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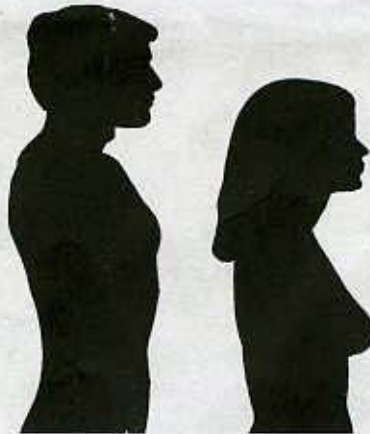


CALIFORNIA
TUMOR TISSUE REGISTRY

“GENERAL PATHOLOGY”

Study Cases, Subscription A

March, 2004



California Tumor Tissue Registry
c/o: Department of Pathology and Human Anatomy
Loma Linda University School of Medicine
11021 Campus Avenue, AH 335
Loma Linda, California 92350
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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: John McGill, M.D.
Pasadena, CA

Case No. 1 - March 2004

Tissue from: Uterus

Accession #29774

Clinical Abstract:

Following work-up for vaginal bleeding, this 56-year-old female was found by CT scan to have a large necrotic uterine mass.

Gross Pathology:

The 654 gram uterus contained a 20.0 cm hemorrhagic endometrial tumor extending through the myometrium to the serosa.

Contributor: Usha Garg, M.D.
Oxnard, CA

Case No. 2 - March 2004

Tissue from: Left breast

Accession #29776

Clinical Abstract:

This 25-year-old female presented with a mass in her left breast.

Gross Pathology:

The 5.0 x 4.0 x 3.0 cm ovoid mass was composed of fairly uniform gray-white tissue without cyst-like spaces.

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

Case No. 3 - March 2004

Tissue from: Right wrist

Accession #29705

Clinical Abstract:

Radiographs showed a mass in the distal right radius of this 24-year-old female. [Radiographs are not available for review.]

Gross Pathology:

The multiple fragments of shaggy papillary to nodular tan-gray tissue measured 10.0 x 9.0 x 5.0 cm.

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

Case No. 4 - March 2004

Tissue from: Right great toe

Accession #29813

Clinical Abstract:

Because of discomfort and pain upon ambulation, this 45-year-old male asked to have a soft tissue mass removed from his right great toe.

Gross Pathology:

The 7.0 x 6.0 x 2.0 cm soft tissue mass had an amorphous, crumbling yellow-white cut surface with calcifications.

**Contributor: Steve Romansky, M.D.
Long Beach, CA**

Case No. 5 - March 2004

Tissue from: Adrenal gland

Accession #29756

Clinical Abstract:

Following therapy for a left adrenal mass, this six year old female underwent resection of the tumor.

Gross Pathology:

The 27 gram, 5.0 x 3.5 x 2.5 cm triangular shaped, soft pink specimen showed a tan-pink solid, and focally lobulated tumor surrounded by a thin rim of yellow adrenal cortex.

**Contributor: Timothy Cloherty, M.D.
Santa Barbara, CA**

Case No. 6 - March 2004

Tissue from: Left adrenal

Accession #29680

Clinical Abstract:

This 49-year-old female was found to have hyperaldosteronism and a left adrenal mass was resected.

Gross Pathology:

The 41 gram adrenal gland contained a 4.5 x 3.5 x 4.5 cm a variegated light and dark red, focally lobular tumor with central hemorrhage and chalky red necrosis.

SPECIAL STUDIES:

Chromogranin	negative
S100	negative
CAM5.2	positive in a dot-like pattern

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

Case No. 7 - March 2004

Tissue from: Retroperitoneum

Accession #29807

Clinical Abstract:

This 75-year-old female presented with a retroperitoneal perinephric mass.

Gross Pathology:

An irregular shaped piece of fatty tissue was lobular and yellow with grey areas of increased consistency.

SPECIAL STUDIES:

HMB45 positive

Contributor: Xuedong Wang, M.D.
Pasadena, CA

Case No. 8 - March 2004

Tissue from: Thymus

Accession #29809

Clinical Abstract:

A chest x-ray right prior to total hip replacement in this 54-year-old female smoker demonstrated an abnormality in the mediastinum. CT scan confirmed a mass in the superior aspect of the anterior mediastinum. A thymectomy was performed.

Gross Pathology:

The well-circumscribed, encapsulated soft tan lesion weighed 110 grams and measured 8.0 x 6.5 x 4.0 cm. Sectioning revealed small cystic spaces ranging from 0.3 to 1.5 cm.

Contributor: W. Leonard Taylor, M.D.
Redlands, CA

Case No. 9 - March 2004

Tissue from: Bowel

Accession #29806

Clinical Abstract:

Complaining of stomach flu, with vomiting, shakes, chills, sweats and up to 103 degree temperature, this 44-year-old female was found to have an abdominal mass, which was removed.

Gross Pathology:

A 20.0 segment of small bowel was distorted by a 155 gram, 14.5 cm in maximum diameter mass. The mass was located within the bowel wall and elevated, but did not ulcerate, the mucosa. It extended into adjacent mesentery to form another, partially cystic, mass.

SPECIAL STUDIES:

CD117	positive
CD34	negative
Desmin	negative
Actin	positive
S100	positive
NSE	positive
Cytokeratin	negative

Contributor: Mark Janssen, M.D.
Anaheim, CA

Case No. 10 - March 2004

Tissue from: Abdominal wall

Accession #29567

Clinical Abstract:

Several years after a total hysterectomy for cancer, this 61-year-old female underwent a ventral hernia repair. Two years later she developed a mass in the region of the marlex mesh placed at the time of the hernia repair.

Gross Pathology:

Within the 437 gram, 13.5 x 12.0 x 6.0 cm specimen was a 10.0 x 10.0 x 5.5 cm circumscribed fibrous nodule with a glistening whorled cut surface.

SPECIAL STUDIES:

Vimentin	positive
SMA	positive
Desmin	negative
S100	negative
HHF35	negative



CALIFORNIA
TUMOR TISSUE REGISTRY

GENERAL PATHOLOGY

Minutes – Subscription A

March, 2004



SUGGESTED READING (General Topics from Recent Literature):

- Evaluation of Immunohistochemistry and Multiple-Level in Sentinel Lymph Nodes from Patients with Breast Cancer. Paragaonkar AS, Beissner RS, Snyder S and Speights VO Jr. *Arch Pathol Lab Med* 2003; 127:701-705.
- Histological Characteristics of Tumor in Vessels and Lymph Nodes are Significant Predictors of Progression of Invasive Ductal Carcinoma of the Breast. A Prospective Study. Hasebe T, Sasaki S, Imato S and Ochiai A. *Hum Pathol* 2004; 35 (3):298-308.
- Diverticular Disease of the Colon. Stollman N and Raskin JB. *Lancet* 2004; 363(9409):631-639.
- Primer on Medical Genomics Part XII. Pharmacogenomics - General Principles with Cancer as a Model. Goetz MP, Ames MM and Weinshilboum RM. *Mayo Clin Proc* 2004; 79(3):376-384.

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FILE DIAGNOSES

CTTR Subscription A

March, 2004

Case 1:

Endometrial ("Endometrioid") adenocarcinoma, uterus
T-82000, M-83803

Case 2:

Low grade phyllodes tumor, breast
T-04000, M-90213

Case 3:

Giant cell tumor, radius
T-Y8600, M-92501

Case 4:

Gouty tophus, hallux
T-Y9710, M-55070

Case 5:

Neuroblastoma with therapy-associated maturation (ganglioneuroblastoma), adrenal
T-93000, M-94903

Case 6:

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

Case 7:

Angiomyolipoma, peri-nephric region
T-Y4600, M-88600

Case 8:

Thymoma, thymus
T-85800, M-85800

Case 9:

Gastrointestinal stromal tumor (GIST), bowel
T-64000, M-96103

Case 10:

