



CALIFORNIA
TUMOR TISSUE REGISTRY

GENITOURINARY PATHOLOGY

Minutes – Subscription B

May 2011



SUGGESTED READING (General Topics from Recent Literature):

- Hyaluronic Acid Predicts Hepatic Fibrosis in Children With Nonalcoholic Fatty Liver Disease. Nobili V, Alisi A, et al. *Transl Res* 2010; 156:229-234.
- Morphologic Findings in Upper Gastrointestinal Biopsies of Patients With Ulcerative Colitis: A Controlled Study. Lin J, McKenna BJ, Appelman HD. *Am J Surg Pathol* 2010; 34:1672-1677.
- Gastric Lesions in Patients With Autoimmune Metaplastic Atrophic Gastritis (AMAG) in a Tertiary Care Setting. Park JY, Cornish TC, et al. *Am J Surg Pathol* 2010; 34:1591-1598.
- Helicobacter Pylori Accelerates Hepatic Fibrosis by Sensitizing Transforming Growth Factor β 1-Induced Inflammatory Signaling. Ki M-R, Goo M-J, et al. *Lab Investigation* 2010; 90:1507-1516.
- Pathology and Clinical Features of Hodgkin Lymphoma-Like Post-transplant Lymphoproliferative Disease. Krishnamurthy S, Hassan A, et al. *Int J Surg Pathol* 2010; 18:278-285.

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FILE DIAGNOSES

CTTR Subscription B

May 2011

Case 1:

Adenocarcinoma, seminal vesicle
T-77500, M-81403

Case 2:

High grade carcinoma with rhabdoid features, probably urothelial in origin
T-75020, M-80103

Case 3:

Squamous cell carcinoma, kidney and spermatic cord
T-71000, M-80703

Case 4:

Extranodal Rosai-Dorfman disease, testicle
T-78000, M-72000

Case 5:

Classic seminoma, testis
T-78000, M-90613

Case 6:

Embryonal carcinoma, testis
T-78000, M-90713

Case 7:

Urothelial carcinoma, ureter
T-73000, M-80103

Case 8:

Wilms tumor (“nephroblastoma”), kidney
T-71000, M-89603

Case 9:

Renal cell carcinoma, clear cell type, kidney
T-71000, M-83103

Case 10:

Papillary renal cell carcinoma, type 2, kidney
T-72000, M-83123

Canoga Park - Adenomatoid/nephrogenic metaplasia
Carlsbad (Genoptix Medical Laboratory) - Micropapillary carcinoma
Costa Mesa (College Hospital) - Adenocarcinoma
Glendale - Tubulocystic carcinoma
Loma Linda (Loma Linda University) - Adenocarcinoma, seminal vesicle
San Diego (Naval Medical Center) - Adenocarcinoma
Florida (Munroe Regional Medical Center) - Adenomatoid tumor
Florida (Naples Pathology Associates) - Metastatic carcinoma consistent with metastatic papillary carcinoma
Georgia, Atlanta - Clear cell carcinoma
Illinois (Heartland Regional Medical Center) - Adenocarcinoma
Illinois (Loyola University of Chicago) - Seminal vesicle adenocarcinoma
Kansas (Coffeyville Regional Medical Center) - Adenocarcinoma
Kansas (Peterson Laboratory Services) - Clear cell adenocarcinoma
Louisiana (LSUHSC-Shreveport) - Cyst adenoma (1); Adenocarcinoma, NOS (1)
Maryland (University of Maryland) - Nephrogenic adenoma
Massachusetts (BWH Pathology) - Adenocarcinoma of seminal vesicle
Michigan (Henry Ford Hospital Residents) - Urothelial adenocarcinoma
New Mexico (The University of New Mexico Pathology Residents) - Clear cell carcinoma
New York (St. Joseph Hospital) - Adenocarcinoma, seminal vesicle
New York (SUNY Stony Brook University) - Invasive adenocarcinoma, primary to be determined
Pennsylvania (Conemaugh Memorial Medical Center) - Angiosarcoma
Pennsylvania (Drexel University College of Medicine) - Adenocarcinoma of bladder
Puerto Rico (University of Puerto Rico) - Adenocarcinoma, NOS, rule out carcinoma of collecting duct of bellini
Tennessee (Wake Forest University) - Adenomatoid tumor
Texas, Crystal Beach - Adenocarcinoma, probably prostatic
Texas, Lubbock - Metastatic renal cell carcinoma
Texas (Scott & White Memorial Hospital) - Clear cell adenocarcinoma
Wisconsin, Madison - Adenocarcinoma /prostate carcinoma/seminal vesicle carcinoma
Wisconsin (Medical Assessment and Consultation, S.C.) - Adenocarcinoma involving seminal vesicle
Australia (St. Vincent's Hospital, Sydney) - Clear cell adenocarcinoma
Canada (Pasqua Hospital) - Adenocarcinoma
England (John Radcliffe Hospital) - Adenocarcinoma of seminal vesicle
Ireland (University College Hospital, Galway) - Nephrogenic adenoma
Japan (Asahi General Hospital) - Nephrogenic adenoma
Japan (Setagaya-Ku) - Papillary carcinoma, recurrent
Japan (Shizuoka Tokashukei Hospital) - Adenocarcinoma
Saudi Arabia (King Khalid University Hospital) - Adenocarcinoma (probably urachal origin)
Spain (Provisa Medical Center) - Non-mucinous adenocarcinoma
The Netherlands, Amstelveen - Adenocarcinoma

Case 1 - Diagnosis:

Adenocarcinoma, seminal vesicle
T-77500, M-81403

Case 1 - References:

Distal seminal vesicle invasion by prostate adenocarcinoma does not occur in isolation of proximal seminal vesicle invasion or lymphovascular infiltration. Samaratunga H; Samaratunga et al. *Pathology* 2010; Jun;42(4): p330-3.
Giant seminal vesicle cyst resembling mega-ureter with hydronephrosis. Chuang KL; Lai WI; Chiang YJ. *Arch Androl* 2005; Sep-Oct;51(5): p367-9.
MUC6 is a marker of seminal vesicle-ejaculatory duct epithelium and is useful for the differential diagnosis with prostate adenocarcinoma. Leroy X; Ballereau C, et al. *Am J Surg Pathol* 2003; Apr;27(4): p519-21.
Cystadenoma of the seminal vesicle: report of a case with ultrastructural findings. Santos LD; Wong CS; Killingsworth M. *Pathology* 2001; Aug;33(3): p399-402.

