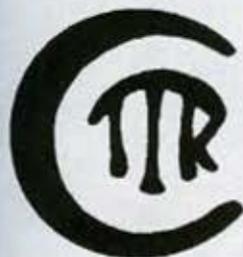


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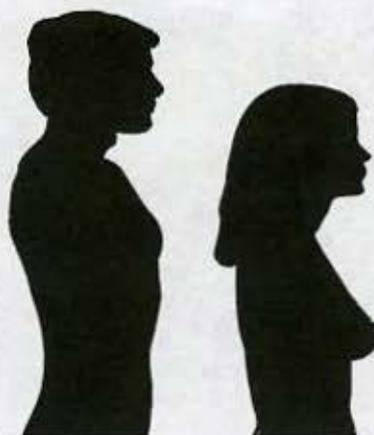


CALIFORNIA  
TUMOR TISSUE REGISTRY

## **“GENERAL PATHOLOGY”**

**Study Cases, Subscription A**

**May 2003**



**California Tumor Tissue Registry**  
**c/o: Department of Pathology and Human Anatomy**  
**Loma Linda University School of Medicine**  
**11021 Campus Avenue, AH 335**  
**Loma Linda, California 92350**  
**(909) 558-4788**  
**FAX: (909) 558-0188**  
**E-mail: [cttr@linkline.com](mailto:cttr@linkline.com)**  
**Web page: [www.cttr.org](http://www.cttr.org)**  
**Web site & Case of the Month: [www.cttr.org](http://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: William Illig, M.D.**  
**Tulsa, OK**

**Case No. 1 - May 2003**

**Tissue from: Tonsils and adenoids**

**Accession #29295**

**Clinical Abstract:**

Over a five day period this 19-year-old female developed a sore throat and progressive malaise with headaches. Because of the increasing airway obstruction, which was quite dramatic, an emergency operation for removal of the enlarged and ulcerated tonsils and adenoids was performed.

**Gross Pathology:**

The aggregate of tonsils and adenoids measured 9.0 x 8.0 x 2.5 cm.

**SPECIAL STUDIES:**

CD-3 & CD-20      A mixed population of T- & B-cells

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**Contributor: Guillermo Acero, M.D.**  
**Santa Paula, CA**

**Case No. 2 - May 2003**

**Tissue from: Ovary**

**Accession #29289**

**Clinical Abstract:**

On routine examination, this 49-year-old was found to have a firm, solid-feeling pelvic mass. Ultrasound revealed a solid left adnexal mass. An exploratory laparotomy and left salpingo-oophorectomy was performed.

**Gross Pathology:**

The 517 gram, 13.0 x 10.0 x 8.0 cm ovarian mass had a firm nodular yellow and brown surface.

**Contributor: Kenneth A. Frankel, M.D.  
Glendale, CA**

**Case No. 3 - May 2003**

**Tissue from: Right ovary**

**Accession #29446**

**Clinical Abstract:**

A cystic mass was noted in the right ovary of this 53-year-old female.

**Gross Pathology:**

The 624 gram, 16.0 cm diameter ovoid mass was soft and had a cystic cavity filled with semisolid chocolate brown material. On the inner aspect of the cyst was a 5 cm fleshy tan solid area.

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

**Case No. 4 - May 2003**

**Tissue from: Ovaries**

**Accession #29556**

**Clinical Abstract:**

After fifteen months of tenderness and pain in her lower abdomen, this 36-year-old female was found to have a large pelvic mass. Past history included a cholecystectomy several years earlier, a benign fibroadenoma of the breast and cervical dysplasia.

**Gross Pathology:**

Both ovaries were replaced by tumor having smooth, glistening, edematous areas intermixed with coarsely granular areas and multiple cystic regions. The 1,180 gram right ovary was 21.0 x 16.0 x 5.0 cm. The 252 gram left ovary was 11.0 x 9.0 x 6.0 cm.