Abdominal fibromatosis (desmoid tumor)
T-Y4100, M-76100

Alameda (Alameda County Medical Center) - Endometrioid adenocarcinoma
Arcadia (Garfield Medical Center) - Clear cell adenocarcinoma
Bakersfield - Endometrioid adenocarcinoma
Baldwin Park (Kaiser Permanente) - Endometrioid adenocarcinoma (2); Endometrial carcinoma (deeply invasive) (1)
Fontana (Kaiser Permanente) - Endometrioid adenocarcinoma
Howard/Fremont - Endometrioid carcinoma, moderately differentiated
Irvine (UC Irvine Residents) - Poorly differentiated adenocarcinoma
Laguna Beach (South Coast Medical Center) - Grade I, endometrial adenocarcinoma
Long Beach - Papillary serous adenocarcinoma (6); High-grade endometrioid carcinoma (1)
Monterey (Community Hospital of Monterey Peninsula) - Endometrioid adenocarcinoma, grade 3 (2); Endometrial adenocarcinoma, endometrioid, grade 2 (2)
Mountain View (El Camino Pathology Group) - Endometrial adenocarcinoma, FIGO 2 (2)
Sacramento (UC Davis Medical Center) - Endometrioid carcinoma, grade II
San Diego (Naval Medical Center) - Moderately differentiated endometrioid adenocarcinoma
San Francisco (San Francisco General Hospital) - Carcinosarcoma
Santa Barbara (Santa Barbara Cottage Hospital) - Adenocarcinoma, endometrioid type, grade II
Santa Rosa (Santa Rosa Memorial Hospital) - Endometrioid adenocarcinoma (2); Poorly focally differentiated endometrial endometrioid adenocarcinoma (1)
Ventura - Endometrioid endometrial adenocarcinoma
Alaska (Alaska Native Medical Center) - Endometrioid endometrial adenocarcinoma, FIGO grade 2
Arizona (Maryvale Medical Center) - Serous carcinoma, endometrium
Colorado (Evergreen) - Anaplastic carcinoma/adenocarcinoma
Colorado (Lutheran Medical Center) - Papillary serous carcinoma
Florida (Baptist Hospital) - Endometrioid adenocarcinoma (3); Endometrial carcinoma, FIGO I-II (1); Endometrial carcinoma (1)
Florida (Ocala) - Endometrial adenocarcinoma
Florida (Tallahassee) - Adenocarcinoma
Florida (Winter Haven Hospital) - Carcinosarcoma (2)
Illinois (Burr Ridge) - Villoglandular endometrial carcinoma
Illinois (Evanston Hospital) - Endometrioid adenocarcinoma
Indiana (Ball Memorial Hospital) - Endometrioid adenocarcinoma
Indiana (Howard Community Hospital) - Endometrial carcinoma
Kansas (Kansas University Medical Center) - Endometrial adenocarcinoma, endometrioid type, FIGO II, nuclear grading II (3)
Maryland (National Naval Medical Center) - Endometrioid adenocarcinoma
Maryland (Johns Hopkins Hospital Residents) - Endometrioid adenocarcinoma, FIGO II
Massachusetts (Berkshire Medical Center) - Endometrioid adenocarcinoma, FIGO grade III
Massachusetts (New England Medical Center Residents) - Endometrial adenocarcinoma, endometrioid type
Minnesota (Fairview Southdale Hospital) - Endometrioid adenocarcinoma, villoglandular type
New Jersey (Overlook Hospital) - Adenocarcinoma, poorly differentiated consistent with neuroendocrine differentiation
New York (Long Island Jewish Medical Center) - Poorly differentiated endometrioid adenocarcinoma
New York (Nassau University Medical Center) - Poorly differentiated adenocarcinoma with clear cell feature
New York, New York - Grade 3, endometrioid carcinoma of the endometrium -- ? clear cell features
New York (New York Presbyterian Cornell Residents) - Endometrioid carcinoma
North Carolina (Mountain Area Pathology) - Endometrial adenocarcinoma (1); Endometrioid adenocarcinoma (1); Endometrial adenocarcinoma consistent with poorly differentiated tumor at serosal surface (1); Poorly differentiated endometrioid carcinoma (1)
Ohio (Medical College of Ohio) - Moderately differentiated adenocarcinoma, endometrioid type with squamous metaplasia (1)
Oklahoma (Tulsa) - Endometrioid type adenocarcinoma, poorly differentiated
Pennsylvania (Allegheny General Hospital) - Poorly differentiated endometrial carcinoma
Pennsylvania (Conemaugh Memorial Medical Center) - Endometrial carcinoma
Pennsylvania (Drexel University College of Medicine) - Endometrial carcinoma, endometrioid type
Pennsylvania (Lehigh Valley Hospital) - Endometrial adenocarcinoma

Pennsylvania (Mount Nittany Medical Center) - Endometrial adenocarcinoma
Pennsylvania (York Hospital) - Endometrial adenocarcinoma, endometrioid type, FIGO 3(4); Endometrial adenocarcinoma (2)
Puerto Rico (University of Puerto Rico) - Endometrial carcinoma, endometrioid type, FIGO grade 2
Rhode Island (RI Hospital Residents) - Endometrioid carcinoma
Texas (Lubbock) - Papillary serous carcinoma
Texas (Propath Associates) - Endometrial adenocarcinoma (2)
Texas (San Antonio) - Endometrial adenocarcinoma, endometrioid type
Texas (Scott & White Memorial Hospital) - Invasive endometrioid adenocarcinoma
Wisconsin (Meriter Hospital) - Endometrioid adenocarcinoma
Wyoming (Greenbrier Valley Medical Center) - Endometrial adenocarcinoma, endometrioid
Australia (North Queensland Pathology) - Endometrioid endometrial adenocarcinoma
Australia (Royal Prince Alfred Hospital) - Endometrioid adenocarcinoma, grade 2
Canada (Foothills Medical Center) - Endometrioid adenocarcinoma
Hong Kong (Hong Kong Baptist Hospital) - Clear cell carcinoma
Italy (Naples) - Grade 3 endometrioid adenocarcinoma
Saudi Arabia - Endometrioid adenocarcinoma, uterus

Case 1 – Diagnosis:

Endometrial (“Endometrioid”) adenocarcinoma, uterus
 T-82000, M-83803

Case 1 – References:

Mutter GI. Histopathology of Genetically Defined Endometrial Precancers. *Int J Gynecol Pathol* 2000; 19(4):301-309.
 Zaino RJ. Endometrial Hyperplasia. It is Time for a Quantum Leap to a New Classification. *Int J Gynecol Pathol* 2000; 19(4):315-321.
 Silva EG and Fallen-Mitchell M. Malignant Neoplasms of the Uterine Corpus in Patient Treated for Breast Carcinoma. The Effects of Tamoxifen. *Int J Gynecol Pathol* 1994; 13(3):248-258.
 Ruhul Quddus M, Latkovich P, Castellani WJ, et al. Expression of Cyclin D1 in Normal, Metaplastic, Hyperplastic Endometrium and Endometrioid Carcinoma Suggests a Role in Endometrial Carcinogenesis. *Arch Pathol Lab Med* 2002; 126(4):459-463.
 Clement PB and Young RH. Endometrioid Carcinoma of the Uterine Corpus. A Review of its Pathology with Emphasis on Recent Advances and Problematic Aspects. *Adv Ant Pathol* 2002; 9(3):145-184.

Case No. 2, Accession No. 29776

March 2004

Alameda (Alameda County Medical Center) - Juvenile fibroadenoma
Arcadia (Garfield Medical Center) - Benign phyllodes tumor
Bakersfield - Fibroadenoma
Baldwin Park (Kaiser Permanente) - Benign phyllodes tumor (1); Phyllodes tumor (2)
Fontana (Kaiser Permanente) - Fibroadenoma
Howard/Fremont - Phyllodes tumor, benign
Irvine (UC Irvine Residents) - Cellular fibroadenoma
Laguna Beach (South Coast Medical Center) - Juvenile fibroadenoma
Long Beach - Phyllodes tumor, benign (4); Juvenile cellular fibroadenoma (3)
Monterey (Community Hospital of Monterey Peninsula) - Fibroadenoma (2); Favor fibroadenoma vs. benign phyllodes (1); Juvenile fibroadenoma (1)
Mountain View (El Camino Pathology Group) - Phyllodes tumor (2)
Sacramento (UC Davis Medical Center) - Fibroadenoma
San Diego (Naval Medical Center) - Juvenile fibroadenoma (10); Benign phyllodes tumor (3)
San Francisco (San Francisco General Hospital) - Phyllodes tumor
Santa Barbara (Santa Barbara Cottage Hospital) - Cellular fibroadenoma
Santa Rosa (Santa Rosa Memorial Hospital) - Benign phyllodes tumor (2); Phyllodes tumor (1)
Ventura - Phyllodes tumor
Alaska (Alaska Native Medical Center) - Cellular fibroadenoma