Quantifying the impact of seminal vesicle invasion identified using endorectal magnetic resonance imaging on PSA outcome after radiation therapy for patients with clinically localized prostate cancer. Nguyen PL; Whittington R, et al. *Int J Radiat Oncol Biol Phys* 2004; Jun 1;59(2): p400-5.

Primary adenocarcinoma of the seminal vesicles. Thiel R; Effert P. *J Urol* 2002; Nov;168(5): p1891-6.

Case No. 2, Accession No. 12511

May 2011

Canoga Park - Renal cell carcinoma vs. rhabdoid tumor
Carlsbad (Genoptix Medical Laboratory) - Papillary renal cell carcinoma, type 1
Costa Mesa (College Hospital) - Tubular carcinoma
Glendale - Collecting duct carcinoma
Loma Linda (Loma Linda University) - Pleomorphic renal cell carcinoma, chromophobe type
San Diego (Naval Medical Center) - Renal cell carcinoma
Florida (Munroe Regional Medical Center) - Malignant favor adrenal cortical carcinoma
Florida (Naples Pathology Associates) - Renal cell carcinoma
Georgia, Atlanta - Poorly differentiated carcinoma, rule out urothelial carcinoma
Illinois (Heartland Regional Medical Center) - Poorly differentiated carcinoma, favor urothelial carcinoma
Illinois (Loyola University of Chicago) - Urothelial carcinoma
Kansas (Coffeyville Regional Medical Center) - Pleomorphic granular cell carcinoma, kidney
Kansas (Peterson Laboratory Services) - Anaplastic renal cell carcinoma
Louisiana (LSUHSC-Shreveport) - Renal collecting duct carcinoma (1); Undifferentiated malignant tumor (1)
Maryland (University of Maryland) - Invasive high-grade urothelial carcinoma
Massachusetts (BWH Pathology) - Medullary carcinoma of kidney
Michigan (Henry Ford Hospital Residents) - Sarcomatoid renal cell carcinoma
New Mexico (The University of New Mexico Pathology Residents) - Alveolar rhabdomyosarcoma
New York (St. Joseph Hospital) - Medullary renal cell carcinoma
New York (SUNY Stony Brook University) - High grade renal cell carcinoma, NOS, with rhabdoid features
Pennsylvania (Conemaugh Memorial Medical Center) - Poorly differentiated renal cell carcinoma with rhabdoid feature
Pennsylvania (Drexel University College of Medicine) - Papillary renal cell carcinoma
Puerto Rico (University of Puerto Rico) - Renal cell carcinoma, unclassified/rule out epithelioid angiomyolipoma
Tennessee (Wake Forest University) - Epithelioid angiomyolipoma
Texas, Crystal Beach - Adenocarcinoma, kidney, granular type
Texas, Lubbock - Chromophobe carcinoma
Texas (Scott & White Memorial Hospital) - Sarcomatoid renal cell carcinoma
Wisconsin, Madison - Renal cell carcinoma
Wisconsin (Medical Assessment and Consultation, S.C.) - High grade renal cell carcinoma
Australia (St. Vincent's Hospital, Sydney) - High grade urothelial carcinoma
Canada (Pasqua Hospital) - Poorly differentiated carcinoma
England (John Radcliffe Hospital) - Collecting duct carcinoma
Ireland (University College Hospital, Galway) - Renal medullary carcinoma
Japan (Asashi General Hospital) - Clear cell renal cell carcinoma
Japan (Setagaya-Ku) - Renal cell carcinoma
Japan (Shizuoka Tokashukei Hospital) - Collecting duct renal cell carcinoma
Saudi Arabia (King Khalid University Hospital) - Collecting duct carcinoma
Spain (Provisa Medical Center) - Papillary renal cell carcinoma with rhabdoid features
The Netherlands, Amstelveen - Collecting duct carcinoma

Case 2 - Diagnosis:

High grade carcinoma with rhabdoid features, probably urothelial in origin
T-75020, M-80103

Case 2 - References:

Urothelial carcinoma of the renal pelvis with rhabdoid features. Fukumura Y; Fujii H; Mitani K, et al. *Pathol Int* 2009; May;59(5): p322-5.
Urothelial carcinoma with rhabdoid features: report of 6 cases. Parwani AV; Herawi M, et al. *Hum Pathol* 2006; Feb;37(2): p168-72.
Cytologic features of the nested variant of urothelial carcinoma: a study of seven cases. Cardillo M; Reuter VE; *Lin O Cancer* 2003; Feb 25;99(1): p23-7.
Estrogen receptor expression in papillary urothelial carcinoma of the bladder and ovarian transitional cell carcinoma. Croft PR; Lathrop SL; Feddersen RM; Joste NE. *Arch Pathol Lab Med* 2005; Feb;129(2): p194-9.
High-grade urothelial carcinoma of the renal pelvis: clinicopathologic study of 108 cases with emphasis on unusual morphologic variants. Perez-Montiel D; Wakely PE, et al. *Mod Pathol* 2006; Apr;19(4): p494-503.