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

**Case No. 5 - May 2003**

**Tissue from: Right upper eyelid**

**Accession #29300**

**Clinical Abstract:**

This five-year-old female had a recurrent mass resected from her right upper eyelid.

**Gross Pathology:**

The 3.2 x 2.0 x 1.8 cm right eyelid had a solid white mass.

**SPECIAL STUDIES:**

Desmin	strongly positive
S-100	focal, faint staining

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**Contributor: Neda Moatamed, M.D.**  
**Los Angeles, CA**

**Case No. 6 - May 2003**

**Tissue from: Esophagus**

**Accession #29485**

**Clinical Abstract:**

After experiencing seven months of dyspnea and dysphagia, this 63-year-old male was found to have an esophageal mass.

**Gross Pathology:**

The mass measured 27.0 cm in greatest dimension.

**SPECIAL STUDIES:**

CD-34	positive
CD-117	positive
S-100	negative
Desmin	negative

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

**Case No. 7 - May 2003**

**Tissue from: Pancreas**

**Accession #29576**

**Clinical Abstract:**

An obese 28-year-old female was found to have a large mass in the head of her pancreas.

**Gross Pathology:**

Within the pancreas was a 9.0 x 8.0 x 8.0 cm firm white-tan tumor.

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

**Case No. 8 - May 2003**

**Tissue from: Small bowel mesentery**

**Accession #29510**

**Clinical Abstract:**

A 56-year-old male was found to have an abdominal mass on workup. Past medical history included nephrectomy for renal cell carcinoma. A small bowel resection was performed.

**Gross Pathology:**

The 456 gram, 26.0 cm length of small bowel had two separate mesenteric nodules measuring 6.5 x 6.3 x 6.2 cm and 7.3 x 5.9 x 7.4 cm. The larger tumor extended into the mucosa with focal ulceration. Two additional small bowel resections each had a similar mesenteric nodule.

**Contributor: Robert H. Zuch, M.D.**  
**Baldwin Park, CA**

**Case No. 9 - May 2003**

**Tissue from: Left buttock**

**Accession #29457**

**Clinical Abstract:**

This 54-year-old female developed a mass on the left buttock

**Gross Pathology:**

The 9.2 x 2.2 cm ellipse of gray-tan skin had a 8.0 x 7.0 x 4.0 cm white-tan whorled mass in its deep aspect.

**SPECIAL STUDIES:**

Pan-cytokeratin	negative
EMA	negative
Desmin	negative
CD31	positive in blood vessels
CD34	diffuse positive
S100	negative
SMA & MSA	positive around blood vessels

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**Contributor: Guillermo Acero, M.D.**  
**Santa Paula, CA**

**Case No. 10 - May 2003**

**Tissue from: Retroperitoneum**

**Accession #29338**

**Clinical Abstract:**

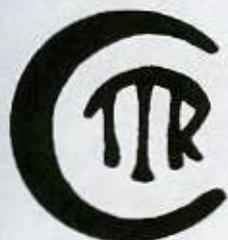
During a prostatic workup, an abdominal mass was noted in this 69-year-old male. At surgery, a left upper quadrant retroperitoneal mass was found to involve the tail of the pancreas and the spleen.

**Gross Pathology:**

A 13.0 x 10.5 x 8.0 cm multi-lobulated solid mass filled the hilum of the spleen.

