



CALIFORNIA
TUMOR TISSUE REGISTRY

1179

“GENERAL PATHOLOGY”

Study Cases, Subscription A

September 2004



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

Target audience:

Practicing pathologists and pathology residents.

Goal:

To acquaint the participant with the histologic features of a variety of benign and malignant neoplasms and tumor-like conditions.

Objectives:

The participant will be able to recognize morphologic features of a variety of benign and malignant neoplasms and tumor-like conditions and relate those processes to pertinent references in the medical literature.

Educational methods and media:

Review of representative glass slides with associated histories.
Feedback on consensus diagnoses from participating pathologists.
Listing of selected references from the medical literature.

Principal faculty:

Weldon K. Bullock, MD
Donald R. Chase, MD

CME Credit:

Loma Linda University School of Medicine designates this continuing medical education activity for up to 2 hours of Category I of the Physician's Recognition Award of the American Medical Association.
CME credit is offered for the subscription year only.

Accreditation:

Loma Linda University School of Medicine is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to sponsor continuing medical education for physicians.

Contributor: Jozef Kollin, M.D.
Lakewood, CA

Case No. 1 - September 2004

Tissue from: Right neck

Accession #29846

Clinical Abstract:

A mass was discovered in the right neck of this 44 year-old male.

Gross Pathology:

The 3.0 x 2.5 x 2.4 cm ovoid well circumscribed right neck mass was tan-gray, without nodularity.

Contributor: Kenneth A. Frankel, M.D.
Covina, CA

Case No. 2 - September 2004

Tissue from: Parotid gland

Accession #29582

Clinical Abstract:

This 41-year-old female was found to have a mass in her right parotid gland.

Gross Pathology:

The 4.6 x 3.2 x 2.5 cm parotid gland had a 2.2 cm diameter solid and cystic appearing nodule.

**Contributor: LLUMC Pathology Group (mtm)
Loma Linda, CA**

Case No. 3 - September 2004

Tissue from: Retroperitoneal mass

Accession #29665

Clinical Abstract:

A 44-year-old male had a history of hypertension (180/122) with a stroke at age 41. During follow-up for pancreatitis, a CT scan showed two retroperitoneal masses. A 2.5 cm mass was present along the medial aspect of the inferior vena cava. The second mass was inferior to the first, between the right kidney and the vena cava. This second mass was estimated at 5.5 cm and it compressed and displaced the adjacent vena cava.

Gross Pathology:

Adjacent to the resected right kidney was a 5.5 x 5.4 x 4.0 cm encapsulated lobulated pink-tan mass with a homogeneous red-tan cut surface.

**Contributor: LLUMC Pathology Group (dc)
Loma Linda, CA**

Case No. 4 - September 2004

Tissue from: Right adrenal

Accession #29759

Clinical Abstract:

During follow up for a 4-vessel coronary artery bypass graft, this 47-year-old male was discovered to have a right adrenal mass. A composite resection of right adrenal and kidney was performed.

Gross Pathology:

Within the 1950 gram, 20.2 x 19.5 x 13.5 cm resection specimen was a 14.5 x 9.5 x 9.0 cm multinodular, heterogeneous, gray to yellow-tan mass that was adjacent to the upper pole of the kidney.

Contributor: Douglas Kahn, M.D.
Sylmar, CA

Case No. 5 - September 2004

Tissue from: Right testicle

Accession #29624

Clinical Abstract:

After ten years of treatment for multiple myeloma, this 82-year-old male was found to have right testicular enlargement. A right orchiectomy was performed.

Gross Pathology:

The 4.5 cm testicular tumor had a cuff of residual normal-appearing parenchyma. The cut surface of the tumor was homogeneous tan, finely granular with focal hemorrhage but no apparent necrosis.

SPECIAL STUDIES (Outside):

PLAP	negative
Wide spectrum keratin	negative
Kappa	negative
Lambda	positive
CD20	negative
PCA (plasmacytic antigen)	positive
CD45	10% of the small-sized tumor cells were positive

Contributor: Rebecca L. Christensen, M.D.
San Diego, CA

Case No. 6 - September 2004

Tissue from: Omentum

Accession #29718

Clinical Abstract:

A 41-year-old female with a history of endometriosis presented with a left complex adnexal mass. The patient's CA-125 was elevated. She underwent a hysterectomy with bilateral salpingo-oophorectomy as well as omentectomy.

Gross Pathology:

The 138 gram uterus was grossly unremarkable. The left ovary had cysts that microscopically show endometriosis. The 15.0 x 10.0 x 1.0 cm portion of omentum included a 6.5 x 6.5 x 4.0 cm lobulated mass.

SPECIAL STUDIES:

Negative:	Pancytokeratin, CK7, CK20, EMA, S-100, Chromogranin A, Synaptophysin, NSE, SMA, CD117
Positive:	Vimentin

Contributor: Alexander K. Lyster, M.D.
Victoria, TX

Case No. 7 - September 2004

Tissue from: Right breast

Accession #29857

Clinical Abstract:

This 21-year-old female presented with a right breast mass. A right lung nodule was also noted. She had recently been pregnant. Laboratory studies are not available.

Gross Pathology:

The 6.0 x 4.0 x 3.0 cm firm irregular ovoid portion of breast tissue contained a 5.0 x 3.0 x 2.0 cm dark hemorrhagic tan gray mass.

Contributor: Howard Otto, M.D.
Cheboygan, MI

Case No. 8 - September 2004

Tissue from: Right kidney

Accession #29869

Clinical Abstract:

During work-up for a colovesical fistula, thought to be due to perforated diverticulitis, this 63-year-old male was found to have a right kidney mass.

Gross Pathology:

The 14 x 7.5 x 6.5 cm kidney had a 6.0 cm x 5.0 cm well-demarcated cortical nodule bulging from the upper portion. The cut surface was tan-gray-brown, similar to the adjacent renal cortex. There was no invasion of hilum or renal capsule.

Contributor: Tai-Po Tschang, M.D.
Fresno, CA

Case No. 9 - September 2004

Tissue from: Paratesticular tissue

Accession #29642

Clinical Abstract:

This 54-year-old male complained of a left scrotal mass. A left orchiectomy was performed for removal of a large paratesticular mass.

Gross Pathology:

The 418 gram testicular resection specimen included a 14.5 x 11.5 x 4.5 cm rubbery, yellow to tan-brown paratesticular mass.

Contributor: LLUMC Pathology Group (wc)
Loma Linda, CA

Case No. 10 - September 2004

Tissue from: Omentum

Accession #29751

Clinical Abstract:

A CT exam for abdominal pain in this 58-year-old female showed ascites and a cyst in the liver. An ultrasound was also performed, showing multiple masses throughout the abdomen. The ovaries were not visualized. She had had a prior hysterectomy but without oophorectomy. At surgery, tumor was found to involve the appendix, both ovaries, serosal surface of cecum and sigmoid colon, the pelvic peritoneum and produced a large omental mass.

Gross Pathology:

The 820 gram omentum measured 19.5 x 19.0 x 6.0 cm and contained multiple white and red-tan nodules ranging from 0.5 cm to 3.5 cm.

SPECIAL STUDIES:

CK20

positive

CK7

negative



CALIFORNIA
TUMOR TISSUE REGISTRY

GENERAL PATHOLOGY

Minutes – Subscription A

September 2004



SUGGESTED READING (General Topics from Recent Literature):

- Colorectal Adenoma to Carcinoma Progression Follows Multiple Pathways of Chromosomal Instability. Hermsen, M, Postma C, Baak J, et al. *Gastroenterology* 2002; 123:1109-1119.
- Dangerous Abbreviations. *Hum Pathol* 2004; 35(5):529-531. Booker DL and Berman JJ.
- Cancer Information on the World Wide Web. Gross Characteristics. Trumbo Craig W. *J of the National Cancer Instit* 2004; 96(4):332-333.
- Cancer Stem Cells. Are We Missing the Target? Jones, JJ, Matsui WH, Smith, D. *J of the National Cancer Instit* 2004; 96(8):583-585.
- Prostate Cancers in Men with Low PSA Level--Must We Find Them? Carter HB. *N Eng J Med* 2004; 2292-2294.

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FILE DIAGNOSES

(If possible, submit answers on website at www.cttr.org. Click "subscriptions", then "submit answers".)