Case No. 3, Accession No. 31411

May 2011

Canoga Park - Transitional/squamous carcinoma of renal pelvis
Carlsbad (Genoptix Medical Laboratory) - Chromophobe renal cell carcinoma, eosinophilic variant
Costa Mesa (College Hospital) - Transitional carcinoma
Glendale - Squamous cell carcinoma
Loma Linda (Loma Linda University) - Renal cell carcinoma, chromophobe type
San Diego (Naval Medical Center) - Collecting duct carcinoma
Florida (Munroe Regional Medical Center) - Squamous cell carcinoma
Florida (Naples Pathology Associates) - Squamous cell carcinoma
Georgia, Atlanta - Urothelial carcinoma with squamous differentiation
Illinois (Heartland Regional Medical Center) - Squamous cell carcinoma
Illinois (Loyola University of Chicago) - Squamous cell carcinoma
Kansas (Coffeyville Regional Medical Center) - Granular cell renal carcinoma
Kansas (Peterson Laboratory Services) - Squamous cell carcinoma
Louisiana (LSUHSC-Shreveport) - Squamous carcinoma (2)
Maryland (University of Maryland) - Invasive squamous cell carcinoma
Massachusetts (BWH Pathology) - Squamous cell carcinoma of kidney
Michigan (Henry Ford Hospital Residents) - Squamous cell carcinoma
New Mexico (The University of New Mexico Pathology Residents) - Transitional cell carcinoma with squamous differentiation
New York (St. Joseph Hospital) - Collecting duct renal cell carcinoma
New York (SUNY Stony Brook University) - Keratinizing squamous cell carcinoma
Pennsylvania (Conemaugh Memorial Medical Center) - Urothelial/squamous cell carcinoma
Pennsylvania (Drexel University College of Medicine) - Chromophobe renal cell carcinoma
Puerto Rico (University of Puerto Rico) - Squamous cell carcinoma vs. urothelial carcinoma with squamous differentiation
Tennessee (Wake Forest University) - Squamous cell carcinoma; acute and chronic pyelonephritis
Texas, Crystal Beach - Carcinoma transitional consistent with squamous differentiation probably caliceal
Texas, Lubbock - Chromophobe carcinoma
Texas (Scott & White Memorial Hospital) - Squamous cell carcinoma
Wisconsin, Madison - Squamous cell carcinoma
Wisconsin (Medical Assessment and Consultation, S.C.) - Squamous cell carcinoma involving kidney
Australia (St. Vincent's Hospital, Sydney) - Squamous cell carcinoma
Canada (Pasqua Hospital) - Squamous cell carcinoma
England (John Radcliffe Hospital) - Squamous cell carcinoma
Ireland (University College Hospital, Galway) - Squamous cell carcinoma
Japan (Asashi General Hospital) - Carcinoma of the collecting duct of Bellini
Japan (Setagaya-Ku) - Transitional cell carcinoma
Japan (Shizuoka Tokashukei Hospital) - Squamous cell carcinoma
Saudi Arabia (King Khalid University Hospital) - Squamous cell carcinoma
Spain (Provisa Medical Center) - Squamous cell carcinoma
The Netherlands, Amstelveen - Adenosquamous carcinoma

Case 3 - Diagnosis:

Squamous cell carcinoma, kidney and spermatic cord
T-71000, M-80703

Case 3 - References:

Squamous cell carcinoma of the renal pelvis. Bhandari A; Alassi O; Rogers C; MacLennan GT. *J Urol* 2010; May;183(5): p2023-4.
Carcinosarcoma and squamous cell carcinoma of the renal pelvis associated with nephrolithiasis: A case report of each tumor type. Kayaselcuk F; Bal N; Guvel S, et al. *Pathol Res Pract* 2003;199(7): p489-92.
Surgery plus targeted therapy for renal cell carcinoma with isolated spermatic cord metastasis. Correa JJ; Fishman M; Chuang ST; Spiess PE. *Clin Genitourin Cancer* 2009; Oct;7(3): pE101-3.

Case No. 4, Accession No. 31004

May 2011

Canoga Park - Leydig cell tumor
Carlsbad (Genoptix Medical Laboratory) - Mixed germ cell tumor
Costa Mesa (College Hospital) - Leydig cell tumor
Glendale - Leydig cell tumor
Loma Linda (Loma Linda University) - Angiosarcoma of testicle
San Diego (Naval Medical Center) - Leydig cell tumor
Florida (Munroe Regional Medical Center) - Leydig cell tumor
Florida (Naples Pathology Associates) - Leydig cell tumor
Georgia, Atlanta - Leydig cell tumor
Illinois (Heartland Regional Medical Center) - Xanthogranulomatous orchitis (rule out malakoplakia)
Illinois (Loyola University of Chicago) - Malakoplakia
Kansas (Coffeyville Regional Medical Center) - Leydig cell tumor
Kansas (Peterson Laboratory Services) - Malakoplakia
Louisiana (LSUHSC-Shreveport) - Renal cell carcinoma, NOS (1); Leydig cell tumor (1)
Maryland (University of Maryland) - Leydig cell tumor
Massachusetts (BWH Pathology) - Leydig cell tumor (Lipid rich)
Michigan (Henry Ford Hospital Residents) - Leydig cell carcinoma
New Mexico (The University of New Mexico Pathology Residents) - Leydig cell tumor
New York (St. Joseph Hospital) - Sertoli-Leydig cell tumor
New York (SUNY Stony Brook University) - Leydig cell tumor
Pennsylvania (Conemaugh Memorial Medical Center) - Gonadoblastoma
Pennsylvania (Drexel University College of Medicine) - Spermatocytic seminoma
Puerto Rico (University of Puerto Rico) - Rosai-Dorfman disease/rule out Sertoli-Leydig tumor
Tennessee (Wake Forest University) - Fibroxanthomatous reaction
Texas, Crystal Beach - Adenomatoid tumor
Texas, Lubbock - Spermatocytic seminoma
Texas (Scott & White Memorial Hospital) - Leydig cell tumor
Wisconsin, Madison - Leydig cell tumor
Wisconsin (Medical Assessment and Consultation, S.C.) - Leydig cell tumor of testis
Australia (St. Vincent's Hospital, Sydney) - Steroid cell tumor
Canada (Pasqua Hospital) - Leydig cell tumor
England (John Radcliffe Hospital) - Extranodal Rosai-Dorfman disease, testicle
Ireland (University College Hospital, Galway) - Histiocytic inflammation
Japan (Asashi General Hospital) - Leydig cell tumor
Japan (Setagaya-Ku) - Leydig cell tumor
Japan (Shizuoka Tokashukei Hospital) - Leydig cell tumor
Saudi Arabia (King Khalid University Hospital) - Leydig cell tumor
Spain (Provisa Medical Center) - Leydig cell tumor
The Netherlands, Amstelveen - Leydig cell hyperplasia