Arizona (Maryvale Medical Center) - Serous carcinoma, endometrium
Colorado (Evergreen) - Benign phyllodes tumor
Colorado (Lutheran Medical Center) - Phyllodes tumor
Florida (Baptist Hospital) - Phyllodes tumor, benign (3); Phyllodes tumor (2)
Florida (Ocala) - Fibroadenoma
Florida (Tallahassee) - Fibroadenoma variant, benign phyllodes tumor
Florida (Winter Haven Hospital) - Benign phyllodes tumor (2)
Illinois (Burr Ridge) - Myxoid fibroadenoma
Illinois (Evanston Hospital) - Phyllodes tumor
Indiana (Ball Memorial Hospital) - Benign phyllodes tumor
Indiana (Howard Community Hospital) - Cellular fibroadenoma
Kansas (Kansas University Medical Center) - Juvenile fibroadenoma (3)
Maryland (National Naval Medical Center) - Cellular fibroadenoma
Maryland (Johns Hopkins Hospital Residents) - Phyllodes tumor
Massachusetts (Berkshire Medical Center) - Fibroadenoma (4); Phyllodes, benign (2)
Massachusetts (New England Medical Center Residents) - Phyllodes tumor, benign
Minnesota (Fairview Southdale Hospital) - Phyllodes tumor
New Jersey (Overlook Hospital) - Phyllodes tumor of low malignant potential
New York (Long Island Jewish Medical Center) - Fibroadenoma
New York (Nassau University Medical Center) - Phyllodes tumor, benign
New York, New York - Phyllodes tumor, favor benign
New York (New York Presbyterian Cornell Residents) - Phyllodes tumor, benign
North Carolina (Mountain Area Pathology) - Fibroadenoma with myxoid metaplasia (2); Fibroadenoma consistent with prominent smooth muscle component (1); Fibroadenoma (1)
Ohio (Medical College of Ohio) - Fibroadenoma with stromal cellularity
Oklahoma (Tulsa) - Fibroadenoma
Pennsylvania (Allegheny General Hospital) - Phyllodes tumor
Pennsylvania (Conemaugh Memorial Medical Center) - Phyllodes tumor
Pennsylvania (Drexel University College of Medicine) - Phyllodes tumor
Pennsylvania (Lehigh Valley Hospital) - Phyllodes tumor
Pennsylvania (Mount Nittany Medical Center) - Phyllodes tumor, low-grade
Pennsylvania (York Hospital) - Cellular or juvenile fibroadenoma (2); Cellular fibroadenoma (2); Juvenile fibroadenoma (2)
Puerto Rico (University of Puerto Rico) - Fibroadenoma
Rhode Island (RI Hospital Residents) - Fibroadenoma
Texas (Lubbock) - Giant fibroadenoma
Texas (ProPath Associates) - Benign phyllodes tumor of breast (2)
Texas (San Antonio) - Cellular fibroadenoma
Texas (Scott & White Memorial Hospital) - Phyllodes tumor, low grade
Wisconsin (Meriter Hospital) - Cellular fibroadenoma
Wyoming (Greenbrier Valley Medical Center) - Phyllodes tumor
Australia (North Queensland Pathology) - Benign phyllodes tumor
Australia (Royal Prince Alfred Hospital) - Benign phyllodes
Canada (Foothills Medical Center) - Low grade phyllodes tumor
Hong Kong (Hong Kong Baptist Hospital) - Fibroadenoma with cellular stroma
Italy (Naples) - Phyllodes tumor
Saudi Arabia - Fibroadenoma, breast

Case 2 - Diagnosis:

Low grade phyllodes tumor, breast
 T-04000, M-90213

Case 2 - References:

- Feakins RM, Mulcahy HE, Nichols CD, et al. p53 Expression in Phyllodes Tumours is Associated with Histological Features of Malignancy But Does Not Predict Outcome. *Histopathol* 1999; 35(2):162-169.
- Dacic S, Kounelis S, Kouri E, et al. Immunohistochemical Profile of Cystosarcoma Phyllodes of the Breast. A Study of 23 Cases. *Breast J* 2002; 8(6):376-381.
- Latif Z, Clark D, Nairn ER, et al. Phyllodes Tumor of the Prostate. A Rare Condition Requiring Careful Surveillance. *J Urol* 2003; 170(5):1944.
- Ortega E, Aranda FI, Chulia MT, et al. Phyllodes Tumor of the Breast with Actin Inclusions in Stromal Cells. Diagnosis by Fine-Needle Aspiration Cytology. *Diagn Cytopathol* 2001; 25(2):115-117.
- Moore T and Lee AH. Expression of CD34 and bcl-2 in Phyllodes Tumours, Fibroadenomas and Spindle Cell Lesions of the Breast. *Histopathol* 2001; 38(1):62-67.
- Chulia MT, Paya A, Niveiro M, et al. Phyllodes Tumor in Ectopic Breast Tissue of the Vulva. *Int J Surg Pathol* 2001; 9(1):81-83.

Case No. 3, Accession No. 29705

March 2004

- Alameda (Alameda County Medical Center) - Giant cell tumor
- Arcadia (Garfield Medical Center) - Giant cell tumor of bone
- Bakersfield - Giant cell tumor of tendon sheath
- Baldwin Park (Kaiser Permanente) - Giant cell tumor of bone (3)
- Fontana (Kaiser Permanente) - Osteosarcoma
- Howard/Fremont - Brown tumor of hyperparathyroidism vs. GCT of bone
- Irvine (UC Irvine Residents) - Giant cell tumor of bone
- Laguna Beach (South Coast Medical Center) - Giant cell tumor
- Long Beach - Giant cell tumor (7)
- Monterey (Community Hospital of Monterey Peninsula) - Giant cell tumor of bone (4)
- Mountain View (El Camino Pathology Group) - Giant cell tumor (2)
- Sacramento (UC Davis Medical Center) - Giant cell tumor
- San Diego (Naval Medical Center) - Giant cell tumor (10); Osteosarcoma (3)
- San Francisco (San Francisco General Hospital) - Giant cell tumor
- Santa Barbara (Santa Barbara Cottage Hospital) - Aneurysmal bone cyst, solid variant
- Santa Rosa (Santa Rosa Memorial Hospital) - Giant cell tumor of bone (3)
- Ventura - Giant cell tumor of bone
- Alaska (Alaska Native Medical Center) - Giant cell tumor of tendon sheath
- Arizona (Maryvale Medical Center) - Malignant giant cell tumor
- Colorado (Evergreen) - Giant cell tumor
- Colorado (Lutheran Medical Center) - Giant cell tumor
- Florida (Baptist Hospital) - Giant cell tumor (5)
- Florida (Ocala) - Giant cell tumor
- Florida (Tallahassee) - Giant cell tumor
- Florida (Winter Haven Hospital) - Giant cell tumor (2)
- Illinois (Burr Ridge) - Giant cell tumor
- Illinois (Evanston Hospital) - Giant cell tumor of bone
- Indiana (Ball Memorial Hospital) - Giant cell tumor of bone
- Indiana (Howard Community Hospital) - Giant cell tumor of bone
- Kansas (Kansas University Medical Center) - Giant cell tumor (3)
- Maryland (National Naval Medical Center) - Giant cell tumor of bone
- Maryland (Johns Hopkins Hospital Residents) - Giant cell tumor of bone
- Massachusetts (Berkshire Medical Center) - Giant cell tumor
- Massachusetts (New England Medical Center Residents) - Giant cell tumor of bone
- Minnesota (Fairview Southdale Hospital) - Osteosarcoma, correlate with radiographs
- New Jersey (Overlook Hospital) - Giant cell tumor of bone
- New York (Long Island Jewish Medical Center) - Giant cell tumor
- New York (Nassau University Medical Center) - Giant cell tumor

