Barbara (Miramonte Laboratory) - Nephroblastoma
Woodland Hills (Kaiser Permanente) - Nephroblastoma
Arkansas (Associated Pathologist Laboratory) - Nephroblastoma
Colorado (McKee Medical Center) - Wilms tumor
Florida (GastroEnterology Associates of Ocala) - PNET
Georgia, Atlanta - Wilms tumor (nephroblastoma)
Illinois (Heartland Regional Medical Center) - Wilms tumor
Illinois, Oak Brook - Nephroblastoma
Maryland (University of Maryland Medical Systems) - Nephroblastoma (Wilms tumor)
Massachusetts (Tufts Medical Center) - Wilms tumor
Minnesota (Fairview Ridges Hospital) - Nephroblastoma
Missouri (Missouri Delta Medical Center) - Wilms tumor (2)
Nebraska (Creighton University Medical Center) - Wilms tumor
New York (Buffalo General Hospital) - Triphasic Wilms tumor
New York (Stony Brook University Medical Center) - Wilms tumor, predominantly blastemal
New York SUNY Downstate Medical Center) - Wilms tumor
North Carolina (Wake Forest University) - Wilms tumor
Ohio (Summa Health System) - Wilms tumor (nephroblastoma)
Ohio (University of Toledo College of Medical Center Residents) - Wilms tumor
Pennsylvania (Drexel University College of Medicine) - Wilms tumor
Pennsylvania (Lehigh Valley Hospital) - Nephroblastoma
Pennsylvania (Magee Womens Hospital of UPMC) - Wilms tumor, anaplastic
South Carolina (Lexington Medical Center) - Nephroblastoma
Texas, Crystal Beach - Wilms tumor
Texas, Lubbock - Wilms tumor, favorable histology
Washington (Seattle VAMC) - Wilms tumor
West Virginia (Greenbrier Valley Medical Center) - Nephroblastoma
Wisconsin, Madison - Wilms tumor
Wisconsin (Medical Assessment & Consultation, S.C.) - Nephroblastoma (Wilms tumor)
Wisconsin (Medical College of Wisconsin) - Wilms tumor, biphasic
Australia (Royal Hobart Hospital) - Nephroblastoma (nodular blastemal pattern)
Australia (Royal Prince Alfred Hospital) - Wilms tumor
Australia (Sullivan Nicolaides Pathology) - Wilms tumor (nephroblastoma)
Canada (Pasqua Hospital) - Nephroblastoma
Ireland (Kerry General Hospital) - Wilms tumor
Ireland (University College Hospital) - Nephroblastoma
Japan (Asahi General Hospital) - Nephroblastoma (1); Wilms tumor (1)
Japan, Tokyo - Nephroblastoma
Oman (Khoula Hospital) - Wilms tumor (nephroblastoma)
Puerto Rico (University of Puerto Rico) - Nephroblastoma, triphasic, favorable
Saudi Arabia (King Khalid University Hospital) - Wilms tumor, favorable histology
United Kingdom (Oxford University NHS Trust) - Nephroblastoma (Wilms tumor)

Case 6 - Diagnosis:

Wilms tumor/nephroblastoma, kidney
 T-71000, M-89603

Case 6 - References:

The pathology of Wilms' tumour (nephroblastoma): the International Society of Paediatric Oncology approach. *J Clin Pathol* 2010 Feb;63(2): p102-9. Vujanic GM; Sandstedt B.

Outcomes of children with favorable histology wilms tumor and peritoneal implants treated in National Wilms Tumor Studies-4 and -5. *Int J Radiat Oncol Biol Phys* 2010 Jun 1;77(2): p554-8. Kalapurakal JA; Green DM, et al.

HER2/neu expression: a predictor for differentiation and survival in children with Wilms tumor. *Pathol Oncol Res* 2010 Mar;16(1): p61-7. Ragab SM; Samaka RM; Shams TM.