CTTR Subscription A

September 2004

Case 1:

Hodgkin's lymphoma, nodular sclerosis type
T-Y0600, M-96503

Case 2:

Acinic cell carcinoma, parotid gland
T-55110, M-85501

Case 3:

Pheochromocytoma, retroperitoneum
T-71000, M-87000

Case 4:

Adrenal cortical carcinoma, adrenal gland
T-93000, M-83703

Case 5:

Plasmacytoma/myeloma, testicle
T-78000, M-97303

Case 6:

Low grade, extra-uterine endometrial stromal sarcoma, omentum
T-63850, M-89303

Case 7:

Choriocarcinoma, breast
T-04000, M-91003

Case 8:

Oncocytoma, kidney
T-71000, M-82900

Case 9:

Well-differentiated inflammatory liposarcoma, para-testicular
T-78000, M-88513

Case 10:

Omental mucinous (pseudomyxoma peritoni) probably appendiceal in origin
T-63850, M-84806

Alameda (Alameda County Medical Center) - Hodgkin's disease, nodular sclerosing
Fontana (Kaiser Permanente) - Hodgkin's lymphoma, nodular sclerosis type
Glendale - Hodgkin's disease
Howard/Fremont - Nodular sclerosing Hodgkin's, rule out metastatic nasopharyngeal carcinoma
Irvine (University of California) - Classical Hodgkin's lymphoma mixed cellularity type
Laguna (Laguna Pathology Medical Group) - Nodular sclerosing Hodgkin's disease
Long Beach - Nodular sclerosing Hodgkin's disease (8)
Monterey (Community Hospital of Monterey Peninsula) - Hodgkin's disease, classical
Monterey Park (Garfield Hospital) - Hodgkin's lymphoma, mixed cellularity type
Mountain View (El Camino Pathology Group) - Nodular sclerosing Hodgkin's disease
Orange (UCI Medical Center) - Hodgkin's disease, nodular sclerosis
Orange (Orange County Pathology Medical Group) - Nodular sclerosis Hodgkin's disease
Sacramento (UC Davis Residents) - Hodgkin's lymphoma, mixed cellularity type
Santa Rosa (Santa Rosa Memorial Hospital) - Hodgkin's disease
Tustin Ranch - Hodgkin's lymphoma, mixed cellularity type
Ventura - Hodgkin's disease, mixed cellularity
Arkansas (University of Arkansas Medical Center) - Nodular sclerosis Hodgkin's lymphoma
Arizona (Phoenix) - Classical Hodgkin's lymphoma
Colorado (Evergreen) - Nodular sclerosing Hodgkin's disease
Colorado (Lutheran Medical Center) - Hodgkin's lymphoma
Florida (Tallahassee) - Classic Hodgkin's lymphoma
Florida (Winter Haven Hospital) - Hodgkin's disease, nodular sclerosis
Illinois (Burr Ridge) - Reactive lymphoid hyperplasia
Illinois (Juliet) - Lymphocytic rich classical Hodgkin's disease
Illinois (Northwestern Memorial Hospital) - Hodgkin's disease
Indiana (Howard Community Hospital) - Nodular lymphocytic predominant Hodgkin's disease
Louisiana (Louisiana State University Medical Center) - Hodgkin's lymphoma, nodular sclerosing (cellular)
Louisiana (Methodist Hospital Group) - Nodular sclerosing Hodgkin's disease
Maryland (National Naval Medical Center) - Hodgkin's lymphoma, classical
Maryland (University of Maryland) - Classical Hodgkin's lymphoma
Maryland (Voodoo Medicine) - Hodgkin's lymphoma, nodular sclerosing
Massachusetts (Berkshire Medical Center) - Hodgkin's disease, lymphocyte predominant
Massachusetts (New England Medical Center) - Hodgkin's lymphoma, nodular sclerosis type
Michigan (Pathology Services) - Hodgkin's disease, lymphocyte predominant
Michigan (St. Joseph Mercy Hospital) - Hodgkin's lymphoma
Minnesota (Fairview Southdale Hospital) - Hodgkin's, nodular sclerosing
Missouri (Truman Medical Center) - Nodular sclerosing Hodgkin's disease
Nebraska (Creighton University School of Medicine) - Hodgkin's lymphoma, nodular sclerosing type
New York (Long Island Jewish Medical Center) - Hodgkin's disease, early nodular sclerosing type
New York (Stony Brook University Hospital Residents) - Hodgkin's lymphoma, mixed cellularity type
New York (Westchester Medical Center) - Nodular sclerosis Hodgkin's lymphoma
North Carolina (Fayetteville) - Hodgkin's lymphoma
Ohio (Dayton) - Hodgkin's lymphoma, nodular sclerosing (5)
Ohio (Medical College of Ohio) - Hodgkin's lymphoma, lymphocyte rich
Ohio (McCullough Hyde Memorial Hospital) - Hodgkin's disease, lymphocytic predominant
Pennsylvania (Drexel University College of Medicine) - Nodular sclerosing Hodgkin's lymphoma
Pennsylvania (Lehigh Valley Hospital) - Hodgkin's lymphoma, nodular sclerosing type
Pennsylvania (Mt. Nittany Medical Center) - Nodular sclerosing classical Hodgkin's lymphoma, right neck
Pennsylvania (Pennsylvania Hospital) - Hodgkin's, nodular sclerosis
Puerto Rico (University of Puerto Rico) - Classic Hodgkin's lymphoma, nodular sclerosis type
Rhode Island (RI Hospital) - Classic Hodgkin's, nodular sclerosis
Texas (Lackland AFB) - Hodgkin's lymphoma
Texas (Lubbock) - Hodgkin's lymphoma, nodular sclerosis
Texas (ProPath Associates) - Hodgkin's lymphoma, nodular sclerosis type
Texas (Scott & White Memorial Hospital) - Hodgkin's lymphoma
Wisconsin (Bellin Health) - Nodular lymphocyte predominant Hodgkin's lymphoma
Wisconsin (Meriter Hospital) - Classical Hodgkin's disease, nodular sclerosis type
Wyoming (Greenbrier Valley Medical Center) - Hodgkin's disease, nodular sclerosis
Australia (North Queensland Pathology Group) - Hodgkin's disease lymphocyte predominant
Australia (Royal Prince Alfred Hospital) - Nodular sclerosing Hodgkin's lymphoma
Brazil (Gustavo Rubino De Azevedo Focchi) - Hodgkin's disease, nodular sclerosing type, cellular phase (2)

Canada (Foothills Medical Center) - Hodgkin's lymphoma, nodular sclerosing
Canada (Woodstock General Hospital) - Hodgkin's lymphoma
Hong Kong (Hong Kong Baptist Hospital) - Nodular sclerosing Hodgkin's lymphoma
Italy (Naples) - Hodgkin's lymphoma
Netherlands, Amsterdam - Hodgkin's lymphoma, nodular sclerosing
Saudi Arabia - Hodgkin's lymphoma nodular sclerosing
Saudi Arabia (King Khalid University) - Hodgkin's lymphoma, nodular sclerosing type

Case 1 - Diagnosis:

Hodgkin's lymphoma, nodular sclerosing type
T-60600, M-96503

Case 1 - References:

Sukpanichant S. Analysis of 1983 Cases of Malignant Lymphoma in Thailand According to the World Health Organization Classification. *Hum Pathol* 2004; 35(2):224-230.
Barrera R, Shintaku IP, Nakamura H and Said JW. The Immunohistochemistry of Hodgkin's Disease. *Semin Diagn Pathol* 1992; 9(4):265-271.
Hsu SM and Hsu PL. The Nature of Reed-Sternberg Cells. Phenotype, Genotype and the Properties. *Crit Rev Oncol* 1994; 5:213-245.
Weiss LM and Chang KL. Molecular Biologic Studies of Hodgkin's Disease. *Semin Diagn Pathol* 1992; 9(4):272-278.
Weinreb M, Day PJ, Niggli F, et al. The Role of Epstein-Barr Virus in Hodgkin's Disease from Different Geographical Areas. *Arch DiChild* 1996; 74(1):27-31.
Chang KL, Chen YY, et al. High Prevalence of Epstein-Barr Virus in Reed-Sternberg Cells of Hodgkin's Disease Occurring in Peru. *Blood* 1993; 81(2):496-501.

Case No. 2, Accession No. 29582

September 2004

Alameda (Alameda County Medical Center) - Acinic cell adenocarcinoma
Fontana (Kaiser Permanente) - Acinic cell carcinoma
Glendale - Acinic cell adenocarcinoma
Howard/Fremont - Acinic cell carcinoma
Irvine (University of California) - Acinic cell tumor
Laguna (Laguna Pathology Medical Group) - Acinic cell tumor
Long Beach - Acinic cell carcinoma (8)
Monterey (Community Hospital of Monterey Peninsula) - Mucoepidermoid carcinoma
Monterey Park (Garfield Hospital) - Acinic cell tumor, low intermediate grade
Mountain View (El Camino Pathology Group) - Acinic cell carcinoma
Orange (UCI Medical Center) - Acinic cell carcinoma, papillary cystic
Orange (Orange County Pathology Medical Group) - Acinic cell carcinoma
Sacramento (UC Davis Residents) - Acinic cell carcinoma
Santa Rosa (Santa Rosa Memorial Hospital) - Acinic cell carcinoma
Tustin Ranch - Ductal adenoma
Ventura - Pleomorphic adenoma
Arkansas (University of Arkansas Medical Center) - Acinic cell carcinoma, parotid
Arizona (Phoenix) - Acinic cell carcinoma, papilocystic variant
Colorado (Evergreen) - Acinic cell carcinoma
Colorado (Lutheran Medical Center) - Acinic cell carcinoma
Florida (Tallahassee) - Acinic cell carcinoma
Florida (Winter Haven Hospital) - Acinic cell carcinoma
Illinois (Burr Ridge) - Oncocytoma
Illinois (Juliet) - Acinic cell adenocarcinoma
Illinois (Northwestern Memorial Hospital) - Acinic cell carcinoma
Indiana (Howard Community Hospital) - Acinic cell carcinoma
Louisiana (Louisiana State University Medical Center) - Acinic cell carcinoma
Louisiana (Methodist Hospital Group) - Acinic cell carcinoma
Maryland (National Naval Medical Center) - Acinic cell carcinoma
Maryland (University of Maryland) - Acinar cell carcinoma
Maryland (Voodoo Medicine) - Acinic cell carcinoma