New York, New York - Giant cell tumor vs. non-ossifying fibroma vs. giant cell reparative granuloma
New York (New York Presbyterian Cornell Residents) - Giant cell tumor
North Carolina (Mountain Area Pathology) - Giant cell tumor of bone (4)
Ohio (Medical College of Ohio) - Giant cell tumor
Oklahoma (Tulsa) - Giant cell tumor
Pennsylvania (Allegheny General Hospital) - Giant cell tumor
Pennsylvania (Conemaugh Memorial Medical Center) - Giant cell tumor
Pennsylvania (Drexel University College of Medicine) - Giant cell tumor of bone
Pennsylvania (Lehigh Valley Hospital) - Giant cell tumor of bone
Pennsylvania (Mount Nittany Medical Center) - Giant cell tumor of bone
Pennsylvania (York Hospital) - Benign giant cell lesion of bone (giant cell tumor vs. giant cell reparative granuloma) with pathologic fracture; (4); Giant cell tumor (2)
Puerto Rico (University of Puerto Rico) - Giant cell tumor
Rhode Island (RI Hospital Residents) - Giant cell tumor of bone
Texas (Lubbock) - Giant cell tumor
Texas (ProPath Associates) - Benign giant cell tumor (1); Aneurysmal bone cyst (1)
Texas (San Antonio) - Benign giant cell lesion, favor GCT of bone (DDx: Brown tumor, giant cell reparative granuloma, solid aneurysmal bone cyst, BFH/NOF and PVNS)
Texas (Scott & White Memorial Hospital) - Giant cell tumor
Wisconsin (Meriter Hospital) - Giant cell tumor
Wyoming (Greenbrier Valley Medical Center) - Giant cell tumor
Australia (North Queensland Pathology) - Myositis ossificans
Australia (Royal Prince Alfred Hospital) - Giant cell tumor of bone (osteoclastoma)
Canada (Foothills Medical Center) - Giant cell tumor
Hong Kong (Hong Kong Baptist Hospital) - Pigmented villonodular synovitis
Italy (Naples) - Osteoblastoma
Saudi Arabia - Giant cell tumors, wrist

Case 3 - Diagnosis:

Giant cell tumor, radius
 T-Y8600, M-92501

Case 3 - References:

Willing M, Delling G and Kaiser E. The Origin of the Neoplastic Stromal Cell in Giant Cell Tumor of Bone. *Hum Pathol* 2003; 34(10):983-993.
 Bertoni F, Bacchini P and Staals EL. Malignancy in Giant Cell Tumor of Bone. *Cancer* 2003; 97(10):2520-2529.
 Fadare O. Benign Metastasizing Giant Cell Tumor. *Arch Pathol Lab Med* 2002; 126(9):1133-1134.
 Olivera P, Perez E, Ortega A, et al. Estrogen Receptor Expression in Giant Cell Tumors of the Bone. *Hum Pathol* 2002; 33(2):165-169.

Case No. 4, Accession No. 29813

March 2004

Alameda (Alameda County Medical Center) - Tophaceous gout
Arcadia (Garfield Medical Center) - Gouty tophus
Bakersfield - Gout
Baldwin Park (Kaiser Permanente) - Gout tophus (2)
Fontana (Kaiser Permanente) - Gout
Howard/Fremont - Gout
Irvine (UC Irvine Residents) - Tophus
Laguna Beach (South Coast Medical Center) - Gouty tophus
Long Beach - Gouty tophus (7)
Monterey (Community Hospital of Monterey Peninsula) - Gouty tophus

Mountain View (El Camino Pathology Group) - Gouty tophus
Sacramento (UC Davis Medical Center) - Gouty tophus
San Diego (Naval Medical Center) - Gouty arthritis
San Francisco (San Francisco General Hospital) - Gouty tophus
Santa Barbara (Santa Barbara Cottage Hospital) - Gouty tophus
Santa Rosa (Santa Rosa Memorial Hospital) - Gouty tophus (3)
Ventura - Gouty tophus
Alaska (Alaska Native Medical Center) - Gouty tophus
Arizona (Maryvale Medical Center) - Gouty tophus
Colorado (Evergreen) - Gouty tophus
Colorado (Lutheran Medical Center) - Gouty tophus
Florida (Baptist Hospital) - Tophus gout (5)
Florida (Ocala) - Tophus gout
Florida (Tallahassee) - Gout
Florida (Winter Haven Hospital) - Gout (2)
Illinois (Burr Ridge) - Gouty tophus
Illinois (Evanston Hospital) - Gout
Indiana (Ball Memorial Hospital) - Gouty tophus
Indiana (Howard Community Hospital) - Podagra
Kansas (Kansas University Medical Center) - Gouty tophus (3)
Maryland (National Naval Medical Center) - Gouty tophus
Maryland (Johns Hopkins Hospital Residents) - Gout
Massachusetts (Berkshire Medical Center) - Tophaceous gout
Massachusetts (New England Medical Center Residents) - Gouty tophus
Minnesota (Fairview Southdale Hospital) - Gouty tophus
New Jersey (Overlook Hospital) - Gouty tophus
New York (Long Island Jewish Medical Center) - Gout
New York (Nassau University Medical Center) - Gouty nodule
New York, New York - Gouty tophus
New York (New York Presbyterian Cornell Residents) - Gout tophus
North Carolina (Mountain Area Pathology) - Gouty tophus (4)
Ohio (Medical College of Ohio) - Tophaceous gout
Oklahoma (Tulsa) - Gouty tophus
Pennsylvania (Allegheny General Hospital) - Gouty tophus
Pennsylvania (Conemaugh Memorial Medical Center) - Gout, tophi
Pennsylvania (Drexel University College of Medicine) - Gout
Pennsylvania (Lehigh Valley Hospital) - Gout
Pennsylvania (Mount Nittany Medical Center) - Gouty tophus (monosodium urate deposition disease)
Pennsylvania (York Hospital) - Tophaceous gout (6)
Puerto Rico (University of Puerto Rico) - Tophus
Rhode Island (RI Hospital Residents) - Gout
Texas (Lubbock) - Tumoral calcinosis
Texas (ProPath Associates) - Gouty tophus (2)
Texas (San Antonio) - Gouty tophus
Texas (Scott & White Memorial Hospital) - Gouty tophus
Wisconsin (Meriter Hospital) - Gouty tophus
Wyoming (Greenbrier Valley Medical Center) - Enchondroma
Australia (North Queensland Pathology) - Gout
Australia (Royal Prince Alfred Hospital) - Gouty tophus
Canada (Foothills Medical Center) - Gouty tophus
Hong Kong (Hong Kong Baptist Hospital) - Gouty tophi
Italy (Naples) - Gouty tophus
Saudi Arabia - Gout, right big toe

Case 4 - Diagnosis:

Gouty tophus, hallux
T-Y9710, M-55070

Case 4 - References:

- King DF and King LA. The Appropriate Processing of Tophi for Microscopy. *Am J Dermatopathol* 4(3):239.
Lichtenstein L, Scott HW and Levin MH. Pathologic Changes in Gout. Survey of Eleven Necropsied Cases. *Am J Pathol* 1956; 32(5):871-895.
Paik SS and Park MH. Fine Needle Aspiration Cytology of Gouty Tophus in a Patient with Rheumatoid Arthritis. *Acta Cytol* 2002; 46(5):1024-1025.
Zaloga B, Hughes JL and Hoda RS. Pathologic Quiz Case. A Soft Tissue Mass with Bone Destruction. Gouty Tophus. *Arch Pathol Lab Med* 2002; 126(5):621-622.
Dodd LG and Major NM. Fine-Needle Aspiration Cytology of Articular and Periarticular Lesions. *Cancer* 2002; 96(3):157-165.

Case No. 5, Accession No. 29756

March 2004

- Alameda (Alameda County Medical Center) - Ganglioneuroblastoma, treated
Arcadia (Garfield Medical Center) - Composite pheochromocytoma
Bakersfield - Ganglioneuroma
Baldwin Park (Kaiser Permanente) - Ganglioneuroma vs. matured neuroblastoma (3)
Fontana (Kaiser Permanente) - Ganglioneuroblastoma
Howard/Fremont - Ganglioneuroblastoma, grade I
Irvine (UC Irvine Residents) - Ganglioneuroblastoma
Laguna Beach (South Coast Medical Center) - Ganglioneuroma
Long Beach - Ganglioneuroma, status post therapy (7)
Monterey (Community Hospital of Monterey Peninsula) - Ganglioneuroma
Mountain View (El Camino Pathology Group) - Ganglioneuroblastoma (1); Ganglioneuroma (1)
Sacramento (UC Davis Medical Center) - Ganglioneuroma
San Diego (Naval Medical Center) - Ganglioneuroblastoma, intermixed
San Francisco (San Francisco General Hospital) - Ganglioneuroma
Santa Barbara (Santa Barbara Cottage Hospital) - Ganglioneuroblastoma
Santa Rosa (Santa Rosa Memorial Hospital) - Ganglioneuroma (3)
Ventura - Ganglioneuroma
Alaska (Alaska Native Medical Center) - Ganglioneuroblastoma (2); Ganglioneuroma (1)
Arizona (Maryvale Medical Center) - Ganglioneuroblastoma, intermixed
Colorado (Evergreen) - Ganglioneuroma
Colorado (Lutheran Medical Center) - Ganglioneuroma
Florida (Baptist Hospital) - Composite pheochromocytoma with ganglioneuroma (1); Ganglioneuroblastoma (3); Ganglioneuroblastoma, imperfect type (1)
Florida (Ocala) - Ganglioneuroblastoma (neuroma)
Florida (Tallahassee) - Ganglioneuroblastoma
Florida (Winter Haven Hospital) - Ganglioneuroblastoma (2)
Illinois (Burr Ridge) - Ganglioneuroma
Illinois (Evanston Hospital) - Ganglioneuroma
Indiana (Ball Memorial Hospital) - Ganglioneuroblastoma
Indiana (Howard Community Hospital) - Pheochromocytoma
Kansas (Kansas University Medical Center) - Ganglioneuroblastoma (3)
Maryland (National Naval Medical Center) - Ganglioneuroblastoma, intermixed
Maryland (Johns Hopkins Hospital Residents) - Maturing neuroblastoma s/p chemotherapy
Massachusetts (Berkshire Medical Center) - Treated ganglioneuroblastoma
Massachusetts (New England Medical Center Residents) - Ganglioneuroblastoma