An unusual clinical presentation of rhabdomyomatous Wilms' tumor. *Can J Urol* 2010 Feb;17(1): p5044-7. Leocadio DE; Koyle MA, et al.

Limitations in the diagnosis of childhood teratoid lesions on fine needle aspiration cytology. *Acta Cytol* 2010 Mar-Apr;54(2): p142-7. Sharmal S; Mishra K.

Case No. 7, Accession No. 31276

February 2012

Arcadia (ABC Laboratories) - Papillary renal cell carcinoma, type 1

Baldwin Park (Kaiser Permanente) - Renal cell carcinoma, papillary type (4)

Fontana (Kaiser Permanente) - Papillary renal cell carcinoma

Glendale - Renal cell carcinoma with clear cell and papillary features

Hayward (St. Rose Hospital) - Papillary renal cell carcinoma, prob type 1

Long Beach (Long Beach Veterans Hospital) - Renal papillary carcinoma

Oakland (Alameda County Medical Center) - Renal cell carcinoma, papillary type

Orange (UCI Medical Center Residents) - Papillary renal cell carcinoma, type 2

Orinda (Kaiser Permanente) - Renal cell carcinoma, clear cell type with focal papillary features

Oxnard (St. John's Regional Medical Center) - Clear cell carcinoma

San Diego (Naval Medical Center) - Papillary renal cell carcinoma

Santa Barbara (Miramonte Laboratory) - Metanephric adenoma

Woodland Hills (Kaiser Permanente) - Renal cell carcinoma, mixed papillary and clear cell features

Arkansas (Associated Pathologist Laboratory) - Renal cell carcinoma, papillary type

Colorado (McKee Medical Center) - Conventional renal cell carcinoma, clear cell type

Florida (GastroEnterology Associates of Ocala) - Papillary renal cell carcinoma

Georgia, Atlanta - Papillary renal cell carcinoma

Illinois (Heartland Regional Medical Center) - Papillary renal cell carcinoma, type 1

Illinois, Oak Brook - Papillary renal cell carcinoma

Maryland (University of Maryland Medical Systems) - Papillary renal cell carcinoma

Massachusetts (Tufts Medical Center) - Renal cell carcinoma, papillary type

Minnesota (Fairview Ridges Hospital) - Papillary renal cell carcinoma

Missouri (Missouri Delta Medical Center) - Tubulopapillary renal cell carcinoma (2)

Nebraska (Creighton University Medical Center) - Papillary renal cell carcinoma

New York (Buffalo General Hospital) - Type II papillary renal cell carcinoma

New York (Stony Brook University Medical Center) - Renal cell carcinoma, tubulopapillary type

New York SUNY Downstate Medical Center) - Papillary renal cell carcinoma, type 1

North Carolina (Wake Forest University) - Papillary renal cell carcinoma

Ohio (Summa Health System) - Papillary renal cell carcinoma

Ohio (University of Toledo College of Medical Center Residents) - Renal cell carcinoma (55% clear cell renal cell carcinoma /45% papillary renal cell carcinoma)

Pennsylvania (Drexel University College of Medicine) - Papillary renal cell carcinoma

Pennsylvania (Lehigh Valley Hospital) - Collecting duct carcinoma

Pennsylvania (Magee Womens Hospital of UPMC) - Collecting duct carcinoma with focal papillary features

South Carolina (Lexington Medical Center) - Papillary renal cell carcinoma

Texas, Crystal Beach - Collecting duct carcinoma

Texas, Lubbock - Renal cell carcinoma, clear cell type, grade II

Washington (Seattle VAMC) - Renal cell carcinoma, papillary chromophil growth

West Virginia (Greenbrier Valley Medical Center) - Renal cell carcinoma

Wisconsin, Madison - Papillary renal cell carcinoma

Wisconsin (Medical Assessment & Consultation, S.C.) - Papillary renal cell carcinoma