Massachusetts (Berkshire Medical Center) - Papilocystic acinic cell carcinoma
Massachusetts (New England Medical Center) - Acinar cell carcinoma
Michigan (Pathology Services) - Pleomorphic adenoma
Michigan (St. Joseph Mercy Hospital) - Acinic cell carcinoma
Minnesota (Fairview Southdale Hospital) - Acinic cell carcinoma
Missouri (Truman Medical Center) - Acinic cell carcinoma
Nebraska (Creighton University School of Medicine) - Papillary adenocarcinoma
New York (Long Island Jewish Medical Center) - Acinic cell carcinoma
New York (Stony Brook University Hospital Residents) - Acinic cell carcinoma
New York (Westchester Medical Center) - Acinic cell carcinoma
North Carolina (Fayetteville) - Acinic cell carcinoma
Ohio (Dayton) - Acinic cell carcinoma (5)
Ohio (Medical College of Ohio) - Low grade mucoepidermoid carcinoma
Ohio (McCullough Hyde Memorial Hospital) - Acinic cell adenocarcinoma
Pennsylvania (Drexel University College of Medicine) - Acinic cell carcinoma, microcystic pattern
Pennsylvania (Lehigh Valley Hospital) - Acinic cell carcinoma metastatic to lymph nodes
Pennsylvania (Mt. Nittany Medical Center) - Acinic cell adenocarcinoma, right parotid gland
Pennsylvania (Pennsylvania Hospital) - Acinic cell adenocarcinoma
Puerto Rico (University of Puerto Rico) - Acinic cell tumor
Rhode Island (RI Hospital) - Acinic cell carcinoma
Texas (Lackland AFB) - Acinar cell carcinoma
Texas (Lubbock) - Intraductal papilloma
Texas (ProPath Associates) - Acinic cell carcinoma of salivary gland (1); Acinic cell adenocarcinoma of salivary gland (1)
Texas (Scott & White Memorial Hospital) - Cystadenocarcinoma
Wisconsin (Bellin Health) - Mucoepidermoid carcinoma
Wisconsin (Meriter Hospital) - Acinic cell carcinoma
Wyoming (Greenbrier Valley Medical Center) - Adenocarcinoma, NOS
Australia (North Queensland Pathology Group) - Acinic cell carcinoma
Australia (Royal Prince Alfred Hospital) - Acinic cell carcinoma
Brazil (Gustavo Rubino De Azevedo Focchi) - Acinic cell carcinoma (2)
Canada (Foothills Medical Center) - Acinic cell carcinoma
Canada (Woodstock General Hospital) - Acinic cell carcinoma
Hong Kong (Hong Kong Baptist Hospital) - Acinic cell tumor
Italy (Naples) - Mucoepidermoid carcinoma
Netherlands, Amsterdam - Acinic cell carcinoma
Saudi Arabia - Acinic cell carcinoma
Saudi Arabia (King Khalid University) - Acinic cell tumor

Case 2 - Diagnosis:

Acinic cell carcinoma, parotid gland
T-55110, M-85501

Case 2 - References:

- Wahlberg P, Anderson H, Biorklund A, et al. Carcinoma of the Parotid and Submandibular Gland--A Study of Survival in 2465 Patients. *Oral Oncol* 2002; 38(7):706-713.
- Harbo G, Bundgaard T, Pedersen D, Sogaard H, et al. Prognostic Indicators for Malignant Tumours of the Parotid Gland. *Clin Otolaryngol* 2002; 27(6):512-516.
- Takahashi T, Moriki T, Ueta S, et al. Colloidlike Material in a Fine Needle Aspirate from Acinic Cell Carcinoma of the Parotid Gland. *Acta Cytol* 2002; 46(6):1165-1166.
- Nagao T, Sugano I, Ishida Y, et al. Hybrid Carcinomas of the Salivary Glands. Report of Nine Cases with a Clinicopathologic, Immunohistochemical, and p53 Gene Alteration Analysis. *Mod Pathol* 2002; 15(7):724-733.
- Riberiro Kde C, Kowalski LP, Saba LM, et al. Epithelial Salivary Glands Neoplasms in Children and Adolescents. A Forty-Four Year Experience. *Med Pediatr Oncol* 2002; 39(6):594-600.

Case No. 3, Accession No. 29665

September 2004

Alameda (Alameda County Medical Center) - Pheochromocytoma
Fontana (Kaiser Permanente) - Pheochromocytoma
Glendale - Pheochromocytoma

Howard/Fremont - Paranglioma
Irvine (University of California) - Pheochromocytoma
Laguna (Laguna Pathology Medical Group) - Paranglioma/pheochromocytoma
Long Beach - Paranglioma (extra-adrenal pheochromocytoma) (8)
Monterey (Community Hospital of Monterey Peninsula) - Pheochromocytoma
Monterey Park (Garfield Hospital) - Malignant paranglioma
Mountain View (El Camino Pathology Group) - Paranglioma
Orange (UCI Medical Center) - Pheochromocytoma
Orange (Orange County Pathology Medical Group) - Paranglioma
Sacramento (UC Davis Residents) - Pheochromocytoma
Santa Rosa (Santa Rosa Memorial Hospital) - Paranglioma (2); Pheochromocytoma (1)
Tustin Ranch - Paranglioma
Ventura - Pheochromocytoma
Arkansas (University of Arkansas Medical Center) - Extra-adrenal paranglioma, retroperitoneum
Arizona (Phoenix) - Pheochromocytoma, malignant
Colorado (Evergreen) - Extra-adrenal pheochromocytoma
Colorado (Lutheran Medical Center) - Pheochromocytoma
Florida (Tallahassee) - Pheochromocytoma
Florida (Winter Haven Hospital) - Malignant paranglioma
Illinois (Burr Ridge) - Pheochromocytoma
Illinois (Juliet) - Paranglioma
Illinois (Northwestern Memorial Hospital) - Extra-adrenal pheochromocytoma
Indiana (Howard Community Hospital) - Paranglioma/pheochromocytoma
Louisiana (Louisiana State University Medical Center) - Pheochromocytoma
Louisiana (Methodist Hospital Group) - Malignant pheochromocytoma
Maryland (National Naval Medical Center) - Extra-adrenal paranglioma
Maryland (University of Maryland) - Paranglioma
Maryland (Voodoo Medicine) - Pheochromocytoma
Massachusetts (Berkshire Medical Center) - Pheochromocytoma
Massachusetts (New England Medical Center) - Paranglioma
Michigan (Pathology Services) - Paranglioma
Michigan (St. Joseph Mercy Hospital) - Paranglioma
Minnesota (Fairview Southdale Hospital) - Pheochromocytoma/paranglioma
Missouri (Truman Medical Center) - Paranglioma
Nebraska (Creighton University School of Medicine) - Pheochromocytoma
New York (Long Island Jewish Medical Center) - Pheochromocytoma
New York (Stony Brook University Hospital Residents) - Pheochromocytoma
New York (Westchester Medical Center) - Pheochromocytoma
North Carolina (Fayetteville) - Pheochromocytoma
Ohio (Dayton) - Pheochromocytoma (5)
Ohio (Medical College of Ohio) - Pheochromocytoma
Ohio (McCullough Hyde Memorial Hospital) - Pheochromocytoma
Pennsylvania (Lehigh Valley Hospital) - Pheochromocytoma
Pennsylvania (Mt. Nittany Medical Center) - Extra-adrenal pheochromocytoma (paranglioma), retroperitoneum
Pennsylvania (Pennsylvania Hospital) - Extra-adrenal paranglioma
Pennsylvania (Drexel University College of Medicine) - Pheochromocytoma
Puerto Rico (University of Puerto Rico) - Pheochromocytoma
Rhode Island (RI Hospital) - Paranglioma/pheochromocytoma
Texas (Lackland AFB) - Pheochromocytoma/malignant paranglioma
Texas (Lubbock) - Paranglioma
Texas (ProPath Associates) - Paranglioma (2)
Texas (Scott & White Memorial Hospital) - Paranglioma
Wisconsin (Bellin Health) - Pheochromocytoma
Wisconsin (Meriter Hospital) - Paranglioma
Wyoming (Greenbrier Valley Medical Center) - Pheochromocytoma
Australia (North Queensland Pathology Group) - Pheochromocytoma
Australia (Royal Prince Alfred Hospital) - Malignant paranglioma
Brazil (Gustavo Rubino De Azevedo Focchi) - Pheochromocytoma (2)
Canada (Foothills Medical Center) - Paranglioma
Canada (Woodstock General Hospital) - Malignant pheochromocytoma
Hong Kong (Hong Kong Baptist Hospital) - Pheochromocytoma
Italy (Naples) - Paranglioma
Netherlands, Amsterdam - Pheochromocytoma

Case 3 - Diagnosis:

Pheochromocytoma, retroperitoneum
T-71000, M-87000

Case 3 - References:

- Webb TA, Sheps SG and Carney JA. Differences Between Sporadic Pheochromocytoma and Pheochromocytoma in Multiple Endocrine Neoplasia, Type 2. *Am J Surg Pathol* 1980; 4(2):121-126.
- McCarthy EF, Bonfiglio M and Lawton W. A Solitary Functioning Osseous Metastasis from a Malignant Pheochromocytoma of the Organ of Zuckerkandl. *Cancer* 1977; 40(6):3092-3096.
- Atuk NO, Teja K, Mondzelewski P, et al. Avascular Necrosis of Pheochromocytoma Followed by Spontaneous Remission. *Arch Intern Med* 1977; 137(8):1073-1075.
- Eigelberger MS and Duh OY. Pheochromocytoma. *Curr Treat Options Oncol* 2001; 2(4):321-329.
- Bethea MC, Baltz HJ, Rodgers RE and Weichert RF 3rd. Pheochromocytoma and Renal Artery Stenosis. A Review of the Literature and Case Report. *South Med J* 1973; 66(4):497-500.
- Dalby MC, Burke M, Radley-Smith R, et al. Pheochromocytoma Presenting After Cardiac Transplantation for Dilated Cardiomyopathy. *J Heart Lung Transplant* 2001; 20(7):773-775.