Minnesota (Fairview Southdale Hospital) - Ganglioneuroma, favor treatment inclined maturation of neuroblastoma
New Jersey (Overlook Hospital) - Ganglioneuroma
New York (Long Island Jewish Medical Center) - Ganglioneuroblastoma
New York (Nassau University Medical Center) - Ganglioneuroblastoma
New York, New York - Ganglioneuroblastoma, very few neuroblasts (differentiating secondary to therapy)
New York (New York Presbyterian Cornell Residents) - Ganglioneuroma
North Carolina (Mountain Area Pathology) - Ganglioneuroblastoma (4)
Ohio (Medical College of Ohio) - Ganglioneuroblastoma
Oklahoma (Tulsa) - Ganglioneuroblastoma
Pennsylvania (Allegheny General Hospital) - Ganglioneuroblastoma
Pennsylvania (Conemaugh Memorial Medical Center) - Ganglioneuroblastoma
Pennsylvania (Drexel University College of Medicine) - Ganglioneuroma
Pennsylvania (Lehigh Valley Hospital) - Ganglioneuroma
Pennsylvania (Mount Nittany Medical Center) - Ganglioneuroblastoma, adrenal gland
Pennsylvania (York Hospital) - Ganglioneuroblastoma (6)
Puerto Rico (University of Puerto Rico) - Ganglioneuroma/ganglioneuroblastoma
Rhode Island (RI Hospital Residents) - Ganglioneuroblastoma
Texas (Lubbock) - Ganglioneuroblastoma
Texas (Propath Associates) - Ganglioneuroma (2)
Texas (San Antonio) - Ganglioneuroblastoma
Texas (Scott & White Memorial Hospital) - Ganglioneuroblastoma
Wisconsin (Meriter Hospital) - Ganglioneuroma
Wyoming (Greenbrier Valley Medical Center) - Adrenal cortical neoplasm
Australia (North Queensland Pathology) - Ganglioneuroblastoma
Australia (Royal Prince Alfred Hospital) - Ganglioneuroblastoma, differentiating
Canada (Foothills Medical Center) - Ganglioneuroblastoma
Hong Kong (Hong Kong Baptist Hospital) - Neuroblastoma, stroma-rich
Italy (Naples) - Ganglioneuroblastoma
Saudi Arabia - Ganglioneuroma, maturing type

Case 5 - Diagnosis:

Neuroblastoma with therapy-associated maturation (ganglioneuroblastoma), adrenal
 T-93000, M-94903

Case 5 - References:

Hiroshige K, Sonoda S, Fujita M, et al. Primary Adrenal Ganglioneuroblastoma in an Adult. *Int Med* 1995; 34(12):1168-1173.
 Leavitt JR, Harold DL and Robinson RB. Adrenal Ganglioneuroma. A Familial Case. *Urol* 2000; 56(3):508.
 Lonergan GJ, Schwab CM, Suarez ES, et al. Neuroblastoma, Ganglioneuroblastoma, Ganglioneuroma. *Radiologic-Pathologic Correlation. Radiographics* 2002; 22(4):911-934.
 Umehara S, Nakagawa A, Matthy KK, et al. Histopathology Defines Prognostic Subsets of Ganglioneuroblastoma, Nodular. *Cancer* 2000; 89(5):1150-1161.
 Peuchmaur M, d'Amore ES, Joshi W, et al. Revision of the International Neuroblastoma Pathology Classification. Confirmation of Favorable and Unfavorable Prognostic Subsets in Ganglioneuroblastoma, Nodular. *Cancer* 2003; 98(10):2274-2281.
 Shimada H, Umehara S, Monobe Y, et al. International Neuroblastoma Pathology Classification for Prognostic Evaluation of Patients with Peripheral Neuroblastic Tumors. A Report From the Children's Cancer Group. *Cancer* 2001;92(9):2451-2461.

Case No. 6, Accession No. 29680

March 2004

Alameda (Alameda County Medical Center) - Adrenal cortical carcinoma
Arcadia (Garfield Medical Center) - Adrenal cortical carcinoma
Bakersfield - Adrenal cortical carcinoma
Baldwin Park (Kaiser Permanente) - Adrenocortical carcinoma (3)
Fontana (Kaiser Permanente) - Adrenal cortical carcinoma

Howard/Fremont - Adrenocortical tumor, probably malignant
Irvine (UC Irvine Residents) - Adrenal cortical carcinoma
Laguna Beach (South Coast Medical Center) - Neuroendocrine carcinoma vs. atypical carcinoid
Long Beach - Adrenocortical carcinoma (7)
Monterey (Community Hospital of Monterey Peninsula) - Adrenal cortical carcinoma (4)
Mountain View (El Camino Pathology Group) - Adrenocortical adenocarcinoma (2)
Sacramento (UC Davis Medical Center) - Adrenal cortical carcinoma
San Diego (Naval Medical Center) - Adrenal cortical carcinoma
San Francisco (San Francisco General Hospital) - Composite pheochromocytoma
Santa Barbara (Santa Barbara Cottage Hospital) - Adrenal cortical carcinoma
Santa Rosa (Santa Rosa Memorial Hospital) - Adrenal cortical carcinoma (1); Adrenocortical carcinoma (2)
Ventura - Adrenal cortical carcinoma
Alaska (Alaska Native Medical Center) - Adrenocortical carcinoma
Arizona (Maryvale Medical Center) - Adrenal cortical carcinoma
Colorado (Evergreen) - Adrenal cortical carcinoma
Colorado (Lutheran Medical Center) - Adrenal cortical carcinoma
Florida (Baptist Hospital) - Adrenal cortical carcinoma (5)
Florida (Ocala) - Cortical adenoma
Florida (Tallahassee) - Adrenal cortical carcinoma
Florida (Winter Haven Hospital) - Metastatic adenocarcinoma (1); Adenocarcinoma, metastatic (1)
Illinois (Burr Ridge) - Cortical carcinoma
Illinois (Evanston Hospital) - Adrenal cortical carcinoma
Indiana (Ball Memorial Hospital) - Adrenocortical adenoma
Indiana (Howard Community Hospital) - Adrenal adenoma, ? capsular penetration
Kansas (Kansas University Medical Center) - Adrenal corticocarcinoma (3)
Maryland (National Naval Medical Center) - Adrenal corticocarcinoma
Maryland (Johns Hopkins Hospital Residents) - Adrenal cortical neoplasm, favoring carcinoma
Massachusetts (Berkshire Medical Center) - Adrenocortical carcinoma
Massachusetts (New England Medical Center Residents) - Adrenal cortical carcinoma
Minnesota (Fairview Southdale Hospital) - Adrenal cortical carcinoma
New Jersey (Overlook Hospital) - Adrenal cortical carcinoma
New York (Long Island Jewish Medical Center) - Cortical adenoma
New York (Nassau University Medical Center) - Cortical carcinoma
New York, New York - Adrenocortical neoplasm, favor malignant vs. metastatic neuroendocrine carcinoma (would perform a synaptophysin) vs. adrenal corticomedullary tumor
New York (New York Presbyterian Cornell Residents) - Adrenal cortical carcinoma
North Carolina (Mountain Area Pathology) - Adrenocortical carcinoma (1); Adrenal cortical carcinoma (3)
Ohio (Medical College of Ohio) - Adrenocortical carcinoma
Oklahoma (Tulsa) - Adrenal cortical adenoma
Pennsylvania (Allegheny General Hospital) - Adrenal cortical carcinoma
Pennsylvania (Conemaugh Memorial Medical Center) - Adrenocortical carcinoma
Pennsylvania (Drexel University College of Medicine) - Adrenal adenoma with hyperaldosteronism
Pennsylvania (Lehigh Valley Hospital) - Carcinoma, favor metastatic
Pennsylvania (Mount Nittany Medical Center) - Adrenal cortical carcinoma
Pennsylvania (York Hospital) - Adrenal cortical carcinoma (1); Adrenocortical carcinoma (5)
Puerto Rico (University of Puerto Rico) - Cortical adenocarcinoma
Rhode Island (RI Hospital Residents) - Adrenal cortical adenoma
Texas (Lubbock) - Adenoma
Texas (ProPath Associates) - Aldosterone producing adrenocortical carcinoma (1); Adrenal cortical adenoma (1)
Texas (San Antonio) - Adrenal cortical carcinoma
Texas (Scott & White Memorial Hospital) - Adrenal cortical carcinoma
Wisconsin (Meriter Hospital) - Pheochromocytoma