Wisconsin (Medical College of Wisconsin) - Renal cell carcinoma, NOS (subtype pending immunohistochemistry)

Australia (Royal Hobart Hospital) - Papillary renal cell carcinoma
Australia (Royal Prince Alfred Hospital) - Favor clear cell papillary renal cell carcinoma (DDx: metanephric adenoma)
 need special stains
Australia (Sullivan Nicolaides Pathology) - Renal papillary carcinoma, type 1
Canada (Pasqua Hospital) - Renal cell carcinoma, papillary
Ireland (Kerry General Hospital) - Renal cell carcinoma
Ireland (University College Hospital) - Mixed papillary and clear cell renal carcinoma
Japan (Asahi General Hospital) - Papillary renal cell carcinoma (2)
Japan, Tokyo - Renal cell carcinoma
Oman (Khoula Hospital) - Papillary renal carcinoma, type 1
Puerto Rico (University of Puerto Rico) - Papillary renal cell carcinoma/clear cell renal cell carcinoma, papillary type
Saudi Arabia (King Khalid University Hospital) - Papillary renal cell carcinoma
United Kingdom (Oxford University NHS Trust) - Papillary renal cell carcinoma showing solid growth pattern

Case 7 - Diagnosis:

Papillary renal cell carcinoma, kidney
 T-71000, M-83123

Case 7 - References:

Solid variant of papillary renal cell carcinoma with spindle cell and tubular components. *Arch Pathol Lab Med* 2010 Aug;134(8): p1210-4. Cantley R; Gattuso P; Cimbalk D.
 Fuhrman grade provides higher prognostic accuracy than nucleolar grade for papillary renal cell carcinoma. *J Urol* 2010 Jun;183(6): p2143-7. Klatte T; Anterasian C, et al.
 Renal tubulocystic carcinoma is closely related to papillary renal cell carcinoma: implications for pathologic classification. *Am J Surg Pathol* 2009 Dec;33(12): p1840-9. Zhou M; Yang XJ, et al.
 Clear cell papillary renal cell carcinoma: a distinct histopathologic and molecular genetic entity. *Am J Surg Pathol* 2008 Aug;32(8): p1239-45. Gobbo S; Eble JN, et al.
 Oncocytic papillary renal cell carcinoma with solid architecture: mimic of renal oncocytoma. *Pathol Int* 2008 Mar;58(3): p164-8. Mai KT; Kohler DM; Robertson SJ; Belanger EC; Marginean EC.

Case No. 8, Accession No. 29819

February 2012

Arcadia (ABC Laboratories) - Oncocytoma
Baldwin Park (Kaiser Permanente) - Oncocytoma (4)
Fontana (Kaiser Permanente) - Chromophobe renal cell carcinoma
Glendale - Oncocytoma
Hayward (St. Rose Hospital) - Renal cell carcinoma vs. oncocytoma
Long Beach (Long Beach Veterans Hospital) - Renal cell carcinoma, chromophobic type
Oakland (Alameda County Medical Center) - Renal cell carcinoma, clear cell vs. oncocytic features
Orange (UCI Medical Center Residents) - Renal cell carcinoma, eosinophilic variant
Orinda (Kaiser Permanente) - Oncocytoma
Oxnard (St. John's Regional Medical Center) - Renal cell carcinoma
San Diego (Naval Medical Center) - Oncocytoma
Santa Barbara (Miramonte Laboratory) - Oncocytoma
Woodland Hills (Kaiser Permanente) - Oncocytoma
Arkansas (Associated Pathologist Laboratory) - Renal cell carcinoma
Colorado (McKee Medical Center) - Chromophobe renal cell carcinoma
Florida (GastroEnterology Associates of Ocala) - Clear cell renal cell carcinoma
Georgia, Atlanta - Renal oncocytoma, rule out eosinophilic chromophobe renal cell carcinoma
Illinois (Heartland Regional Medical Center) - Renal oncocytoma
Illinois, Oak Brook - Renal cell carcinoma
Maryland (University of Maryland Medical Systems) - Favor oncocytoma, defer to immunostains to rule out chromophobe renal cell carcinoma
Massachusetts (Tufts Medical Center) - Oncocytic variant of clear cell, renal cell carcinoma
Minnesota (Fairview Ridges Hospital) - Clear cell renal cell carcinoma
Missouri (Missouri Delta Medical Center) - Renal cell carcinoma, eosinophilic variant