Case No. 4, Accession No. 29759

September 2004

- Alameda (Alameda County Medical Center) - Adrenal cortical carcinoma
Fontana (Kaiser Permanente) - Adrenal cortical carcinoma
Glendale - Adrenal cortical carcinoma
Howard/Fremont - Adrenocortical carcinoma, rule out metastatic melanoma
Irvine (University of California) - Adrenal cortical neoplasm
Laguna (Laguna Pathology Medical Group) - Adrenal cortical carcinoma
Long Beach - Adrenal cortical carcinoma (8)
Monterey (Community Hospital of Monterey Peninsula) - Adrenal cortical carcinoma
Monterey Park (Garfield Hospital) - Adrenal cortical carcinoma
Mountain View (El Camino Pathology Group) - Adrenocortical carcinoma
Orange (UCI Medical Center) - Adrenal cortical carcinoma
Orange (Orange County Pathology Medical Group) - Adrenal cortical carcinoma
Sacramento (UC Davis Residents) - Adrenal cortical carcinoma
Santa Rosa (Santa Rosa Memorial Hospital) - Adrenal cortical tumor (2); Adrenocortical oncocytoma (1)
Tustin Ranch - Adrenocortical carcinoma
Ventura - Adrenocortical carcinoma
Arkansas (University of Arkansas Medical Center) - Adrenal cortical carcinoma
Arizona (Phoenix) - Adrenocortical carcinoma
Colorado (Evergreen) - Adrenocortical carcinoma
Colorado (Lutheran Medical Center) - Adrenal cortical carcinoma
Florida (Tallahassee) - Adrenal cortical carcinoma
Florida (Winter Haven Hospital) - Adrenal cortical carcinoma
Illinois (Burr Ridge) - Well-differentiated adrenal cortical carcinoma
Illinois (Juliet) - Adrenocortical carcinoma
Illinois (Northwestern Memorial Hospital) - Adrenal cortical carcinoma
Indiana (Howard Community Hospital) - Adrenocortical carcinoma
Louisiana (Louisiana State University Medical Center) - Adrenal cortical carcinoma
Louisiana (Methodist Hospital Group) - Pheochromocytoma
Maryland (National Naval Medical Center) - Adrenal cortical carcinoma
Maryland (University of Maryland) - Adrenal cortical carcinoma
Maryland (Voodoo Medicine) - Adrenal cortical carcinoma
Massachusetts (Berkshire Medical Center) - Adrenal cortical carcinoma
Massachusetts (New England Medical Center) - Adrenal cortical carcinoma
Michigan (Pathology Services) - Adrenocortical carcinoma
Michigan (St. Joseph Mercy Hospital) - Renal cell carcinoma
Minnesota (Fairview Southdale Hospital) - Adrenal cortical carcinoma

Missouri (Truman Medical Center) - Adrenocortical carcinoma
Nebraska (Creighton University School of Medicine) - Adrenal cortical carcinoma
New York (Long Island Jewish Medical Center) - Adrenal cortical carcinoma
New York (Stony Brook University Hospital Residents) - Adrenal cortical carcinoma
New York (Westchester Medical Center) - Adrenal cortical carcinoma
North Carolina (Fayetteville) - Adrenal cortical carcinoma
Ohio (Dayton) - Adrenal cortical carcinoma (5)
Ohio (Medical College of Ohio) - Adrenocortical neoplasm, favor carcinoma
Ohio (McCullough Hyde Memorial Hospital) - Adrenal cortical carcinoma
Pennsylvania (Drexel University College of Medicine) - Adrenal cortical carcinoma
Pennsylvania (Lehigh Valley Hospital) - Pheochromocytoma
Pennsylvania (Mt. Nittany Medical Center) - Adrenocortical carcinoma, right adrenal gland
Pennsylvania (Pennsylvania Hospital) - Pheochromocytoma
Puerto Rico (University of Puerto Rico) - Adrenal cortical carcinoma
Rhode Island (RI Hospital) - Adrenal cortical carcinoma
Texas (Lackland AFB) - Adrenal cortical carcinoma vs. pheochromocytoma
Texas (Lubbock) - Oncocytic carcinoma
Texas (ProPath Associates) - Adrenal oncocytoma (2)
Texas (Scott & White Memorial Hospital) - Adrenal cortical carcinoma
Wisconsin (Bellin Health) - Adrenal cortical adenoma
Wisconsin (Meriter Hospital) - Adrenal cortical carcinoma
Wyoming (Greenbrier Valley Medical Center) - Adrenal cortical carcinoma
Australia (North Queensland Pathology Group) - Adrenal cortical carcinoma
Australia (Royal Prince Alfred Hospital) - Adrenal cortical tumor
Brazil (Gustavo Rubino De Azevedo Focchi) - Adrenal cortex carcinoma (2)
Canada (Foothills Medical Center) - Adrenal cortical carcinoma
Canada (Woodstock General Hospital) - Adrenal cortical carcinoma
Hong Kong (Hong Kong Baptist Hospital) - Granular cell tumor
Italy (Naples) - Adrenal cortical carcinoma
Netherlands, Amsterdam - Oncocytic adrenal cortical adenoma
Saudi Arabia - Adrenal gland carcinoma
Saudi Arabia (King Khalid University) - Adrenocortical carcinoma

Case 4 - Diagnosis:

Adrenal cortical carcinoma, adrenal gland
 T-93000, M-83703

Case 4 - References:

Ng J and Libertino JM. Adrenocortical Carcinoma. Diagnosis, Evaluation and Treatment. *J Urol* 2003; 69(1):5-11.
 Izumi M, Serizawa H, Iwaya K, et al. A Case of Myxoid Adrenocortical Carcinoma with Extensive Lipomatous Metaplasia. *Arch Pathol Lab Med* 2003; 127(2):227-230.
 Kazantseva IA, Poliakova GA, Gurevich LG, et al. Adrenocortical Tumors with Neuroendocrine Differentiation. *Arkh Pathol* 2002; 64(5):8-13.
 Wood BJ, Abraham Hvizda JL, et al. Radiofrequency Ablation of Adrenal Tumors and Adrenocortical Carcinoma Metastases. *Cancer* 2003; 97(3):554-560.
 Porpiglia F, Destefanis P, Fiori C, et al. Does Adrenal Mass Size Really Affect Safety and Effectiveness of Laparoscopic Adrenalectomy? *Urol* 2002; 60(5):801-805.
 O'Kane HF, Duggan B, Lennon G and Russell C. Spontaneous Rupture of Adrenocortical Carcinoma. *J Urol* 2002; 168(6):2530.

Case No. 5, Accession No. 29624

September 2004

Alameda (Alameda County Medical Center) - Plasmacytoma
Fontana (Kaiser Permanente) - Metastatic myeloma
Glendale - Anaplastic myeloma
Howard/Fremont - Plasmacytoma
Irvine (University of California) - Plasma cell myeloma, testis
Laguna (Laguna Pathology Medical Group) - Plasmacytoma/multiple myeloma
Long Beach - Multiple myeloma (8)
Monterey (Community Hospital of Monterey Peninsula) - Plasmacytoma
Monterey Park (Garfield Hospital) - Myeloma