Wyoming (Greenbrier Valley Medical Center) - Adrenal cortical carcinoma
Australia (North Queensland Pathology) - Adrenal cortical carcinoma
Australia (Royal Prince Alfred Hospital) - Adrenal cortical carcinoma
Canada (Foothills Medical Center) - Adrenal cortical carcinoma
Hong Kong (Hong Kong Baptist Hospital) - Adrenal cortical carcinoma
Italy (Naples) - Adrenal cortical carcinoma
Saudi Arabia - Adrenal cortical carcinoma, adrenal

Case 6 - Diagnosis:

Adrenal cortical carcinoma, adrenal
T-93020, M-83703

Consultation: Dr. Kempson, Stanford University: "Adrenal cortical carcinoma".

Case 6 - References:

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.
Tritos NA, Curshing GW, Heatley G, et al. Clinical Features and Prognostic Factors Associated with Adrenocortical Carcinoma. Lahey Clinic Medical Center Experience. *Am Surg* 2000; 66(1):73-79.
Yang B, Ali SZ and Rosenthal DL. CD10 Facilitates the Diagnosis of Metastatic Renal Cell Carcinoma from Primary Adrenal Cortical Neoplasm in Adrenal Fine-Needle Aspiration. *Diagn Cytopathol* 2002; 27(3):149-152.
Laforga JB and Aranda FI. Giant Adrenal Cortical Carcinoma, Clinically "Nonfunctional". Report of a Case Containing Cytoplasmic Hyaline Globules of Vimentin. *Diagn Cytopathol* 1999; 21(6):394-397.
Wieczorek TJ, Pinkus JL, Glickman JN, et al. Comparison of Thyroid Transcription Factor-1 and Hepatocyte Antigen Immunohistochemical Analysis in the Differential Diagnosis of Hepatocellular Carcinoma, Metastatic Adenocarcinoma, Renal Cell Carcinoma, and Adrenal Cortical Carcinoma. *Am J Clin Pathol* 2002; 118(6):911-921.
Terzolo M, Boccuzzi A, Bovio S, et al. Immunohistochemical Assessment of Ki-67 in the Differential Diagnosis of Adrenocortical Tumors. *Urol* 2001; 57(1):176-182.

Case No. 7, Accession No. 29807

March 2004

Alameda (Alameda County Medical Center) - Angiomyolipoma
Arcadia (Garfield Medical Center) - Angiomyolipoma
Bakersfield - Angiomyolipoma
Baldwin Park (Kaiser Permanente) - Angiomyolipoma (3)
Fontana (Kaiser Permanente) - Perivascular epithelioid cell tumor/angiomyolipoma
Howard/Fremont - Angiomyolipoma
Irvine (UC Irvine Residents) - Angiomyolipoma
Laguna Beach (South Coast Medical Center) - Angiomyolipoma
Long Beach - Angiomyolipoma (7)
Monterey (Community Hospital of Monterey Peninsula) - Angiomyolipoma (3); Well-differentiated liposarcoma (1)
Mountain View (El Camino Pathology Group) - Angiomyolipoma
Sacramento (UC Davis Medical Center) - Angiomyolipoma
San Diego (Naval Medical Center) - Angiomyolipoma
San Francisco (San Francisco General Hospital) - Angiomyolipoma
Santa Barbara (Santa Barbara Cottage Hospital) - Angiomyolipoma, (pecoma)
Santa Rosa (Santa Rosa Memorial Hospital) - Angiomyolipoma (3)
Ventura - Metastatic melanoma
Alaska (Alaska Native Medical Center) - Angiomyolipoma
Arizona (Marvvalle Medical Center) - Angiomyolipoma
Colorado (Evergreen) - Angiomyolipoma
Colorado (Lutheran Medical Center) - Angiomyolipoma
Florida (Baptist Hospital) - Angiomyolipoma (5)
Florida (Ocala) - Angiomyolipoma

Florida (Tallahassee) - Round cell liposarcoma
Florida (Winter Haven Hospital) - Angiomyolipoma (2)
Illinois (Burr Ridge) - Angiomyolipoma
Illinois (Evanston Hospital) - Angiomyolipoma
Indiana (Ball Memorial Hospital) - Angiomyolipoma
Indiana (Howard Community Hospital) - Lipoma with spindle cell features
Kansas (Kansas University Medical Center) - Angiomyolipoma
Maryland (National Naval Medical Center) - Angiomyolipoma
Maryland (Johns Hopkins Hospital Residents) - Angiomyolipoma
Massachusetts (Berkshire Medical Center) - Angiomyolipoma
Massachusetts (New England Medical Center Residents) - Angiomyolipoma
Minnesota (Fairview Southdale Hospital) - Angiomyolipoma (pecoma)
New Jersey (Overlook Hospital) - Angiomyolipoma
New York (Long Island Jewish Medical Center) - Angiomyolipoma
New York (Nassau University Medical Center) - Angiomyolipoma
New York, New York - Angiomyolipoma
New York (New York Presbyterian Cornell Residents) - Angiomyolipoma (5)
North Carolina (Mountain Area Pathology) - Angiomyolipoma (5)
Ohio (Medical College of Ohio) - Angiomyolipoma
Oklahoma (Tulsa) - Angiomyolipoma
Pennsylvania (Allegheny General Hospital) - Angiomyolipoma
Pennsylvania (Conemaugh Memorial Medical Center) - Angiomyolipoma
Pennsylvania (Drexel University College of Medicine) - Angiomyolipoma
Pennsylvania (Lehigh Valley Hospital) - Angiomyolipoma
Pennsylvania (Mount Nittany Medical Center) - Angiomyolipoma, renal
Pennsylvania (York Hospital) - Clear cell tumor, adrenal/lung/renal vs. clear cell sarcoma (4); Clear cell neoplasm (1); Clear cell carcinoma (1)
Puerto Rico (University of Puerto Rico) - Angiomyolipoma
Rhode Island (RI Hospital Residents) - Epithelioid angiomyolipoma
Texas (Lubbock) - Angiomyolipoma
Texas (ProPath Associates) - Angiomyolipoma (2)
Texas (San Antonio) - Angiomyolipoma
Texas (Scott & White Memorial Hospital) - Angiomyolipoma
Wisconsin (Meriter Hospital) - Angiomyolipoma
Wyoming (Greenbrier Valley Medical Center) - Angiomyolipoma
Australia (North Queensland Pathology) - Angiomyolipoma
Australia (Royal Prince Alfred Hospital) - Angiomyolipoma
Canada (Foothills Medical Center) - Angiomyolipoma
Hong Kong (Hong Kong Baptist Hospital) - Angiomyolipoma
Italy (Naples) - Epithelioid angiomyolipoma
Saudi Arabia - Angiomyolipoma, retroperitoneum

Case 7 - Diagnosis:

Angiomyolipoma, peri-nephric region
 T-Y4600, M-88600

Case 7 - References:

- Yakoo H, Isoda K, Nakazato Y, et al. Retroperitoneal Epithelioid Angiomyolipoma Leading to Fatal Outcome. *Pathol Int* 2000; 50(8):649-654.
 Piccinini EE, Rosati G, Ugolini G, et al. Giant Retroperitoneal Angiomyolipoma. A Case Report. *Hepatogastroenterology* 1999; 46(25):182-184.
 Rubinas TC, Flanigan RC and Picken MM. Pathology Quiz Case. Renal Mass in an Otherwise Healthy Man. Epithelioid Angiomyolipoma. *Arch Pathol Lab Med* 2004; 128(1):19-20.