Nebraska (Creighton University Medical Center) - Oncocytoma
New York (Buffalo General Hospital) - Eosinophilic variant of clear cell renal cell carcinoma
New York (Stony Brook University Medical Center) - Oncocytoma
New York SUNY Downstate Medical Center) - Oncocytoma
North Carolina (Wake Forest University) - Oncocytoma like angiomyolipoma
Ohio (Summa Health System) - Clear cell carcinoma, eosinophilic-type
Ohio (University of Toledo College of Medical Center Residents) - Chromophobe renal cell carcinoma
Pennsylvania (Drexel University College of Medicine) - Clear cell renal cell carcinoma
Pennsylvania (Lehigh Valley Hospital) - Chromophobe renal cell carcinoma
Pennsylvania (Magee Womens Hospital of UPMC) - Oncocytoma
South Carolina (Lexington Medical Center) - Oncocytoma
Texas, Crystal Beach - Clear cell carcinoma
Texas, Lubbock - Chromophobe carcinoma
Washington (Seattle VAMC) - Oncocytoma
West Virginia (Greenbrier Valley Medical Center) - Chromophobe renal cell carcinoma
Wisconsin, Madison - Renal oncocytoma
Wisconsin (Medical Assessment & Consultation, S.C.) - Renal cell carcinoma, clear cell type with focal eosinophilia
Wisconsin (Medical College of Wisconsin) - Renal cell carcinoma, clear cell (eosinophilic variant)
Australia (Royal Hobart Hospital) - Clear cell renal cell carcinoma (eosinophilic variant)
Australia (Royal Prince Alfred Hospital) - Favor chromophobe carcinoma (need special stains)
Australia (Sullivan Nicolaides Pathology) - Oncocytoma
Canada (Pasqua Hospital) - Oncocytoma
Ireland (Kerry General Hospital) - Chromophobe renal cell carcinoma
Ireland (University College Hospital) - Renal cell carcinoma, granular cell type
Japan (Asahi General Hospital) - Oncocytoma (1); Renal cell carcinoma, clear cell type (1)
Japan, Tokyo - Renal cell carcinoma
Oman (Khoulia Hospital) - Renal cell carcinoma (chromophobe type)
Puerto Rico (University of Puerto Rico) - Clear cell renal cell carcinoma/chromophobe carcinoma
Saudi Arabia (King Khalid University Hospital) - Renal cell carcinoma (oncocytic cell type)
United Kingdom (Oxford University NHS Trust) - Oncocytoma

Case 8 - Diagnosis:

Renal cell carcinoma, chromophobe type, kidney
 T-71000, M-82703

Case 8 - References:

Cytological features of chromophobe renal cell carcinoma, classic type. A report of nine cases. *Cytopathology* 2009; Feb;20(1): p44-9. Tejerina E; Gonzalez-Peramato P, et al.
 Squamous differentiation in a sarcomatoid chromophobe renal cell carcinoma: an unusual case report with review of the literature. *Arch Pathol Lab Med* 2008; Oct;132(10): p1672-4. Viswanathan S; Desai SB, et al.
 Chromophobe renal cell carcinoma with calcification: Report of a case with rare finding on aspiration smears. *Diagn Cytopathol* 2008; Sep;36(9): p647-50. Sharma SG; Mathur SR, et al.
 Chromophobe renal cell carcinoma in a child: case report and review of the literature. *Pediatr Dev Pathol* 2007; Mar-Apr;10(2): p125-8. Katzman PJ; Schwartz JI.
 Immunohistochemical analysis for cytokeratin 7, KIT, and PAX2: value in the differential diagnosis of chromophobe cell carcinoma. *Am J Clin Pathol* 2007; Feb;127(2): p225-9. Memeo L; Jhang J, et al.
 Fine needle aspiration of chromophobe renal cell carcinoma. *Acta Cytol* 2007; Jan-Feb;51(1): p9-15. Salamanca J; Alberti N, et al.