Case 4 - Diagnosis:

Extranodal Rosai-Dorfman disease, testicle
T-78000, M-72000

Consultation: Lester Thompson, MD: as above.

Case 4 - References:

- Fernandopulle SM, Hwang JS, et al. Rosai-Dorfman Disease of the Testis. An Unusual Entity that Mimics Testicular Malignancy. *J Clin Pathol* 2006; 59(3):325-327.
- Lossos IS, Okon E, Bogomolski-Yahalom V, et al. Sinus Histiocytosis with Massive Lymphadenopathy (Rosai-Dorfman Disease): Report of a patient with isolated Renotesticular Involvement After Cure of Non-Hodgkin's Lymphoma. *Ann Hematol* 1997; 74(1):41-44.
- Ruggiero A, Attina G, et al. Rosai-Dorfman Disease. Two Cases Reports and Diagnostic Role of Fine-Needle Aspiration Cytology. *J Pediatr Hematol Oncol* 2006; 28(2):103-106.
- Kong YY, Kong JC, et al. Cutaneous Rosai-Dorfman Disease. A Clinical and Histopathologic Study of 25 Cases in China. *Am J Surg Pathol* 2007; 31(3):341-350.
- Adhikari RC, Sayami G, et al. Fine-Needle Aspiration Cytology of Rosai-Dorfman Disease. *Diagn Cytopathol* 2004; 31(3):198-199.

Case No. 5, Accession No. 12440**May 2011**

Canoga Park - Seminoma
Carlsbad (Genoptix Medical Laboratory) - Seminoma
Costa Mesa (College Hospital) - Seminoma
Glendale - Seminoma
Loma Linda (Loma Linda University) - Germinoma, testicle
San Diego (Naval Medical Center) - Mixed germ cell tumor
Florida (Munroe Regional Medical Center) - Seminoma
Florida (Naples Pathology Associates) - Seminoma
Georgia, Atlanta - Seminoma
Illinois (Heartland Regional Medical Center) - Classic seminoma
Illinois (Loyola University of Chicago) - Seminoma
Kansas (Coffeyville Regional Medical Center) - Seminoma
Kansas (Peterson Laboratory Services) - Seminoma
Louisiana (LSUHSC-Shreveport) - Seminoma (2)
Maryland (University of Maryland) - Classic seminoma
Massachusetts (BWH Pathology) - Seminoma of testis
Michigan (Henry Ford Hospital Residents) - Seminoma, classical
New Mexico (The University of New Mexico Pathology Residents) - Spermatocytic seminoma
New York (St. Joseph Hospital) - Seminoma
New York (SUNY Stony Brook University) - Seminoma
Pennsylvania (Conemaugh Memorial Medical Center) - Classic seminoma
Pennsylvania (Drexel University College of Medicine) - Seminoma
Puerto Rico (University of Puerto Rico) - Seminoma
Tennessee (Wake Forest University) - Seminoma
Texas, Crystal Beach - Seminoma
Texas, Lubbock - Classical seminoma
Texas (Scott & White Memorial Hospital) - Seminoma
Wisconsin, Madison - Seminoma
Wisconsin (Medical Assessment and Consultation, S.C.) - Spermatocytic seminoma
Australia (St. Vincent's Hospital, Sydney) - Classic seminoma
Canada (Pasqua Hospital) - Seminoma
England (John Radcliffe Hospital) - Seminoma
Ireland (University College Hospital, Galway) - Seminoma
Japan (Asashi General Hospital) - Seminoma

Japan (Setagaya-Ku) - Seminoma
Japan (Shizuoka Tokashukei Hospital) - Spermatocytic seminoma
Saudi Arabia (King Khalid University Hospital) - Seminoma
Spain (Provisa Medical Center) - Seminoma
The Netherlands, Amstelveen - Seminoma

Case 5 - Diagnosis:

Classic seminoma, testis
T-78000, M-90613

Case 5 - References:

A rare case of classic testicular seminoma in an 86-year-old shows similar proliferation rate as in younger men. Foell K; Martens M; Izawa JI. *Urology* 2007; Nov;70(5): p1007.e7-9.
TCL1 is a diagnostic marker for intratubular germ cell neoplasia and classic seminoma. Cao D; Lane Z, et al. *Histopathology* 2010; Jul;57(1): p152-7.
Classical testicular seminoma in young man. Voinea F; Vamesu S; Deacu M, et al. *Rom J Morphol Embryol* 2006;;47(4): p379-84
The association between intratubular seminoma and invasive germ cell tumors.. Berney DM; Lee A; Shamash J; Oliver RT. *Hum Pathol* 2006; Apr;37(4): p458-61.
Late recurrent seminoma: 18 years after bilateral orchidectomy in patient with bilateral stage one testicular seminoma. Ng CF; Tsui TM; To KF, et al.. *Int Urol Nephrol* 2010; Mar;42(1): p69-72.
Free beta-subunit of human chorionic gonadotropin in serum is a diagnostically sensitive marker of seminomatous testicular cancer.. Lempiainen A; Stenman UH, et al. *Clin Chem* 2008; Nov;54(11): p1840-3.