**SPECIAL STUDIES:**

S-100	negative
Desmin	negative
CAM5.2	negative
LCA (CD45)	negative
CD34	positive



CALIFORNIA  
TUMOR TISSUE REGISTRY

*GENERAL PATHOLOGY*

Minutes – Subscription A

May 2003



**SUGGESTED READING (General Topics from Recent Literature):**

- Markers, Markers Everywhere.... Prognosis in Colorectal Cancer - Time for a New Approach. Cunningham, D and Andrejev J. *J of Clin Oncol* 2001; 19(2):286-288.
- Accuracy of Magnetic Resonance Imaging in Prediction of Tumour-Free Resection Margin in Rectal Cancer Surgery. Beets-Tan RGH, Beets GL, Vliegen RFA, et al. *The Lancet* 2001; 357:497-504.
- Pathology and the Internet. Wheeler D. *Adv in Anat Pathol* 2003; 10(3):172-173.
- Distinctive Clinicopathological Characteristics in Esophageal Squamous Cell Carcinoma. Kuwano H, Nakajima M, Miyazaki T, et al. *Ann Thorac Cardiovasc Surg* 2003; 9(1):6-13.
- Immunophenotype of Desmoplastic Small Round Cell Tumors as Detected in Cases with EWS-WT1. Gene Fusion Product. Zhang PJ, Goldblum JR, et al. *Mod Pathol* 2003; 16:229-235.

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E-mail: [cttr@linkline.com](mailto:cttr@linkline.com)  
Web site & Case of the Month: [www.cttr.org](http://www.cttr.org)

## FILE DIAGNOSES

CTTR Subscription A

May 2003

**Case 1:**

Infectious mononucleosis, tonsils and adenoids  
T-61100, D-0410

**Case 2:**

Fibrothecoma, ovary  
T-86922, M-86000

**Case 3:**

Clear cell carcinoma, ovary  
T-87000, M-83103

**Case 4:**

Metastatic signet ring adenocarcinoma, ovary (so-called "Krukenberg tumor")  
T-86920, M-80103