Case No. 9, Accession No. 29935

February 2012

Arcadia (ABC Laboratories) - Polycystic kidney
Baldwin Park (Kaiser Permanente) - Sarcomatoid renal cell carcinoma (4)
Fontana (Kaiser Permanente) - Cystic nephroma
Glendale - Tubulocystic carcinoma

Hayward (St. Rose Hospital) - Collecting duct carcinoma vs. ADPKD
Long Beach (Long Beach Veterans Hospital) - Cystic renal cell carcinoma
Oakland (Alameda County Medical Center) - Sarcoma (vs. renal cell carcinoma, sarcomatoid type)
Orange (UCI Medical Center Residents) - Tubulocystic carcinoma
Orinda (Kaiser Permanente) - Favor sarcomatoid renal cell carcinoma
Oxnard (St. John's Regional Medical Center) - Sarcomatoid renal cell vs. 1° sarcoma
San Diego (Naval Medical Center) - Tubulocystic carcinoma
Santa Barbara (Miramonte Laboratory) - Multilocular cystic renal cell carcinoma
Woodland Hills (Kaiser Permanente) - Tubulocystic carcinoma
Arkansas (Associated Pathologist Laboratory) - Renal cell carcinoma, collecting duct type
Colorado (McKee Medical Center) - Liposarcoma vs. malignant angiomyolipoma
Florida (GastroEnterology Associates of Ocala) - Acquired renal cystic disease
Georgia, Atlanta - Tubulocystic carcinoma
Illinois (Heartland Regional Medical Center) - Sarcomatoid renal cell carcinoma
Illinois, Oak Brook - Sarcomatoid renal cell carcinoma
Maryland (University of Maryland Medical Systems) - Tubulocystic carcinoma
Massachusetts (Tufts Medical Center) - Renal cell carcinoma consistent with sarcomatous transformation
Minnesota (Fairview Ridges Hospital) - Sarcomatoid renal cell carcinoma
Missouri (Missouri Delta Medical Center) - Tubulocystic renal cell carcinoma (2)
Nebraska (Creighton University Medical Center) - Collecting duct carcinoma
New York (Buffalo General Hospital) - Leiomyosarcoma
New York (Stony Brook University Medical Center) - Cystic nephroma
New York SUNY Downstate Medical Center - Cystic nephroma vs. multilocular cystic renal cell carcinoma
North Carolina (Wake Forest University) - Tubulocystic carcinoma or multilocular cystic renal cell carcinoma
Ohio (Summa Health System) - Angiomyolipoma, IHC required to rule out sarcomatoid tumor
Ohio (University of Toledo College of Medical Center Residents) - High grade sarcoma
Pennsylvania (Drexel University College of Medicine) - Sarcomatoid carcinoma
Pennsylvania (Lehigh Valley Hospital) - Sarcomatoid renal cell carcinoma
Pennsylvania (Magee Womens Hospital of UPMC) - Multicystic clear cell carcinoma
South Carolina (Lexington Medical Center) - High grade sarcoma
Texas, Crystal Beach - Cystic nephroma
Texas, Lubbock - Cystic renal cell carcinoma
Washington (Seattle VAMC) - Malignant neoplasm with sarcomatoid growth pattern
West Virginia (Greenbrier Valley Medical Center) - Tubulocystic carcinoma
Wisconsin, Madison - Leiomyosarcoma
Wisconsin (Medical Assessment & Consultation, S.C.) - Multilocular cystic renal cell carcinoma
Wisconsin (Medical College of Wisconsin) - Tubulocystic carcinoma
Australia (Royal Hobart Hospital) - Multilocular cystic renal cell carcinoma
Australia (Royal Prince Alfred Hospital) - AML, leiomyosarcoma, more blks needed, special stains needed
Australia (Sullivan Nicolaides Pathology) - Tubulocystic renal cell carcinoma
Canada (Pasqua Hospital) - Cystic nephroma
Ireland (Kerry General Hospital) - Sarcomatoid renal cell carcinoma
Ireland (University College Hospital) - Sarcomatoid renal cell carcinoma
Japan (Asahi General Hospital) - Leiomyosarcoma (1); Nephrogenic adenoma (1)
Japan, Tokyo - Renal cell carcinoma, septic, clear cell
Oman (Khoula Hospital) - Multilocular cystic renal cell carcinoma
Puerto Rico (University of Puerto Rico) - Sarcomatoid renal cell carcinoma, malignant angiomyolipoma
Saudi Arabia (King Khalid University Hospital) - Atypical angioliopoma
United Kingdom (Oxford University NHS Trust) - Adult cystic nephroma