- Makhlouf HR, Remotti HE and Ishak KG. Expression of KIT (CD117) in Angiomyolipoma. *Am J Surg Pathol* 2002; 26(4):493-497.
- Jimenez RE, Eble JN, Reuter VE, et al. Concurrent Angiomyolipoma and Renal Cell Neoplasia. A Study of 36 Cases. *Mod Pathol* 2001; 14(3):157-163.
- Barnard M and Lajoie G. Angiomyolipoma. Immunohistochemical and Ultrastructural Study of 14 Cases. *Ultrastruct Pathol* 2001; 25(1):21-29.

Case No. 8, Accession No. 29809

March 2004

- Alameda (Alameda County Medical Center) - Thymoma
- Arcadia (Garfield Medical Center) - Thymoma
- Bakersfield - Thymoma
- Baldwin Park (Kaiser Permanente) - Spindle cell thymoma (1); Lymphocytic thymoma (2)
- Fontana (Kaiser Permanente) - Thymoma
- Howard/Fremont - Thymoma, mixed type
- Irvine (UC Irvine Residents) - Thymoma
- Laguna Beach (South Coast Medical Center) - Thymoma vs. thymic carcinoid
- Long Beach - Thymoma (7)
- Monterey (Community Hospital of Monterey Peninsula) - Thymoma (2); Thymoma, lymphocyte predominant (2)
- Mountain View (El Camino Pathology Group) - Thymoma (2)
- Sacramento (UC Davis Medical Center) - Thymoma (spindle cell variant)
- San Diego (Naval Medical Center) - Thymoma (WHO, A,B)
- San Francisco (San Francisco General Hospital) - Spindle cell thymoma
- Santa Barbara (Santa Barbara Cottage Hospital) - Thymoma
- Santa Rosa (Santa Rosa Memorial Hospital) - Thymoma (2); Lymphocytic thymoma (1)
- Ventura - Thymoma
- Alaska (Alaska Native Medical Center) - Thymoma (with mixed features)
- Arizona (Maryvale Medical Center) - Malignant thymoma
- Colorado (Evergreen) - Thymoma
- Colorado (Lutheran Medical Center) - Thymoma
- Florida (Baptist Hospital) - Lymphocyte predominant thymoma (1); Thymoma (4)
- Florida (Ocala) - Thymoma
- Florida (Tallahassee) - Thymoma
- Florida (Winter Haven Hospital) - Thymoma
- Illinois (Burr Ridge) - Thymoma
- Illinois (Evanston Hospital) - Thymoma
- Indiana (Ball Memorial Hospital) - Thymoma
- Indiana (Howard Community Hospital) - Spindle cell (mixed) thymoma
- Kansas (Kansas University Medical Center) - Thymic carcinoid (3)
- Maryland (National Naval Medical Center) - Thymoma, mixed
- Maryland (Johns Hopkins Hospital Residents) - Thymoma
- Massachusetts (Berkshire Medical Center) - Thymoma (spindle cell) (6); Mixed (1)
- Massachusetts (New England Medical Center Residents) - Thymoma
- Minnesota (Fairview Southdale Hospital) - Thymoma
- New Jersey (Overlook Hospital) - Thymoma
- New York (Long Island Jewish Medical Center) - Spindle cell thymoma
- New York (Nassau University Medical Center) - Carcinoid tumor
- New York, New York - Thymoma, WHO type A
- New York (New York Presbyterian Cornell Residents) - Thymoma
- North Carolina (Mountain Area Pathology) - Thymoma (4)
- Ohio (Medical College of Ohio) - Thymoma
- Oklahoma (Tulsa) - Thymoma, mixed type AB

Pennsylvania (Allegheny General Hospital) - Thymoma
Pennsylvania (Conemaugh Memorial Medical Center) - Lymphoma
Pennsylvania (Drexel University College of Medicine) - Thymoma
Pennsylvania (Lehigh Valley Hospital) - Lymphoepithelial thymoma
Pennsylvania (Mount Nittany Medical Center) - Thymoma
Pennsylvania (York Hospital) - Thymoma (6)
Puerto Rico (University of Puerto Rico) - Thymoma
Rhode Island (RI Hospital Residents) - Thymoma
Texas (Lubbock) - Thymoma
Texas (ProPath Associates) - Lymphoepithelial thymoma (1); Mixed thymoma (1)
Texas (San Antonio) - Thymoma
Texas (Scott & White Memorial Hospital) - Thymoma
Wisconsin (Meriter Hospital) - Thymoma
Wyoming (Greenbrier Valley Medical Center) - Thymoma
Australia (North Queensland Pathology) - Thymoma (mixed type)
Australia (Royal Prince Alfred Hospital) - Thymoma (mixed, AB type)
Canada (Foothills Medical Center) - Type AB thymoma
Hong Kong (Hong Kong Baptist Hospital) - Thymoma, type AB mixed
Italy (Naples) - Thymoma
Saudi Arabia - Thymoma, thymus

Case 8 - Diagnosis:

Thymoma, thymus
 T-85800, M-85800

Case 8 – References:

Suster S and Moran CA. Primary Thymic Neoplasms. Spectrum of Differentiation and Histologic Features. *Semin Diagn Pathol* 1999; 16(1):2-17.
 Chilosi M, Iannucci AM, Pizzolo G, et al. Immunohistochemical Analysis of Thymoma. Evidence from Medullary Origin of Epithelial Cells. *Am J Surg Pathol* 1984; 8(4):309-318.
 Pan CC, Chen PC, Chou TY, et al. Expression of Calretinin and Other Mesothelioma-Related Markers in Thymic Carcinoma and Thymoma. *Hum Pathol* 2003; 34(11):1155-1162.
 Inoue M, Starostik P, Zetti A, et al. Correlating Genetic Aberrations with World Health Organization-Defined Histology and Stage Across the Spectrum of Thymomas. *Cancer Res* 2003; 63(13):3708-3715.
 Zhou R, Zetti A, Strobel P, et al. Thymic Epithelial Tumors Can Develop Along Two Different Pathogenetic Pathways. *Am J Pathol* 2001; 159(5):1853-1860.

Case No. 9, Accession No. 29806

March 2004

Alameda (Alameda County Medical Center) - Gastrointestinal autonomic nerve tumor
Arcadia (Garfield Medical Center) - Low grade gastrointestinal stromal tumor vs. schwannoma
Bakersfield - Gastrointestinal stromal tumor
Baldwin Park (Kaiser Permanente) - Gastrointestinal stromal tumor (3)
Fontana (Kaiser Permanente) - Gastrointestinal stromal tumor
Howard/Fremont - GIST (CD34 negative)
Irvine (UC Irvine Residents) - Desmoid tumor
Laguna Beach (South Coast Medical Center) - GIST, malignant
Long Beach - GIST, malignant (7)
Monterey (Community Hospital of Monterey Peninsula) - GIST (4)
Mountain View (El Camino Pathology Group) - GIST (2)
Sacramento (UC Davis Medical Center) - Gastrointestinal stromal tumor
San Diego (Naval Medical Center) - Malignant GIST; Gastrointestinal autonomic nerve tumor (1)
San Francisco (San Francisco General Hospital) - Gastric stromal tumor