Case No. 6, Accession No. 12372

May 2011

Canoga Park - Mixed germ cell tumor
Carlsbad (Genoptix Medical Laboratory) - Yolk sac tumor
Costa Mesa (College Hospital) - Embryonal carcinoma
Glendale - Embryonal carcinoma
Loma Linda (Loma Linda University) - Endodermal sinus (yolk sac) tumor, testicle
San Diego (Naval Medical Center) - Embryonal carcinoma
Florida (Munroe Regional Medical Center) - Embryonal carcinoma
Florida (Naples Pathology Associates) - Yolk sac tumor
Georgia, Atlanta - Embryonal carcinoma
Illinois (Heartland Regional Medical Center) - Endodermal sinus tumor and embryonal carcinoma
Illinois (Loyola University of Chicago) - Embryonal carcinoma
Kansas (Coffeyville Regional Medical Center) - Yolk sac tumor
Kansas (Peterson Laboratory Services) - Embryonal carcinoma with ITGCN
Louisiana (LSUHSC-Shreveport) - Mixed germ cell tumor (2)
Maryland (University of Maryland) - Embryonal carcinoma
Massachusetts (BWH Pathology) - Embryonal carcinoma of testis
Michigan (Henry Ford Hospital Residents) - Embryonal carcinoma
New Mexico (The University of New Mexico Pathology Residents) - Embryonal carcinoma
New York (St. Joseph Hospital) - Embryonal carcinoma, testicle
New York (SUNY Stony Brook University) - Embryonal carcinoma vs. yolk sac tumor
Pennsylvania (Conemaugh Memorial Medical Center) - Mixed germ cell tumor
Pennsylvania (Drexel University College of Medicine) - GCT, embryonal carcinoma
Puerto Rico (University of Puerto Rico) - Yolk sac vs. mixed germ cell tumor (yolk sac & embryonal carcinoma)
Tennessee (Wake Forest University) - Embryonal carcinoma
Texas, Crystal Beach - Sex cord tumor
Texas, Lubbock - Embryonal carcinoma
Texas (Scott & White Memorial Hospital) - Mixed germ cell tumor
Wisconsin, Madison - Embryonal carcinoma

Wisconsin (Medical Assessment and Consultation, S.C.) - Testicular yolk sac tumor
Australia (St. Vincent's Hospital, Sydney) - Embryonal carcinoma
Canada (Pasqua Hospital) - Embryonal carcinoma
England (John Radcliffe Hospital) - Embryonal carcinoma
Ireland (University College Hospital, Galway) - Embryonal carcinoma
Japan (Asashi General Hospital) - Embryonal cell carcinoma
Japan (Setagaya-Ku) - Embryonal carcinoma
Japan (Shizuoka Tokashukei Hospital) - Embryonal carcinoma
Saudi Arabia (King Khalid University Hospital) - Malignant mixed germ cell tumor (embryonal and yolk sac)
Spain (Provisa Medical Center) - Embryonal carcinoma
The Netherlands, Amstelveen - Yolk sac tumor and syncytiotrof diff (+embryonal carcinoma)

Case 6 - Diagnosis:

Embryonal carcinoma, testis
 T-78000, M-90713

Case 6 - References:

Association of intratubular seminoma and intratubular embryonal carcinoma with invasive testicular germ cell tumors.
 Lau SK; Weiss LM; Chu PG. *Am J Surg Pathol* 2007; Jul;31(7): p1045-9.
 The most common, clinically significant misdiagnoses in testicular tumor pathology, and how to avoid them. Ulbright TM. *Adv Anat Pathol* 2008; Jan;15(1): p18-27. OCT4 is superior to CD30 in the diagnosis of metastatic embryonal carcinomas after chemotherapy. Sung MT; Jones TD; Beck SD; Foster RS; Cheng L. *Hum Pathol* 2006; Jun;37(6): p662-7.
 Loss of CD30 expression in metastatic embryonal carcinoma: the effects of chemotherapy? Berney DM; Shamash J; Pieroni K; Oliver RT. *Histopathology* 2001; Oct;39(4): p382-5.
 Intratubular embryonal carcinoma. Rakheja D; Hoang MP; Sharma S; Albores-Saavedra J. *Arch Pathol Lab Med* 2002; Apr;126(4): p487-90.