Mountain View (El Camino Pathology Group) - Anaplastic myeloma
Orange (UCI Medical Center) - Plasmacytoma
Orange (Orange County Pathology Medical Group) - Multiple myeloma
Sacramento (UC Davis Residents) - Plasmacytoma
Santa Rosa (Santa Rosa Memorial Hospital) - Plasmacytoma (multiple myeloma) (3)
Tustin Ranch - Recurrent myeloma
Ventura - Extramedullary myeloma
Arkansas (University of Arkansas Medical Center) - Plasmacytoma with amyloidoma, testis
Arizona (Phoenix) - Plasmacytoma, testicle
Colorado (Evergreen) - Plasmacytoma/possible amyloid
Colorado (Lutheran Medical Center) - Multiple myeloma
Florida (Tallahassee) - Plasmacytoma
Florida (Winter Haven Hospital) - Plasmacytoma
Illinois (Burr Ridge) - Plasmacytoma
Illinois (Juliet) - Extramedullary plasmacytoma
Illinois (Northwestern Memorial Hospital) - Anaplastic plasmacytoma
Indiana (Howard Community Hospital) - Plasmacytoma
Louisiana (Louisiana State University Medical Center) - Plasmacytoma
Louisiana (Methodist Hospital Group) - Extramedullary myeloma "extension"
Maryland (National Naval Medical Center) - Plasmacytoma
Maryland (University of Maryland) - Plasma cell myeloma
Maryland (Voodoo Medicine) - Recurrent multiple myeloma
Massachusetts (Berkshire Medical Center) - Plasmacytoma
Massachusetts (New England Medical Center) - Plasmacytoma
Michigan (Pathology Services) - Plasmacytoma
Michigan (St. Joseph Mercy Hospital) - Myeloma
Minnesota (Fairview Southdale Hospital) - Myeloma
Missouri (Truman Medical Center) - Plasma cell myeloma
Nebraska (Creighton University School of Medicine) - Multiple myeloma
New York (Long Island Jewish Medical Center) - Myeloma/plasmacytoma
New York (Stony Brook University Hospital Residents) - Plasmacytoma
New York (Westchester Medical Center) - Extraosseous multiple myeloma (relapse)
North Carolina (Fayetteville) - Plasmacytoma
Ohio (Dayton) - Plasmablastic multiple myeloma (1); Myeloma (1); Extramedullary plasmacytoma (2); Myeloma/plasmacytoma (1)
Ohio (Medical College of Ohio) - Plasmacytoma
Ohio (McCullough Hyde Memorial Hospital) - Plasmacytoma
Pennsylvania (Drexel University College of Medicine) - Plasmacytoma
Pennsylvania (Lehigh Valley Hospital) - Plasmacytoma
Pennsylvania (Mt. Nittany Medical Center) - Amyloid tumor (amyloidoma) and plasmacytoma, right testicle
Pennsylvania (Pennsylvania Hospital) - Plasmacytoma of testis
Puerto Rico (University of Puerto Rico) - Plasmacytoma
Rhode Island (RI Hospital) - Plasmacytoma
Texas (Lackland AFB) - "Anaplastic" plasmacytoma
Texas (Lubbock) - Plasmacytoma
Texas (ProPath Associates) - Myeloma with secondary testicular pheomacytoma (1); Myeloma with secondary (testicular plasmacytoma)
Texas (Scott & White Memorial Hospital) - Plasmacytoma
Wisconsin (Bellin Health) - Plasmacytoma
Wisconsin (Meriter Hospital) - Plasmacytoma
Wyoming (Greenbrier Valley Medical Center) - Plasmacytoma
Australia (North Queensland Pathology Group) - Myeloma
Australia (Royal Prince Alfred Hospital) - Pleomorphic plasmacytoma/myeloma
Brazil (Gustavo Rubino De Azevedo Focchi) - Myeloma/plasmacytoma (2)
Canada (Foothills Medical Center) - Extramedullary deposit of multiple myeloma
Canada (Woodstock General Hospital) - Plasmacytoma
Hong Kong (Hong Kong Baptist Hospital) - Anaplastic myeloma
Italy (Naples) - Multiple myeloma
Netherlands, Amsterdam - Multiple myeloma
Saudi Arabia - Multiple myeloma
Saudi Arabia (King Khalid University) - Myeloma

Case 5 - Diagnosis:

Plasmacytoma/myeloma, testicle
T-78000, M-97303

Consultation: Jonathan Said, M.D. UCLA Medical Center: "Consistent with myeloma/plasmacytoma."

Case 5 - References:

- Hallemar S, Engeler DS, Eoller TL. (Unusual Crystalline Inclusions in Plasmacytoma Cells of the Testis in Primary Medullary Plasmacytoma). *Pathologie* 1996; 17(6):455-458.
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- Gale JT, Bowie JD and Mahony BS. Myeloma of the Testicle. Sonographic Appearance. *J Clin Ultrasound* 1987; 15(4):280-281.
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- Chesi M Nardini E, Lim RS, Smith KD, et al. The t(4;14) Translocation in Myeloma Dysregulates Both FGFR3 and a Novel Gene, MMSET, Resulting in Igh/MMSET Hybrid Transcripts. *Blood* 1998; 92(9):3025-3034.
- Ferry JA, Young RU and Scully RE. Testicular and Epididymal Plasmacytoma. A Report of 7 Cases, Including Three that were the Initial Manifestation of Plasma Cell Myeloma. *Am J Surg Pathol* 1997; 21(5):590-598.

Case No. 6, Accession No. 29718

September 2004

- Alameda (Alameda County Medical Center) - Endometrial stromal sarcoma
- Fontana (Kaiser Permanente) - Endometrial stromal sarcoma arising in endometriosis
- Glendale - Endometrial stromal sarcoma
- Howard/Fremont - Endometrial stroma sarcoma
- Irvine (University of California) - Endometrial stromal sarcoma, low grade
- Laguna (Laguna Pathology Medical Group) - Endometrial stromal sarcoma
- Long Beach - Endometrial stromal sarcoma arising in endometriosis (8)
- Monterey (Community Hospital of Monterey Peninsula) - Endometrial stromal sarcoma, low grade
- Monterey Park (Garfield Hospital) - Endometrial stromal neoplasm arising in endometriosis, borderline malignant
- Mountain View (El Camino Pathology Group) - Low grade endometrial stromal sarcoma
- Orange (UCI Medical Center) - Adenosarcoma
- Orange (Orange County Pathology Medical Group) - Endometrial stromal sarcoma
- Sacramento (UC Davis Residents) - Endometrial stromal sarcoma arising in endometriosis
- Santa Rosa (Santa Rosa Memorial Hospital) - Low-grade endometrial stromal sarcoma (1); Low-grade stromal sarcoma associated with endometriosis (2)
- Tustin Ranch - Endometrioid cystadenofibroma
- Ventura - Endometrial stroma sarcoma
- Arkansas (University of Arkansas Medical Center) - Low-grade endometrial stromal sarcoma arising in endometriosis, omentum
- Arizona (Phoenix) - Endometrial stromal sarcoma arising within endometriotic implants
- Colorado (Evergreen) - Stromal sarcoma/endometriosis
- Colorado (Lutheran Medical Center) - Metastatic low grade stromal sarcoma (vs. adenosarcoma)
- Florida (Tallahassee) - Endometrial stromal sarcoma
- Florida (Winter Haven Hospital) - Endometriosis
- Illinois (Burr Ridge) - Granulosa cell tumor
- Illinois (Juliet) - Adenosarcoma
- Illinois (Northwestern Memorial Hospital) - Endometrial stromal sarcoma, low grade
- Indiana (Howard Community Hospital) - Endometrial stromal sarcoma (ovary)
- Louisiana (Louisiana State University Medical Center) - Stromal sarcoma, low grade
- Louisiana (Methodist Hospital Group) - Low grade endometrial sarcoma with epithelioid component
- Maryland (National Naval Medical Center) - Endometrial stromal sarcoma, hi-grade
- Maryland (University of Maryland) - Endometriosis
- Maryland (Voodoo Medicine) - Endometrial stromal sarcoma, low grade
- Massachusetts (Berkshire Medical Center) - Endometriosis (2); vs. low grade stromal sarcoma (3)
- Massachusetts (New England Medical Center) - Low grade endometrial sarcoma
- Michigan (Pathology Services) - Endometriosis
- Michigan (St. Joseph Mercy Hospital) - Endometrial stromal sarcoma
- Minnesota (Fairview Southdale Hospital) - Stromal sarcoma (high grade) arising in endometriosis
- Missouri (Truman Medical Center) - Endometrial stromal tumor
- Nebraska (Creighton University School of Medicine) - Endometrial stroma sarcoma, high-grade

New York (Long Island Jewish Medical Center) - Adenosarcoma
New York (Stony Brook University Hospital Residents) - Endometrial stromal sarcoma
New York (Westchester Medical Center) - Endometrial stromal sarcoma arising in endometriosis
North Carolina (Fayetteville) - Endometrial stromal sarcoma
Ohio (Dayton) - Endometrial stromal sarcoma (4); Endometrial stroma sarcoma, low grade (1);
Ohio (Medical College of Ohio) - Low grade endometrial stromal sarcoma arising in endometriosis
Ohio (McCullough Hyde Memorial Hospital) - Endometrioma
Pennsylvania (Drexel University College of Medicine) - Endometrial stroma sarcoma
Pennsylvania (Lehigh Valley Hospital) - Adenosarcoma
Pennsylvania (Mt. Nittany Medical Center) - Endometrial stromal tumor, omentum
Pennsylvania (Pennsylvania Hospital) - Thecoma
Puerto Rico (University of Puerto Rico) - Adenosarcoma
Rhode Island (RI Hospital) - Stromal sarcoma arising within endometriosis vs. adenocarcinoma vs. sex cord stromal tumor
Texas (Lackland AFB) - Endometrial stromal sarcoma arising in endometriosis vs. adenosarcoma
Texas (Lubbock) - Stromal sarcoma, low grade
Texas (ProPath Associates) - Low grade endometrial stromal sarcoma (2)
Texas (Scott & White Memorial Hospital) - Stromal sarcoma arising in endometriosis (do a CD/O immunostain)
Wisconsin (Bellin Health) - Low grade endometrial stromal sarcoma
Wisconsin (Meriter Hospital) - Low grade endometrial stromal sarcoma
Wyoming (Greenbrier Valley Medical Center) - Endometrial stroma sarcoma
Australia (North Queensland Pathology Group) - Extra uterine endometrial stromal sarcoma
Australia (Royal Prince Alfred Hospital) - Endometrial stromal sarcoma
Brazil (Gustavo Rubino De Azevedo Focchi) - Low grade endometrial stromal sarcoma arising in an endometriotic foci (2)
Canada (Foothills Medical Center) - Extrauterine low-grade endometrial stromal sarcoma
Canada (Woodstock General Hospital) - Endometrial stromal sarcoma
Hong Kong (Hong Kong Baptist Hospital) - Endometriosis
Italy (Naples) - Endometrial stromal sarcoma
Netherlands, Amsterdam - Low grade stromal sarcoma in an endometriosis
Saudi Arabia - Low grade endometrial sarcoma
Saudi Arabia (King Khalid University) - Low grade stroma sarcoma on a background adenomyosis

Case 6 - Diagnosis:

Low grade, extra-uterine endometrial stromal sarcoma, omentum
 T-63850, M89303

Consultation: MR Hendrickson, M.D., Stanford University. "Stromal sarcoma."