**Case 5:**

Embryonal rhabdomyosarcoma, eyelid  
T-XX821, M-89103

**Case 6:**

Gastrointestinal stromal tumor, esophagus  
T-62000, M-88903

**Case 7:**

Solid-pseudopapillary tumor, pancreas  
T-59000, M-80001

**Case 8:**

Mesenteric fibromatosis, small bowel  
T-64000, M-76100

**Case 9:**

Solitary fibrous tumor, buttock  
T-Y1600, M-91600

**Case 10:**

Hemangiopericytoma/solitary fibrous tumor, intra-abdominal  
T-Y4100, M-91503

- Bakersfield - Hodgkin's lymphoma
- Bay Area - Chronic tonsillitis, viral (? infectious mononucleosis) (3)
- Baldwin Park (Kaiser Permanente) - Hodgkin's lymphoma (3)
- Hayward/Fremont - Viral lymphadenitis, favor measles
- Laguna Beach (South Coast Medical Center) - High grade (large cell) lymphoma
- Long Beach (Lakewood Regional Medical Center) - Infectious mononucleosis (5)
- Monterey (Community Hospital of Monterey Peninsula) - Infectious mononucleosis
- Mountain View (El Camino Pathology Group) - Infectious mononucleosis
- Oakland (Kaiser Permanente) - Reactive node consistent with infectious mononucleosis (3)
- Orange (Kaiser Permanente) - Viral (mono) vs. Hodgkin's (mononucleosis) (2)
- Orange (UCI Medical Center Residents) - Malignant lymphoma
- San Diego (Naval Medical Center) - Infectious mononucleosis (1); Reactive interfollicular process, favor mononucleosis
- Santa Barbara (Cottage Hospital) - Necrotizing immunoblastic lymphadenitis
- Santa Rosa (Santa Rosa Memorial Hospital) - Reactive lymphoid hyperplasia with acute inflammation, rule out Epstein-Barr virus (1); Marked lymphoid hyperplasia consistent with infectious mononucleosis (1); Reactive hyperplasia, rule out Epstein-Barr virus (1)
- Ventura - Hodgkin's disease, mixed cellularity (2)
- Alaska (Alaska Pathology Laboratory) - Large cell lymphoma (? TCRBL)
- Alaska (Alaska Native Medical Center) - Infectious mononucleosis (2); Hodgkin's disease (1)
- Arizona (Phoenix Memorial Hospital) - Hodgkin's lymphoma, classical lymphocyte depleted
- Florida (Baptist Hospital) - Reactive hyperplasia (1); Florid lymphoid hyperplasia (? Viropathic such as mononucleosis), extensive candidiasis (1); Mononucleosis (1); Reactive paracortical hyperplasia (prob viral) (1)
- Florida (Munroe Regional Medical Center) - Necrotizing lymphadenitis
- Florida (Pathology Associates) - Lymphoma
- Florida (Winter Haven Hospital) - Hodgkin's disease
- Indiana (Fort Wayne) - EBV lymphoma
- Louisiana (Louisiana State University Medical Center) - Infectious mononucleosis surface ulceration with fungus
- Maryland (Johns Hopkins Hospital Residents) - Primary EBV infection vs. Hodgkin's disease, would perform both CD15/CD30 stains and EBV insitu hybridization studies to differentiate (1)
- Maryland (National Naval Medical Center) - Infectious mononucleosis
- Maryland (University of Maryland) - Acute tonsillitis, rule out infectious mononucleosis
- Massachusetts (New England Medical Center Residents) - Infectious mononucleosis
- Michigan (Oakwood Hospital) - Viral lymphadenitis
- Nebraska (Creighton University School of Medicine Residents) - Florid lymphoid hyperplasia (consistent with viral infection)
- New Jersey (Overlook Hospital) - Florid lymphoid hyperplasia (probably infectious mono)
- New York (Long Island Jewish Medical Center) - Infectious mononucleosis
- New York (Nassau County Medical Center) - Lymphadenitis, favors Kikuchi's
- New York (Stony Brook University Hospital Residents) - Mixed cellularity classical Hodgkin's lymphoma
- New York (Westchester Medical Center) - Follicular and paracortical hyperplasia consistent with infectious mononucleosis
- North Carolina (Mountain Area Pathology) - Tonsillar abscess with mixed bacteria and fungal organisms (2); Reactive lymphoid hyperplasia consistent with abscess formation (1); Reactive hyperplasia, ? infectious mononucleosis vs. non-specific tonsillar abscess (1)
- Oklahoma (Oklahoma University Pathology Residents) - Large cell lymphoma (4); Infectious mononucleosis lymphadenitis (2)
- Pennsylvania (Allegheny General Hospital) - Atypical lymphoid proliferation favor infectious mononucleosis and overlying yeast and bacteria
- Pennsylvania (Lehigh Valley Hospital) - Necrotizing tonsillitis (Kikuchi's lymphadenitis)
- Pennsylvania (Memorial Medical Center) - Hodgkin's disease (nodular lymphocytic type)
- Puerto Rico (University of Puerto Rico) - Reactive nodule/infectious mononucleosis??
- Rhode Island (RI Hospital Pathology Residents) - Atypical immunoblastic proliferation suspicious for infectious mononucleosis
- Texas (ProPath Services) - Hodgkin's disease, mixed cellularity (2)
- Texas (Scott & White Memorial Hospital) - Infectious mononucleosis with secondary fungal colonization
- West Virginia (Greenbrier Valley Medical Center) - Reactive tonsillitis
- Wisconsin (Meriter Health Services) - Infectious mononucleosis

Australia (North Queensland Pathology) - Reactive hyperplasia ? EBV infection. Fungal elements seen  
Australia (Royal Prince Alfred Hospital) - Infectious mononucleosis  
Canada (Foothills Medical Center) - Reactive (infectious mononucleosis)  
Hong Kong (Hong Kong Baptist Hospital) - Atypical lymphoid hyperplasia consistent with infectious mononucleosis  
Japan (Shimada City) - Infectious mononucleosis  
Qatar (Hamad Medical Corporation) - High grade lymphoma

#### **Case 1 - Diagnosis:**

Infectious mononucleosis, tonsils and adenoids

Director's Note: A monospot test, done seven days after onset of illness, was positive, as was a test for Epstein-Barr virus. A CD30 stain marked the Reed-Sternberg-like cells, a finding previously reported in infectious mononucleosis lymphadenitis (AJSP, May, 1990;93#5:698-702) (drc)