Case No. 7, Accession No. 12610

May 2011

Canoga Park - High grade large cell carcinoma
Carlsbad (Genoptix Medical Laboratory) - Micropapillary carcinoma
Costa Mesa (College Hospital) - Transitional cell carcinoma
Glendale - Micropapillary transitional cell carcinoma
Loma Linda (Loma Linda University) - Papillary transitional cell carcinoma of ureter (urothelial carcinoma)
San Diego (Naval Medical Center) - High grade urothelial carcinoma
Florida (Munroe Regional Medical Center) - Urothelial carcinoma
Florida (Naples Pathology Associates) - Urothelial cell carcinoma, high grade
Georgia, Atlanta - Invasive urothelial carcinoma with micropapillary features
Illinois (Heartland Regional Medical Center) - High grade urothelial carcinoma, micropapillary
Illinois (Loyola University of Chicago) - Urothelial carcinoma, micropapillary type
Kansas (Coffeyville Regional Medical Center) - Papillary transitional cell carcinoma
Kansas (Peterson Laboratory Services) - Urothelial carcinoma, high grade, micropapillary pattern
Louisiana (LSUHSC-Shreveport) - Papillary adenocarcinoma (2)
Maryland (University of Maryland) - Micropapillary carcinoma
Massachusetts (BWH Pathology) - Micropapillary carcinoma (urothelial carcinoma with a micropapillary growth pattern)
Michigan (Henry Ford Hospital Residents) - Urothelial carcinoma, micropapillary
New Mexico (The University of New Mexico Pathology Residents) - Micropapillary transitional cell carcinoma
New York (St. Joseph Hospital) - High grade urothelial carcinoma, micropapillary type
New York (SUNY Stony Brook University) - High grade urothelial cell carcinoma, micropapillary variant
Pennsylvania (Conemaugh Memorial Medical Center) - Urothelial carcinoma, micropapillary variant
Pennsylvania (Drexel University College of Medicine) - Urothelial carcinoma, micropapillary
Puerto Rico (University of Puerto Rico) - Infiltrating urothelial carcinoma, micropapillary variant
Tennessee (Wake Forest University) - High grade urothelial carcinoma, micropapillary variant

Texas, Crystal Beach - Papillary carcinoma
Texas, Lubbock - Invasive high grade carcinoma
Texas (Scott & White Memorial Hospital) - Invasive high grade urothelial carcinoma
Wisconsin, Madison - Metastatic adenocarcinoma
Wisconsin (Medical Assessment and Consultation, S.C. - High grade urothelial carcinoma with intravascular carcinoma deposits
Australia (St. Vincent's Hospital, Sydney) - Micropapillary urothelial carcinoma
Canada (Pasqua Hospital) - Micropapillary carcinoma
England (John Radcliffe Hospital) - Micropapillary transitional cell carcinoma
Ireland (University College Hospital, Galway) - Micropapillary urothelial carcinoma
Japan (Asahi General Hospital) - Micropapillary urothelial carcinoma
Japan (Setagaya-Ku) - Transitional cell carcinoma
Japan (Shizuoka Tokashukei Hospital) - Urothelial carcinoma, micropapillary type
Saudi Arabia (King Khalid University Hospital) - High grade urothelial carcinoma (nested variant)
Spain (Provisa Medical Center) - Micropapillary carcinoma
The Netherlands, Amstelveen - Urothelial cell carcinoma

Case 7 - Diagnosis:

Urothelial carcinoma, ureter
 T-73000, M-80103

Case 7 - References:

Micropapillary urothelial carcinoma of the upper urinary tract: Clinicopathologic study of five cases. Perez-Montiel D; Hes O; Michal M; Suster S. *Am J Clin Pathol* 2006; Jul;126(1): p86-92.
 Micropapillary variant of urothelial carcinoma in the upper urinary tract: a clinicopathologic study of 11 cases. Guo CC; Tamboli P; Czerniak B. *Arch Pathol Lab Med* 2009; Jan;133(1): p62-6.
 The molecular signature for urothelial carcinoma of the upper urinary tract... Ho CL; Tzai TS, et al. *J Urol* 2008; Mar;179(3): p1155-9.
 Primary site and incidence of lymph node metastases in urothelial carcinoma of upper urinary tract. Kondo T; Nakazawa H; Ito F, et al. *Urology* 2007; Feb;69(2): p265-9.
 Discriminatory immunohistochemical staining of urothelial carcinoma in situ and non-neoplastic urothelium: an analysis of cytokeratin 20, p53, and CD44 antigens. McKenney JK; Desai S; Cohen C; Amin MB. *J Surg Pathol* 2001; Aug;25(8): p1074-8.
 Micropapillary carcinoma of the urothelial tract. A clinicopathologic study of 38 cases. Alvarado-Cabrero I; Sierra-Santesteban FI, et al.. *Ann Diagn Pathol* 2005; Feb;9(1): p1-5.

Case No. 8, Accession No. 31240

May 2011

Canoga Park - Wilms tumor
Carlsbad (Genoptix Medical Laboratory) - Nephroblastoma (Wilms tumor)
Costa Mesa (College Hospital) - Nephroblastoma
Glendale - Wilms tumor
Loma Linda (Loma Linda University) - Wilms tumor
San Diego (Naval Medical Center) - Wilms tumor
Florida (Munroe Regional Medical Center) - Wilms tumor
Florida (Naples Pathology Associates) - Nephroblastoma
Georgia, Atlanta - Wilms tumor, blastemal predominant
Illinois (Heartland Regional Medical Center) - Nephroblastoma
Illinois (Loyola University of Chicago) - Wilms tumor
Kansas (Coffeyville Regional Medical Center) - Nephroblastoma (Wilms tumor)
Kansas (Peterson Laboratory Services) - Nephroblastoma
Louisiana (LSUHSC-Shreveport) - Wilms tumor (2)
Maryland (University of Maryland) - Nephroblastoma
Massachusetts (BWH Pathology) - Wilms tumor of kidney
Michigan (Henry Ford Hospital Residents) - Wilms tumor