Case 6 - References:

Gerber MA and Toker C. Primary Extrauterine Endometrial Stromal Sarcoma. *Arch Pathol* 1970; 89(5):477-480.
 Nguyen GK and Berendt RC. Aspiration Biopsy Cytology of Metastatic Endometrial Stromal Sarcoma and Extragenital Mixed Mesodermal Tumor. *Diagn Cytopathol* 1986 2(3):256-260.
 Gorospe L, Simon MJ, Lima F, et al. Primary Mesenteric Tumor with Pheotypical Features of Gastrointestinal Stromal Tumors. *Eur Radiol* 2002; 12 Suppl 3:S82-S5.
 Sheth S, Horton KM, Garland MR, et al. Mesenteric Neoplasms. CT Appearances of Primary and Secondary Tumors and Differential Diagnosis. *Radiograph* 2003; 23(2):457-473.

Case No. 7, Accession No. 29857

September 2004

Alameda (Alameda County Medical Center) - Choriocarcinoma, metastatic
Fontana (Kaiser Permanente) - Metastatic choriocarcinoma
Glendale - Choriocarcinoma
Howard/Fremont - Choriocarcinoma
Irvine (University of California) - Metastatic choriocarcinoma
Laguna (Laguna Pathology Medical Group) - Choriocarcinoma
Long Beach - Choriocarcinoma (8)
Monterey (Community Hospital of Monterey Peninsula) - Metastatic choriocarcinoma
Monterey Park (Garfield Hospital) - Metastatic choriocarcinoma
Mountain View (El Camino Pathology Group) - Choriocarcinoma (metastatic?)
Orange (UCI Medical Center) - Choriocarcinoma
Orange (Orange County Pathology Medical Group) - Choriocarcinoma

Sacramento (UC Davis Residents) - Choriocarcinoma
Santa Rosa (Santa Rosa Memorial Hospital) - Choriocarcinoma metastatic to breast (1); Choriocarcinoma (2)
Tustin Ranch - Choriocarcinoma
Ventura - Metastatic choriocarcinoma
Arkansas (University of Arkansas Medical Center) - Metastatic gestational choriocarcinoma, breast
Arizona (Phoenix) - Choriocarcinoma, metastatic to breast
Colorado (Evergreen) - Metastatic choriocarcinoma
Colorado (Lutheran Medical Center) - Choriocarcinoma
Florida (Tallahassee) - Choriocarcinoma
Florida (Winter Haven Hospital) - Choriocarcinoma
Illinois (Burr Ridge) - Angiosarcoma, high grade
Illinois (Juliet) - Metastatic choriocarcinoma
Illinois (Northwestern Memorial Hospital) - Choriocarcinoma, metastatic
Indiana (Howard Community Hospital) - Metastatic choriocarcinoma
Louisiana (Louisiana State University Medical Center) - Metastatic choriocarcinoma
Louisiana (Methodist Hospital Group) - High grade mammary carcinoma (pleomorphic)
Maryland (National Naval Medical Center) - Choriocarcinoma
Maryland (University of Maryland) - Choriocarcinoma
Maryland (Voodoo Medicine) - Choriocarcinoma
Massachusetts (Berkshire Medical Center) - Choriocarcinoma
Massachusetts (New England Medical Center) - Metastatic choriocarcinoma
Michigan (Pathology Services) - Choriocarcinoma
Michigan (St. Joseph Mercy Hospital) - Choriocarcinoma
Minnesota (Fairview Southdale Hospital) - Choriocarcinoma (metastatic)
Missouri (Truman Medical Center) - Metastatic choriocarcinoma
Nebraska (Creighton University School of Medicine) - Choriocarcinoma, metastatic
New York (Long Island Jewish Medical Center) - Metastatic choriocarcinoma
New York (Stony Brook University Hospital Residents) - Choriocarcinoma
New York (Westchester Medical Center) - Metastatic gestational choriocarcinoma to breast
North Carolina (Fayetteville) - Choriocarcinoma
Ohio (Dayton) - Choriocarcinoma, metastasis (1); Choriocarcinoma (4)
Ohio (Medical College of Ohio) - Choriocarcinoma
Ohio (McCullough Hyde Memorial Hospital) - Choriocarcinoma
Pennsylvania (Drexel University College of Medicine) - Choriocarcinoma
Pennsylvania (Lehigh Valley Hospital) - Choriocarcinoma
Pennsylvania (Mt. Nittany Medical Center) - Angiosarcoma, grade 3/3, right breast
Pennsylvania (Pennsylvania Hospital) - Metastatic choriocarcinoma
Puerto Rico (University of Puerto Rico) - Choriocarcinoma
Rhode Island (RI Hospital) - Choriocarcinoma
Texas (Lackland AFB) - Metastatic choriocarcinoma
Texas (Lubbock) - Metastatic choriocarcinoma
Texas (ProPath Associates) - Choriocarcinoma, metastatic (2)
Texas (Scott & White Memorial Hospital) - Metastatic choriocarcinoma
Wisconsin (Bellin Health) - Choriocarcinoma
Wisconsin (Meriter Hospital) - Metastatic choriocarcinoma
Wyoming (Greenbrier Valley Medical Center) - Choriocarcinoma
Australia (North Queensland Pathology Group) - Choriocarcinoma
Australia (Royal Prince Alfred Hospital) - Metastatic choriocarcinoma
Brazil (Gustavo Rubino De Azevedo Focchi) - Choriocarcinoma, probably metastatic (2)
Canada (Foothills Medical Center) - Metastatic choriocarcinoma
Canada (Woodstock General Hospital) - Metastatic choriocarcinoma
Hong Kong (Hong Kong Baptist Hospital) - Choriocarcinoma
Italy (Naples) - Metastatic choriocarcinoma
Netherlands, Amsterdam - Metastatic choriocarcinoma
Saudi Arabia - Metastatic choriocarcinoma
Saudi Arabia (King Khalid University) - Metastatic choriocarcinoma

Case 7 - Diagnosis:

Choriocarcinoma, breast
 T-71000, M-82900

Case 7 - References:

- Erhan Y, Ozdemir N, Zekioglu O, et al. Breast Carcinomas with Choriocarcinomatous Features. Case Report and Review of the Literature. *Breast J* 2002; 8(4):244-248.
- O'Neil JS, Burow ME, Green AE, et al. Effects of Estrogen On Leptin Gene Promoter Activation in MCF-7 Breast Cancer and JEG-3 Choriocarcinoma Cells. Selective Regulation via Estrogen Receptor Alpha and Beta. *Mol Cell Endocrinol* 2001; 176(1-2):67-75.
- Fowler CA, Nicholson S, Lott M, et al. Choriocarcinoma Presenting as a Breast Lump. *Eur J Surg Oncol* 21(5):576-578.
- Erhan Y, Ozdemir N, Zekioglu O, et al. Breast Carcinomas with Choriocarcinomatous Features. Case Report and Review of the Literature. *Breast J* 2002; 8(4):244-248.
- Gangadharan VP, Prakash NP, Chitrathara K, et al. Ocular Metastasis of Choriocarcinoma. *Br J Radiol* 1999; 72(864):1216-1217.
- Murata T, Ihara S, Nakayama T, et al. Breast Cancer with Choriocarcinomatous Features. A Case Report with Cytopathologic Details. *Pathol Int* 1999;49(9):816-819.