Case 9 - Diagnosis:

Renal cell carcinoma (nos), favor collecting duct type, kidney
 T-71000, M-83123

Case 9 - References:

Effect of collecting duct histology on renal cell cancer outcome. *J Urol* 2009; Dec;182(6): p2595-9. Wright JL; Risk MC; Hotaling J; Lin DW.

Collecting duct carcinoma of the kidney: an immunohistochemical evaluation of the use of antibodies for differential diagnosis. *Hum Pathol* 2008; Sep;39(9): p1350-9. Kobayashi N; Matsuzaki O, et al.

Collecting duct (Bellini duct) renal cell carcinoma: a nationwide survey in Japan. *J Urol* 2006; Jul;176(1): p40-3; discussion 43. Tokuda N; Naito S, et al.

Cytological features of carcinoma of the collecting ducts of Bellini in voided urine cytology. *Diagn Cytopathol* 2009; Sep;37(9): p676-9. Ohsaki H; Hirakawa E, et al.

Collecting duct renal cell carcinoma: clinical study of a rare tumor. *J Urol* 2002; Jan;167(1): p71-4. Chao D; Zisman A, et al.

New cytological findings on fine-needle aspiration of renal collecting duct carcinoma. *Diagn Cytopathol* 2003; Oct;29(4): p239-40. Sironi M; Delpiano C, et al.

Case No. 10, Accession No. 31333

February 2012

Arcadia (ABC Laboratories) - Cystic fibroma

Baldwin Park (Kaiser Permanente) - Cystic nephroma (4)

Fontana (Kaiser Permanente) - Low grade collecting duct carcinoma

Glendale - Cystic nephroma

Hayward (St. Rose Hospital) - ADPKD

Long Beach (Long Beach Veterans Hospital) - Polycystic renal disease

Oakland (Alameda County Medical Center) - Cystic nephroma

Orange (UCI Medical Center Residents) - Mixed epithelial and stromal tumor

Orinda (Kaiser Permanente) - Cystic nephroma

Oxnard (St. John's Regional Medical Center) - Cystic nephroma

San Diego (Naval Medical Center) - Mixed epithelial stromal tumor

Santa Barbara (Miramonte Laboratory) - Cystic nephroma

Woodland Hills (Kaiser Permanente) - Cystic nephroma/mixed epithelial and stromal tumor