New Mexico (The University of New Mexico Pathology Residents) - Wilms tumor
New York (St. Joseph Hospital) - Wilms tumor
New York (SUNY Stony Brook University) - Wilms tumor, blastemal component only, favorable histology
Pennsylvania (Conemaugh Memorial Medical Center) - Wilms tumor
Pennsylvania (Drexel University College of Medicine) - Wilms tumor
Puerto Rico (University of Puerto Rico) - Wilms tumor, triphasic, favorable histology
Tennessee (Wake Forest University) - Wilms tumor
Texas, Crystal Beach - Nephroblastoma
Texas, Lubbock - Wilms tumor
Texas (Scott & White Memorial Hospital) - Wilms tumor
Wisconsin, Madison - Wilms tumor
Wisconsin (Medical Assessment and Consultation, S.C.) - Nephroblastoma (Wilms tumor)
Australia (St. Vincent's Hospital, Sydney) - Nephroblastoma
Canada (Pasqua Hospital) - Nephroblastoma
England (John Radcliffe Hospital) - Wilms tumor
Ireland (University College Hospital, Galway) - Nephroblastoma
Japan (Asashi General Hospital) - Nephroblastoma
Japan (Setagaya-Ku) - Nephroblastoma
Japan (Shizuoka Tokashukei Hospital) - Nephroblastoma
Saudi Arabia (King Khalid University Hospital) - Nephroblastoma (Wilms tumor)
Spain (Provisa Medical Center) - Nephroblastoma
The Netherlands, Amstelveen - Nephroblastoma

Case 8 - Diagnosis:

Wilms tumor ("nephroblastoma"), kidney
 T-71000, M-89603

Case 8 - References:

Long-term outcomes for infants with very low risk Wilms tumor treated with surgery alone in National Wilms Tumor Study-5. Shamberger RC; Anderson JR; Breslow NE; Perlman EJ; Beckwith JB, et al. *Ann Surg* 2010; Mar;251(3): p555-8.
 HER2/neu expression: a predictor for differentiation and survival in children with Wilms tumor. Ragab SM; Samaka RM; Shams TM. *Pathol Oncol Res* 2010; Mar;16(1): p61-7.
 Wilms tumor in adult. Karim ME; Momen MA, et al. *Mymensingh Med J* 2010; Apr;19(2): p299-302.
 Desmoplastic small round cell tumor of the kidney mimicking Wilms tumor: a case report and review of the literature. da Silva RC; Medeiros Filho P, et al. *Appl Immunohistochem Mol Morphol* 2009; Dec;17(6): p557-62.
 Adult extrarenal Wilms tumor of the uterus with teratoid features. Garcia-Galvis OF; Stolnicu S, et al. *Hum Pathol* 2009; Mar;40(3): p418-24.

Case No. 9, Accession No. 30565

May 2011

Canoga Park - Renal cell carcinoma, chromophobe
Carlsbad (Genoptix Medical Laboratory) - Clear cell renal cell carcinoma, grade 3
Costa Mesa (College Hospital) - Renal cell carcinoma
Glendale - Renal cell carcinoma, clear cell
Loma Linda (Loma Linda University) - Renal cell carcinoma, chromophobe type
San Diego (Naval Medical Center) - Renal cell carcinoma with papillary features
Florida (Munroe Regional Medical Center) - Renal cell carcinoma, clear cell
Florida (Naples Pathology Associates) - Renal cell carcinoma, clear cell type
Georgia, Atlanta - Clear cell papillary renal cell carcinoma
Illinois (Heartland Regional Medical Center) - Renal cell carcinoma, clear cell type
Illinois (Loyola University of Chicago) - Clear cell renal cell carcinoma
Kansas (Coffeyville Regional Medical Center) - Renal cell carcinoma (granular cell type)
Kansas (Peterson Laboratory Services) - Clear cell renal cell carcinoma, grade 3
Louisiana (LSUHSC-Shreveport) - Clear cell renal cell carcinoma (2)

Maryland (University of Maryland) - Clear cell renal cell carcinoma with eosinophilic features
Massachusetts (BWH Pathology) - Renal cell carcinoma, clear cell type
Michigan (Henry Ford Hospital Residents) - Chromophobe renal cell carcinoma
New Mexico (The University of New Mexico Pathology Residents) - Chromophobe renal cell carcinoma
New York (St. Joseph Hospital) - Chromophobe renal cell carcinoma
New York (SUNY Stony Brook University) - Clear cell papillary renal cell carcinoma, eosinophilic variant
Pennsylvania (Conemaugh Memorial Medical Center) - Renal cell carcinoma, clear cell type
Pennsylvania (Drexel University College of Medicine) - Renal cell carcinoma, clear cell type
Puerto Rico (University of Puerto Rico) - Clear cell renal cell carcinoma, rule out chromophobe renal cell carcinoma and renal carcinoma associated with Xp11.2 translocation
Tennessee (Wake Forest University) - Clear cell renal cell carcinoma
Texas, Crystal Beach - Clear cell carcinoma
Texas, Lubbock - Renal cell carcinoma, clear cell type
Texas (Scott & White Memorial Hospital) - Renal cell carcinoma, clear cell vs. granular
Wisconsin, Madison - Renal cell carcinoma (chromophobe cell carcinoma)
Wisconsin (Medical Assessment and Consultation, S.C.) - High grade renal cell carcinoma, clear cell type
Australia (St. Vincent's Hospital, Sydney) - Clear cell renal cell carcinoma
Canada (Pasqua Hospital) - Renal cell carcinoma, clear cell type
England (John Radcliffe Hospital) - Chromophobe carcinoma
Ireland (University College Hospital, Galway) - Renal cell carcinoma, conventional clear cell type
Japan (Asahi General Hospital) - Clear cell renal cell carcinoma
Japan (Setagaya-Ku) - Clear cell carcinoma
Japan (Shizuoka Tokashukei Hospital) - Renal cell carcinoma, clear cell type
Saudi Arabia (King Khalid University Hospital) - Clear cell renal cell carcinoma, eosinophilic variant
Spain (Provisa Medical Center) - Clear cell, renal cell carcinoma
The Netherlands, Amstelveen - Chromophobe carcinoma