Case No. 8, Accession No. 29869

September 2004

- Alameda (Alameda County Medical Center) - Oncocytoma
- Fontana (Kaiser Permanente) - Oncocytoma
- Glendale - Oncocytoma
- Howard/Fremont - Oncocytoma
- Irvine (University of California) - Oncocytoma
- Laguna (Laguna Pathology Medical Group) - Oncocytoma
- Long Beach - Oncocytoma (8)
- Monterey (Community Hospital of Monterey Peninsula) - Oncocytoma
- Monterey Park (Garfield Hospital) - Oncocytoma
- Mountain View (El Camino Pathology Group) - Oncocytoma
- Orange (UCI Medical Center) - Oncocytoma
- Orange (Orange County Pathology Medical Group) - Oncocytoma
- Sacramento (UC Davis Residents) - Oncocytoma
- Santa Rosa (Santa Rosa Memorial Hospital) - Oncocytoma (1); Renal oncocytoma (2)
- Tustin Ranch - Renal oncocytoma
- Ventura - Oncocytoma
- Arkansas (University of Arkansas Medical Center) - Renal oncocytoma
- Arizona (Phoenix) - Renal oncocytoma
- Colorado (Evergreen) - Renal oncocytoma
- Colorado (Lutheran Medical Center) - Oncocytoma
- Florida (Tallahassee) - Oncocytoma
- Florida (Winter Haven Hospital) - Oncocytoma
- Illinois (Burr Ridge) - Oncocytoma
- Illinois (Juliet) - Oncocytoma
- Illinois (Northwestern Memorial Hospital) - Oncocytoma
- Indiana (Howard Community Hospital) - Oncocytoma
- Louisiana (Louisiana State University Medical Center) - Oncocytoma
- Louisiana (Methodist Hospital Group) - Oncocytoma
- Maryland (National Naval Medical Center) - Oncocytoma
- Maryland (University of Maryland) - Oncocytoma
- Maryland (Voodoo Medicine) - Oncocytoma
- Massachusetts (Berkshire Medical Center) - Oncocytoma
- Massachusetts (New England Medical Center) - Oncocytoma
- Michigan (Pathology Services) - Oncocytoma
- Michigan (St. Joseph Mercy Hospital) - Oncocytoma
- Minnesota (Fairview Southdale Hospital) - Renal cell carcinoma (chromophobe tumor)
- Missouri (Truman Medical Center) - Oncocytoma
- Nebraska (Creighton University School of Medicine) - Oncocytoma
- New York (Long Island Jewish Medical Center) - Oncocytoma
- New York (Stony Brook University Hospital Residents) - Oncocytoma
- New York (Westchester Medical Center) - Renal oncocytoma
- North Carolina (Fayetteville) - Oncocytoma
- Ohio (Dayton) - Oncocytoma (5)
- Ohio (Medical College of Ohio) - Oncocytoma
- Ohio (McCullough Hyde Memorial Hospital) - Oncocytoma
- Pennsylvania (Drexel University College of Medicine) - Oncocytoma

Pennsylvania (Lehigh Valley Hospital) - Oncocytoma
Pennsylvania (Mt. Nittany Medical Center) - Oncocytoma, right kidney
Pennsylvania (Pennsylvania Hospital) - Oncocytoma
Puerto Rico (University of Puerto Rico) - Oncocytoma
Rhode Island (RI Hospital) - Oncocytoma
Texas (Lackland AFB) - Oncocytoma
Texas (Lubbock) - Renal cell carcinoma, oncocytic type
Texas (ProPath Associates) - Renal oncocytoma (2)
Texas (Scott & White Memorial Hospital) - Oncocytoma
Wisconsin (Bellin Health) - Oncocytoma
Wisconsin (Meriter Hospital) - Oncocytoma
Wyoming (Greenbrier Valley Medical Center) - Oncocytoma
Australia (North Queensland Pathology Group) - Oncocytoma
Australia (Royal Prince Alfred Hospital) - Oncocytoma
Brazil (Gustavo Rubino De Azevedo Focchi) - Oncocytoma (2)
Canada (Foothills Medical Center) - Oncocytoma
Canada (Woodstock General Hospital) - Oncocytoma
Hong Kong (Hong Kong Baptist Hospital) - Oncocytoma
Italy (Naples) - Renal oncocytoma
Netherlands, Amsterdam - Oncocytoma
Saudi Arabia - Oncocytoma
Saudi Arabia (King Khalid University) - Oncocytoma

Case 8 - Diagnosis:

Oncocytoma, kidney
 T-71000, M-82900

Case 8 – References:

Young AN, de Oliveira Salles PG, Lim SD, et al. Beta Defensin-1, Parvalbumin, and Vimentin. A Panel of Diagnostic Immunohistochemical Markers for Renal Tumors Derived from Gene Expression Profiling Studies using cDNA Microarrays. *Am J Surg Pathol* 2003; 27(2):199-205.
 Ibrahim el C, Allory Y, Commo F, Gattegno B, et al. Altered Pattern of Major Histocompatibility Complex Expression in Renal Carcinoma. Tumor-Specific Expression of the NonClassical Human Leukocyte Antigen-G Molecule is Restricted to Clear Cell Carcinoma While Up-Regulation of Other Major Histocompatibility Complex Antigens is Primarily Distributed in all Subtypes of Renal Carcinoma. *Am J Pathol* 2003; 162(2):501-508.
 Guilloncau B, Bermudez II, Gholami S, et al. Laparoscopic Partial Nephrectomy for Renal Tumor. Single Center Experience Comparing Clamping and no Clamping Techniques of the Renal Vasculature. *J Urol* 2003; 169(2):483-486.
 Schulz SM and Lieber MM. Update on Oncocytoma. *Curr Urol Rep* 2003; 4(1):30-35.
 Choyke PL, Glenn GM, Walther MM, et al. Hereditary Renal Cancers. *Radiology* 2003; 226(1):33-46.
 Meng MV, Miller TR, Cha I, et al. Cytology of Morcellated Renal Specimens. Significance in Diagnosis and Dissemination. *J Urol* 2003; 169(1):45-48.

Case No. 9, Accession No. 29642

September 2004

Alameda (Alameda County Medical Center) - Pseudosarcomatous reactive proliferative lesion (proliferative fasciitis)
Fontana (Kaiser Permanente) - Liposarcoma
Glendale - Lymphocyte-rich (inflammatory) liposarcoma, low grade
Howard/Fremont - Plasma cell tumor with amyloidoma
Irvine (University of California) - Low grade liposarcoma vs. atypical lipoma
Laguna (Laguna Pathology Medical Group) - Plasmacytoma/multiple myeloma
Long Beach - Liposarcoma (8)
Monterey (Community Hospital of Monterey Peninsula) - Ganglioneuroma vs. proliferative fasciitis
Monterey Park (Garfield Hospital) - Atypical angiomyxoma
Mountain View (El Camino Pathology Group) - Well-differentiated liposarcoma, "inflammatory" type
Orange (UCI Medical Center) - Atypical lipomatous tumor
Orange (Orange County Pathology Medical Group) - Liposarcoma
Sacramento (UC Davis Residents) - Inflammatory myofibroblastic tumor
Santa Rosa (Santa Rosa Memorial Hospital) - Sarcoma, NOS vs. pleomorphic lipoma (1); Paratesticular neoplasm, sarcoma vs. pseudotumor (1); Myxoid malignant fibrous histiocytoma (1)
Tustin Ranch - Atypical lipoma/well-differentiated liposarcoma

Ventura - Plasmacytoma

Arkansas (University of Arkansas Medical Center) - Well-differentiated (sclerosing/inflammatory) liposarcoma

Arizona (Phoenix) - Liposarcoma, paratesticular

Colorado (Evergreen) - MFH with inflammation

Colorado (Lutheran Medical Center) - Inflammatory pseudotumor

Florida (Tallahassee) - Inflammatory pseudotumor

Florida (Winter Haven Hospital) - Liposarcoma

Illinois (Burr Ridge) - Diffuse large B-cell lymphoma

Illinois (Joliet) - High grade sarcoma

Illinois (Northwestern Memorial Hospital) - Inflammatory liposarcoma

Indiana (Howard Community Hospital) - Inflammatory pseudotumor

Louisiana (Louisiana State University Medical Center) - Malignant fibrous histiocytoma (inflammatory type)

Louisiana (Methodist Hospital Group) - Myxoid liposarcoma

Maryland (National Naval Medical Center) - Liposarcoma

Maryland (University of Maryland) - Myxoid liposarcoma vs. malignant fibrohistiocytoma

Maryland (Voodoo Medicine) - Liposarcoma, high grade

Massachusetts (Berkshire Medical Center) - Rhabdomyosarcoma

Massachusetts (New England Medical Center) - Liposarcoma

Michigan (Pathology Services) - Rhabdomyosarcoma

Michigan (St. Joseph Mercy Hospital) - Liposarcoma

Minnesota (Fairview Southdale Hospital) - Sclerosing lipogranuloma

Missouri (Truman Medical Center) - Liposarcoma, well-differentiated, inflammatory

Nebraska (Creighton University School of Medicine) - Atypical lipomatous tumor

New York (Long Island Jewish Medical Center) - Inflammatory malignant fibrous histiocytoma

New York (Stony Brook University Hospital Residents) - Inflammatory liposarcoma

New York (Westchester Medical Center) - Well-differentiated liposarcoma of paratestis inflammatory type

North Carolina (Fayetteville) - Myxoid malignant fibrous histiocytoma

Ohio (Dayton) - Liposarcoma, pleomorphic type (4); Liposarcoma (1)

Ohio (Medical College of Ohio) - Pleomorphic liposarcoma

Ohio (McCullough Hyde Memorial Hospital) - Myxoid liposarcoma

Pennsylvania (Drexel University College of Medicine) - Pleomorphic liposarcoma

Pennsylvania (Lehigh Valley Hospital) - Inflammatory pseudotumor

Pennsylvania (Mt. Nittany Medical Center) - Myxoid liposarcoma, scrotum

Pennsylvania (Pennsylvania Hospital) - Pleomorphic liposarcoma

Puerto Rico (University of Puerto Rico) - Inflammatory myofibroblastic tumor

Rhode Island (RI Hospital) - Pleomorphic hyalinizing angiectatic tumor

Texas (Lackland AFB) - Lymphoplasmacytic lymphoma vs. extranodal marginal zone lymphoma

Texas (Lubbock) - Rhabdomyosarcoma

Texas (ProPath Associates) - Pseudosarcomatous myofibroblastic proliferation (1); Inflammatory pseudotumor (pseudosarcomatous myofibroblastic proliferation) (1)