Arkansas (Associated Pathologist Laboratory) - Multilocular cyst

Colorado (McKee Medical Center) - Multicystic nephroma

Florida (GastroEnterology Associates of Ocala) - Cystic nephroma

Georgia, Atlanta - Mixed epithelial and stromal tumor

Illinois (Heartland Regional Medical Center) - Cystic nephroma

Illinois, Oak Brook - Multicystic nephroma

Maryland (University of Maryland Medical Systems) - Cystic nephroma

Massachusetts (Tufts Medical Center) - Cystic nephroma

Minnesota (Fairview Ridges Hospital) - Mixed epithelial-stromal tumor

Missouri (Missouri Delta Medical Center) - Simple cortical cyst (2)

Nebraska (Creighton University Medical Center) - Cystic nephroma

New York (Buffalo General Hospital) - Cystic nephroma

New York (Stony Brook University Medical Center) - Mixed stromal-epithelial tumor

New York SUNY Downstate Medical Center - Cystic nephroma

North Carolina (Wake Forest University) - Mixed epithelial and stromal tumor

Ohio (Summa Health System) - Cystic nephroma

Ohio (University of Toledo College of Medical Center Residents) - Tubular cystic carcinoma

Pennsylvania (Drexel University College of Medicine) - Cystic nephroma

Pennsylvania (Lehigh Valley Hospital) - Cystic nephroma

Pennsylvania (Magee Womens Hospital of UPMC) - Mixed epithelial stromal tumor

South Carolina (Lexington Medical Center) - Mixed epithelial and stromal tumor

Texas, Lubbock - Multilocular cyst

Washington (Seattle VAMC) - Benign cystic lesion, possible lymphangioma

West Virginia (Greenbrier Valley Medical Center) - Acquire cystic kidney disease

Wisconsin, Madison - Xanthogranulomatous pyelonephritis and multiloculated cyst (cystic nephroma)

Wisconsin (Medical Assessment & Consultation, S.C.) - Benign mixed epithelial and stromal tumor of kidney

Wisconsin (Medical College of Wisconsin) - Mixed epithelial and stromal tumor/cystic nephroma

Australia (Royal Hobart Hospital) - Cystic nephroma
Australia (Royal Prince Alfred Hospital) - Mixed epithelial stromal tumor
Australia (Sullivan Nicolaides Pathology) - Mixed epithelial stromal cell tumor, kidney
Canada (Pasqua Hospital) - Mixed epithelial and stromal tumor
Ireland (Kerry General Hospital) - Multicystic nephroma
Ireland (University College Hospital) - Cystic nephroma
Japan (Asahi General Hospital) - Cystic nephroma (1); Lymphangioma (1)
Japan, Tokyo - Renal cell carcinoma
Oman (Khoula Hospital) - Cystic nephroma
Puerto Rico (University of Puerto Rico) - Cystic nephroma/multilocular cystic renal cell carcinoma
Saudi Arabia (King Khalid University Hospital) - Medullary sponge kidney (5); Multicystic nephroma (5)
United Kingdom (Oxford University NHS Trust) - Mixed epithelial and stromal tumor

Case 10 - Diagnosis:

Cystic nephroma, kidney
T-71000, M-89601

Case 10 - References:

Cystic nephroma in adults. A report of two cases and review of the literature. *Pol J Pathol* 2005;;56(2): p93-6. Duda-Szymanska J; Kaczmarek J; Papierz W.
Cystic nephroma: a histologic and immunohistochemical study of 10 cases. *Arch Pathol Lab Med* 2004; Dec;128(12): p1404-11. Mukhopadhyay S; Valente AL; de la Roza G.
Cystic nephroma: a benign renal tumor of children and adults. *Surgery* 2003; May;133(5): p596-7. Boulanger SC; Brisseau GF.
Renal cystic neoplasms and renal neoplasms associated with cystic renal diseases: pathogenetic and molecular links. *Adv Anat Pathol* 2003; May;10(3): p135-59. Truong LD; Choi YJ, et al.
Localized cystic disease of the kidney. *AJR Am J Roentgenol* 2001; Apr;176(4): p843-9. Slywotzky CM; Bosniak MA.