Santa Barbara (Santa Barbara Cottage Hospital) - Gastrointestinal stromal tumor, high risk
Santa Rosa (Santa Rosa Memorial Hospital) - Gastrointestinal stromal tumor
Ventura - Gastrointestinal stromal tumor
Alaska (Alaska Native Medical Center) - Gastrointestinal autonomic nerve tumor (GANT)
Arizona (Maryvale Medical Center) - Gastrointestinal stromal tumor
Colorado (Evergreen) - GIST
Colorado (Lutheran Medical Center) - GANT
Florida (Baptist Hospital) - Stromal tumor, GIST (1); GIST (4)
Florida (Ocala) - GIST tumor
Florida (Tallahassee) - Malignant GIST
Florida (Winter Haven Hospital) - GIST
Illinois (Burr Ridge) - GIST with neural differentiation
Illinois (Evanston Hospital) - GANT
Indiana (Ball Memorial Hospital) - GIST
Indiana (Howard Community Hospital) - GIST (neural type)
Kansas (Kansas University Medical Center) - Malignant GIST (3)
Maryland (National Naval Medical Center) - Gastrointestinal stromal tumor
Maryland (Johns Hopkins Hospital Residents) - GIST
Massachusetts (Berkshire Medical Center) - GIST, GANT (1)
Massachusetts (New England Medical Center Residents) - GIST
Minnesota (Fairview Southdale Hospital) - GIST
New Jersey (Overlook Hospital) - GIST, low malignant potential
New York (Long Island Jewish Medical Center) - GIST
New York (Nassau University Medical Center) - GANT
New York, New York - Gastrointestinal stromal tumor (GIST), malignant by virtue of size
New York (New York Presbyterian Cornell Residents) - GIST
North Carolina (Mountain Area Pathology) - GIST (4)
Ohio (Medical College of Ohio) - Gastrointestinal stromal tumor
Oklahoma (Tulsa) - Gastrointestinal stromal tumor
Pennsylvania (Allegheny General Hospital) - GIT
Pennsylvania (Conemaugh Memorial Medical Center) - GIST
Pennsylvania (Drexel University College of Medicine) - GIST
Pennsylvania (Lehigh Valley Hospital) - Gastrointestinal stromal tumor
Pennsylvania (Mount Nittany Medical Center) - Gastrointestinal stromal tumor, small bowel
Pennsylvania (York Hospital) - GIST consistent with high risk for aggressive behavior (4); GIST, high risk (1)
Puerto Rico (University of Puerto Rico) - Gastrointestinal stromal tumor
Rhode Island (RI Hospital Residents) - Gastrointestinal stromal tumor
Texas (Lubbock) - Gastrointestinal stromal tumor
Texas (Propath Associates) - Gastrointestinal stromal tumor (GIST) with high malignant potential (1); Gastrointestinal stromal tumor (GIST)
Texas (San Antonio) - Most compatible with GIST
Texas (Scott & White Memorial Hospital) - GIST
Wisconsin (Meriter Hospital) - Fibromatosis
Wyoming (Greenbrier Valley Medical Center) - Stromal tumor
Australia (North Queensland Pathology) - GIST
Australia (Royal Prince Alfred Hospital) - GIST (4) or fibromatosis (3)
Canada (Foothills Medical Center) - GI stromal tumor
Hong Kong (Hong Kong Baptist Hospital) - Gastrointestinal stromal tumor
Italy (Naples) - Gastrointestinal stromal tumor
Saudi Arabia - Gastrointestinal stromal tumor, malignant bowels

Case 9 - Diagnosis:

Gastrointestinal stromal tumor (GIST), bowel
T-64000, M-96103

Case 9 - References:

- Hasegawa T, Matsuno Y, Shimoda T, et al. Gastrointestinal Stromal Tumor. Consistent CD117 Immunostaining for Diagnosis, and Prognostic Classification Based on Tumor Size and MIB-1 Grade. *Hum Pathol* 2002; 33(6):669-676.
- Capdeville R, Buchdunger E, Zimmermann J, et al. Glivec (ST1571, Imatinib). A Rationally Developed Targeted Anticancer Drug. *Nature Reviews Drug Discovery* 2002; 1(7):493-502.
- Van Oosterom AT, Judson I, Verweij J, et al. Safety and Efficacy of Imatinib (ST1571) in Metastatic Gastrointestinal Stromal Tumours. *A Phase I Study Lancet* 2001; 358:1421-1423.
- Shidham VB, Chivukula M, Gupta D, et al. Immunohistochemical Comparison of Gastrointestinal Stromal Tumor and Solitary Fibrous Tumor. *Arch Pathol Lab Med* 2002; 126(10):1189-1192.
- Berman J and O'Leary TJ. Gastrointestinal Stromal Tumor Workshop. *Hum Pathol* 2001; 32(6):578-582.
- Grady WM. GISTs. The Revolution Continues. *Gastroenterology* 2003; 125 (3):967-969.

Case No. 10, Accession No. 29567

March 2004

- Alameda (Alameda County Medical Center) - Abdominal fibromatosis
- Arcadia (Garfield Medical Center) - Benign myofibroma
- Bakersfield - Abdominal fibromatosis
- Baldwin Park (Kaiser Permanente) - Intraabdominal fibromatosis (desmoid tumor) (1); Desmoid tumor (intraabdominal fibromatosis (1); Intraabdominal fibromatosis (1)
- Fontana (Kaiser Permanente) - Fibromatosis
- Howard/Fremont - Cicatricial fibromatosis
- Irvine (UC Irvine Residents) - Desmoid tumor
- Laguna Beach (South Coast Medical Center) - Post operative spindle cell nodule (inflammatory myofibroblastic tumor/pseudotumor)
- Long Beach - Fibromatosis (desmoid) (7)
- Monterey (Community Hospital of Monterey Peninsula) - Leiomyosarcoma (2); Desmoid (1); Leiomyosarcoma, low grade, vs. desmoid tumor (1)
- Mountain View (El Camino Pathology Group) - Fibromatosis (2)
- Sacramento (UC Davis Medical Center) - Fibromatosis
- San Diego (Naval Medical Center) - Benign myofibroblastic tumor (5); Abdominal wall fibromatosis (5); Leiomyoma (2)
- San Francisco (San Francisco General Hospital) - Desmoid fibromatosis
- Santa Barbara (Santa Barbara Cottage Hospital) - Fibromatosis
- Santa Rosa (Santa Rosa Memorial Hospital) - Nodular fasciitis (2); Proliferative myositis (1)
- Ventura - Abdominal fibromatosis
- Alaska (Alaska Native Medical Center) - Reactive nodular fibrous pseudotumor
- Arizona (Maryvale Medical Center) - Abdominal fibromatosis (desmoid)
- Colorado (Evergreen) - Desmoid
- Colorado (Lutheran Medical Center) - Fibromatosis
- Florida (Baptist Hospital) - Nodular fasciitis (1); Desmoid tumor (1); Desmoid (3)
- Florida (Ocala) - Desmoid tumor
- Florida (Tallahassee) - Desmoid
- Florida (Winter Haven Hospital) - Desmoid fibromatosis (2)
- Illinois (Burr Ridge) - Benign metastasizing leiomyoma (1)
- Illinois (Evanston Hospital) - Desmoid
- Indiana (Ball Memorial Hospital) - Desmoid tumor
- Indiana (Howard Community Hospital) - Abdominal desmoid tumor
- Kansas (Kansas University Medical Center) - Leiomyosarcoma of abdominal wall (3)
- Maryland (National Naval Medical Center) - Fibromatosis
- Maryland (Johns Hopkins Hospital Residents) - Fibromatosis

Massachusetts (Berkshire Medical Center) - Fibromatosis (3); STUMP (5)
Massachusetts (New England Medical Center Residents) - Fibromatosis
Minnesota (Fairview Southdale Hospital) - Cicatricial fibromatosis (desmoid)
New Jersey (Overlook Hospital) - Abdominal desmoid tumor
New York (Long Island Jewish Medical Center) - Fibromatosis
New York (Nassau University Medical Center) - Solitary fibrous tumor
New York, New York - Fibromatosis
New York (New York Presbyterian Cornell Residents) - Fibromatosis
North Carolina (Mountain Area Pathology) - Fibromatosis (4)
Ohio (Medical College of Ohio) - Abdominal fibromatosis
Oklahoma (Tulsa) - Desmoid fibromatosis
Pennsylvania (Allegheny General Hospital) - Abdominal fibromatosis, desmoid
Pennsylvania (Conemaugh Memorial Medical Center) - Leiomyoma
Pennsylvania (Drexel University College of Medicine) - Pseudosarcomatous reactive myofibroblastic proliferation
Pennsylvania (Lehigh Valley Hospital) - Reactive spindle cell nodule
Pennsylvania (Mount Nittany Medical Center) - Desmoid tumor of abdominal wall (abdominal fibromatosis)
Pennsylvania (York Hospital) - Fibromatosis, desmoid pattern (3); Desmoid tumor (1); Fibromatosis (2)
Puerto Rico (University of Puerto Rico) - Desmoid tumor
Rhode Island (RI Hospital Residents) - Fibromatosis
Texas (Lubbock) - Leiomyoma
Texas (Propath Associates) - Abdominal desmoid fibromatosis (1); Leiomyosarcoma, metastatic (1)
Texas (San Antonio) - Desmoid (fibromatosis)
Texas (Scott & White Memorial Hospital) - Fibromatosis
Wisconsin (Meriter Hospital) - Fibromatosis (desmoid)
Wyoming (Greenbrier Valley Medical Center) - Fibroma
Australia (North Queensland Pathology) - Myofibroblastoma, differential diagnosis (fibromatosis)
Australia (Royal Prince Alfred Hospital) - Desmoid
Canada (Foothills Medical Center) - Fibromatosis
Hong Kong (Hong Kong Baptist Hospital) - Fibromatosis
Italy (Naples) - Fibromatosis
Saudi Arabia - Fibromatosis, abdominal wall

Case 10 - Diagnosis:

Abdominal fibromatosis (desmoid tumor)
 T-Y4100, M-76100

Case 10 - References:

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