Texas (Scott & White Memorial Hospital) - Inflammatory liposarcoma

Wisconsin (Bellin Health) - Inflammatory pseudotumor

Wisconsin (Meriter Hospital) - Low grade liposarcoma, inflammatory type

Wyoming (Greenbrier Valley Medical Center) - Inflammatory pseudotumor

Australia (North Queensland Pathology Group) - Pleomorphic liposarcoma

Australia (Royal Prince Alfred Hospital) - Sclerosing liposarcoma

Brazil (Gustavo Rubino De Azevedo Focchi) - Rhabdomyosarcoma with pleomorphic features (2)

Canada (Foothills Medical Center) - Pleomorphic liposarcoma

Canada (Woodstock General Hospital) - Sclerosing liposarcoma

Hong Kong (Hong Kong Baptist Hospital) - Liposarcoma

Italy (Naples) - Inflammatory liposarcoma

Netherlands, Amsterdam - Inflammatory pseudotumor

Saudi Arabia - Sarcoma, inflammatory malignant fibrous histiocytoma

Saudi Arabia (King Khalid University) - Inflammatory myxoid process, favor reactive

Case 9 - Diagnosis:

Well-differentiated inflammatory liposarcoma, para-testicular

T-78000, M88513

Case 9 – References:

- Krause MD, Gillou L, Fletcher CDM. Well-Differentiated Inflammatory Liposarcoma. An Uncommon and Easily Overlooked Variant of a Common Sarcoma. *Am J Surg Pathol* 1997; 21(5):518-527.
- Laurino L, Furlanetto A, Orvieto E, et al. Well-Differentiated Liposarcoma (Atypical Lipomatous Tumors). *Semin Diagn Pathol* 2001; 18(4):258-262.
- Khoubehi B, Mishra V, Ali M, et al. Adult Paratesticular Tumors. *BJU Int* 2002; 90(7):707-715.
- Montgomery E and Fisher C. Paratesticular Liposarcoma. A Clinicopathologic Study. *Am J Surg Pathol* 2003; 27(1):40-47.

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September 2004

- Alameda (Alameda County Medical Center) - Mucinous carcinomatosis
- Fontana (Kaiser Permanente) - Pseudomyxoma peritonei, favor appendiceal origin
- Glendale - Mucinous carcinoma
- Howard/Fremont - Mucinous carcinoma, colonic type; possible origins ovary, appendix, gut
- Irvine (University of California) - Peritoneal mucinous (pseudomyxoma peritonei)
- Laguna (Laguna Pathology Medical Group) - Low grade mucinous tumor from the appendix
- Long Beach - Metastatic mucinous adenocarcinoma (pseudomyxoma peritonei) (8)
- Monterey (Community Hospital of Monterey Peninsula) - Pseudomyxoma peritonei
- Monterey Park (Garfield Hospital) - Mucinous adenocarcinoma consistent with pseudomyxoma peritonei
- Mountain View (El Camino Pathology Group) - Mucinous cystadenocarcinoma (pseudomyxoma), appendiceal origin
- Orange (UCI Medical Center) - Mucinous adenocarcinoma (pseudomyxoma peritonei)
- Orange (Orange County Pathology Medical Group) - Adenocarcinoma, from colon or appendix
- Sacramento (UC Davis Residents) - Pseudomyxoma peritonei
- Santa Rosa (Santa Rosa Memorial Hospital) - Pseudomyxomatous peritonei (1); Pseudomyxoma peritonei, probable metastatic appendiceal adenocarcinoma (2)
- Tustin Ranch - Mucinous (colloid) carcinoma
- Ventura - Pseudomyxoma peritonei
- Arkansas (University of Arkansas Medical Center) - Well-differentiated appendiceal adenocarcinoma with pseudomyxoma peritonei, omentum
- Arizona (Phoenix) - Pseudomyxoma peritonei, secondary to mucinous angiocarcinoma of probable colorectal origin
- Colorado (Evergreen) - Mucinous adenocarcinoma of appendiceal origin/pseudomyxoma
- Colorado (Lutheran Medical Center) - Pseudomyxoma peritonei
- Florida (Tallahassee) - Pseudomyxoma peritonei
- Florida (Winter Haven Hospital) - Low grade mucinous adenocarcinoma
- Illinois (Burr Ridge) - Pseudomyxoma peritonei
- Illinois (Joliet) - Pseudomyxoma peritonei
- Illinois (Northwestern Memorial Hospital) - Pseudomyxoma peritonei secondary to mucinous adenocarcinoma
- Indiana (Howard Community Hospital) - Mucinous adenocarcinoma, prob ovarian primary
- Louisiana (Louisiana State University Medical Center) - Diffuse peritoneal adenomucinosi
- Louisiana (Methodist Hospital Group) - Mucinous adenocarcinoma
- Maryland (National Naval Medical Center) - Mucinous cystadenocarcinoma
- Maryland (University of Maryland) - Pseudomyxoma peritonei (adenomucinosi)
- Maryland (Voodoo Medicine) - Disseminated peritoneal mucinocarcinomatosis
- Massachusetts (Berkshire Medical Center) - Mucinous adenocarcinoma, appendix
- Massachusetts (New England Medical Center) - Disseminated adenomucinosi
- Michigan (Pathology Services) - Colorectal carcinoma
- Michigan (St. Joseph Mercy Hospital) - Metastatic appendiceal adenocarcinoma with pseudomyxoma peritonei
- Minnesota (Fairview Southdale Hospital) - Metastatic mucinous adenocarcinoma (pseudomyxoma peritonei)
- Missouri (Truman Medical Center) - Pseudomyxoma peritonei, mucinous adenocarcinoma
- Nebraska (Creighton University School of Medicine) - Mucinous adenocarcinoma, likely GI origin
- New York (Long Island Jewish Medical Center) - Mucinous adenocarcinoma/pseudomyxoma peritonei
- New York (Stony Brook University Hospital Residents) - Pseudomyxoma peritonei
- New York (Westchester Medical Center) - Pseudomyxoma peritonei with adenomucinosi
- North Carolina (Fayetteville) - Mucinous adenocarcinoma, appendiceal origin
- Ohio (Dayton) - Pseudomyxomatous peritonei mucinous adenocarcinoma (1); Mucinous carcinoma (1); Metastatic mucinous adenocarcinoma (1); Mucinous adenocarcinoma (2)
- Ohio (Medical College of Ohio) - Disseminated peritoneal adenomucinosi, likely of appendiceal/colorectal origin
- Ohio (McCullough Hyde Memorial Hospital) - Pseudomyxoma peritonei
- Pennsylvania (Drexel University College of Medicine) - Pseudomyxoma peritonei
- Pennsylvania (Lehigh Valley Hospital) - Mucinous adenocarcinoma of appendix

Pennsylvania (Mt. Nittany Medical Center) - Pseudomyxoma peritonei
Pennsylvania (Pennsylvania Hospital) - Mucinous adenocarcinoma
Puerto Rico (University of Puerto Rico) - Pseudomyxoma peritonei
Rhode Island (RI Hospital) - Mucinous adenocarcinoma favoring a GI primary
Texas (Lackland AFB) - Omental implants from appendiceal mucinous tumor
Texas (Lubbock) - Metastatic mucinous carcinoma
Texas (ProPath Associates) - Mucinous adenocarcinoma pseudomyxoma peritonci (2)
Texas (Scott & White Memorial Hospital) - Metastatic mucinous adenocarcinoma of probable appendiceal origin
Wisconsin (Bellin Health) - Pseudomyxoma peritonei
Wisconsin (Meriter Hospital) - Peritoneal adenomucinosis (pseudomyxoma peritonei)
Wyoming (Greenbrier Valley Medical Center) - Pseudomyxoma peritonci
Australia (North Queensland Pathology Group) - Pseudomyxoma peritonei appendiceal
Australia (Royal Prince Alfred Hospital) - Pseudomyxoma peritonei – Borderline proliferating mucinous tumor
Brazil (Gustavo Rubino De Azevedo Focchi) - Mucinous carcinoma probably appendiceal primary (pseudomyxoma peritonei) (2)
Canada (Foothills Medical Center) - Peritoneal mucinous carcinomatosis
Canada (Woodstock General Hospital) - Pseudomyxoma peritonci
Hong Kong (Hong Kong Baptist Hospital) - Pseudomyxoma peritonei
Italy (Naples) - Mucinous adenocarcinoma, favor ovarian primary
Netherlands, Amsterdam - Metastatic mucinous adenocarcinoma of the large bowel with a pseudomyxoma peritonei
Saudi Arabia - Mucinous carcinoma of GIT origin
Saudi Arabia (King Khalid University) - Pseudomyxoma peritonii, probably due to appendicular mucinous carcinoma

Case 10 - Diagnosis:

Omental mucinous (pseudomyxoma peritonci) probably appendiceal in origin
T-63850, M-84806

Case 10 - References:

Lauchlan SC. The Secondary Mullerian System—Revisited. *Int J Gynecol Pathol* 1994; 13(1):73-79.
Miyaiishi O, Iida K, Saga S, et al. An Autopsy Case of Serous Papillary Carcinoma of Peritoneum with Distant Metastases but no Peritoneal Dissemination. *Gynecol Oncol* 1994; 55(3):448-452.
Battifora H and McCaughey WTE. Atlas of Tumor Pathology Third Series Fascicle 15. Tumors of the Serosal Membranes. *Armed Forces Institute of Pathol*, Washington DC 1995