Case 9 - Diagnosis:

Renal cell carcinoma, clear cell type, kidney
 T-71000, M-83103

Case 9 - References:

Clear cell renal cell carcinoma with smooth muscle stroma. Shannon BA; Cohen RJ, et al. *Hum Pathol* 2009; Mar;40(3): p425-9.
 Expression of S-100 protein in renal cell neoplasms. Lin F; Yang W, et al. *Hum Pathol* 2006; Apr;37(4): p462-70.
 Cytogenetic profile predicts prognosis of patients with clear cell renal cell carcinoma. Klatte T; Rao PN, et al. *Clin Oncol* 2009; Feb 10;27(5): p746-53.
 Pigmented renal clear cell carcinoma with melanocytic differentiation. Lei JY; Middleton LP, et al. *Hum Pathol* 2001; Feb;32(2): p233-6.
 Clear cell renal cell carcinoma with syncytial giant cells: a case report and review of the literature. Shen R; Wen P. *Arch Pathol Lab Med* 2004; Dec;128(12): p1435-8.
 Clear cell renal cell carcinoma. Grignon DJ; Che M. *Clin Lab Med* 2005; Jun;25(2): p305-16.

Case No. 10, Accession No. 31129

May 2011

Canoga Park - Renal cell carcinoma, papillary type
Carlsbad (Genoptix Medical Laboratory) - Oncocytoma and papillary renal cell carcinoma component
Costa Mesa (College Hospital) - Papillary transitional cell carcinoma
Glendale - Papillary renal cell carcinoma, type 2
Loma Linda (Loma Linda University) - Renal cell carcinoma, papillary type
San Diego (Naval Medical Center) - Papillary renal cell carcinoma
Florida (Munroe Regional Medical Center) - Papillary renal cell carcinoma
Florida (Naples Pathology Associates) - Papillary renal carcinoma
Georgia, Atlanta - Papillary renal cell carcinoma, eosinophilic variant
Illinois (Heartland Regional Medical Center) - Renal cell carcinoma, papillary, type 2

Illinois (Loyola University of Chicago) - Papillary renal cell carcinoma, mixed type I and II
Kansas (Coffeyville Regional Medical Center) - Renal cell carcinoma, papillary type
Kansas (Peterson Laboratory Services) - Papillary renal cell carcinoma, type 2
Louisiana (LSUHSC-Shreveport) - Papillary renal cell carcinoma (2)
Maryland (University of Maryland) - Papillary renal cell carcinoma, type I
Massachusetts (BWH Pathology) - Papillary renal cell carcinoma
Michigan (Henry Ford Hospital Residents) - Papillary renal cell carcinoma, type 2
New Mexico (The University of New Mexico Pathology Residents) - Papillary renal cell carcinoma
New York (St. Joseph Hospital) - Papillary renal cell carcinoma
New York (SUNY Stony Brook University) - Papillary carcinoma, type 2
Pennsylvania (Conemaugh Memorial Medical Center) - Renal papillary cell carcinoma, type I
Pennsylvania (Drexel University College of Medicine) - Renal cell carcinoma, papillary type
Puerto Rico (University of Puerto Rico) - Papillary renal cell carcinoma, type I
Tennessee (Wake Forest University) - Papillary renal cell carcinoma
Texas, Crystal Beach - Oncocytoma
Texas, Lubbock - Papillary renal cell carcinoma
Texas (Scott & White Memorial Hospital) - Papillary renal cell carcinoma
Wisconsin, Madison - Renal cell carcinoma, papillary renal cell carcinoma
Wisconsin (Medical Assessment and Consultation, S.C.) - Renal cell carcinoma, papillary type
Australia (St. Vincent's Hospital, Sydney) - Papillary renal cell carcinoma
Canada (Pasqua Hospital) - Papillary renal cell carcinoma
England (John Radcliffe Hospital) - Type 2, papillary renal cell carcinoma
Ireland (University College Hospital, Galway) - Papillary renal cell carcinoma
Japan (Asahi General Hospital) - Papillary renal cell carcinoma
Japan (Setagaya-Ku) - Papillary renal cell carcinoma
Japan (Shizuoka Tokashukei Hospital) - Papillary renal cell carcinoma
Saudi Arabia (King Khalid University Hospital) - Renal cell carcinoma, papillary variant, type 2
Spain (Provisa Medical Center) - Type 2, papillary renal cell carcinoma
The Netherlands, Amstelveen - Papillary carcinoma

Case 10 - Diagnosis:

Papillary renal cell carcinoma, type 2, kidney
 T-72000, M-83123

Case 10 - References:

Solid variant of papillary renal cell carcinoma with spindle cell and tubular components. Cantley R; Gattuso P; Cimbaluk D. *Arch Pathol Lab Med* 2010; Aug;134(8): p1210-4.
 Clear cell papillary renal cell carcinoma: a distinct histopathologic and molecular genetic entity. Gobbo S; Eble JN; Grignon DJ; Martignoni G, et al. *Am J Surg Pathol* 2008; Aug;32(8): p1239-45.
 Renal papillary adenoma--a putative precursor of papillary renal cell carcinoma. Wang KL; Weinrach DM, et al. *Pathol* 2007; Feb;38(2): p239-46.
 Papillary renal cell carcinoma: a clinicopathological study of 35 cases. Yamanaka K; Miyake H, et al. *Int J Urol* 2006; Aug;13(8): p1049-52.
 Prognostic factors of papillary renal cell carcinoma: results from a multi-institutional series after pathological review. Herrmann E; Trojan L, et al. *J Urol* 2010; Feb;183(2): p460-6.