T-61100, D-0410

#### **Case 1 – References:**

White PD, Thomas JM, Kangro HO, Bruce-Jones WD, et al. Predictions and Associations of Fatigue Syndromes and Mood Disorders That Occur After Infectious Mononucleosis. *Lancet* 2001; 358(9297):1946-1954.  
Weber R, Hegenbarth V, Kaftan H, et al. Nasopharyngeal Endoscopy Adds to Reliability of Clinical Diagnosis of Infectious Mononucleosis. *J Laryngol Otol* 2001; 115(10):792-795.  
Hiraki A, Fujii N, Masuda K, et al. Genetics of Epstein-Barr Virus Infection. *Biomed Pharmacother* 2001; 55(7):369-372.  
Niedobitek G, Agathangelou A, Steven N., et al. Epstein-Barr Virus (EBV) in Infectious Mononucleosis: Detection of the Virus in Tonsillar B Lymphocytes but not in Desquamated Oropharyngeal Epithelial Cells. *Mol Pathol* 2000; 53(1):37-42.  
Ehsan A, Fan H, Eagan PA, et al. Accumulation of p53 in Infectious Mononucleosis Tissues. *Hum Pathol* 2000; 31(11):1397-1403.  
Hjalgrim H, Askling J, Sorensen P, et al. Risk of Hodgkin's Disease and Other Cancers After Infectious Mononucleosis. *J Natl Cancer Inst* 2000; 92(18):1522-1528.

#### **Case No. 2, Accession No. 29289**

May 2003

Bakersfield - Thecoma-fibroma  
Bay Area - Fibrothecoma (3)  
Baldwin Park (Kaiser Permanente) - Ovarian fibroma (1); Fibroma (1); Stromal leiomyoma (1)  
Hayward/Fremont - Thecoma (thecoma-fibroma group tumor)  
Laguna Beach (South Coast Medical Center) - Ovarian fibroma  
Long Beach (Lakewood Regional Medical Center) - Fibrothecoma (5)  
Monterey (Community Hospital of Monterey Peninsula) - Fibroma, cellular  
Mountain View (El Camino Pathology Group) - Fibrothecoma  
Oakland (Kaiser Permanente) - Fibroma (3)  
Orange (Kaiser Permanente) - Fibroma (fibrothecoma) (2)  
Orange (UCI Medical Center Residents) - Fibrothecoma, ovary  
San Diego (Naval Medical Center) - Fibro-thecoma (1); Fibrothecoma (10); Fibroma (6)  
Santa Barbara (Cottage Hospital) - Cellular fibroma  
Santa Rosa (Santa Rosa Memorial Hospital) - Fibroma/thecoma (3)  
Ventura - Ovarian fibroma (2)  
Alaska (Alaska Pathology Laboratory) - Fibroma  
Alaska (Alaska Native Medical Center) - Fibrothecoma  
Arizona (Phoenix Memorial Hospital) - Fibroma, ovary  
Florida (Baptist Hospital) - Fibro-thecoma (1); Thecoma (1); Fibroma/thecoma (1); Fibrothecoma (1)  
Florida (Munroe Regional Medical Center) - Fibroma  
Florida (Pathology Associates) - Fibroma  
Florida (Winter Haven Hospital) - Fibroma  
Indiana (Fort Wayne) - Cellular (mitotically active) ovarian fibrothecoma  
Louisiana (Louisiana State University Medical Center) - Ovary, fibroma, thecoma

Maryland (Johns Hopkins Hospital Residents) - Cellular fibroma  
Maryland (National Naval Medical Center) - Cellular fibroma  
Maryland (University of Maryland) - Fibrothecoma  
Massachusetts (New England Medical Center Residents) - Fibrothecoma  
Michigan (Oakwood Hospital) - Fibroma  
Nebraska (Creighton University School of Medicine Residents) - Ovarian fibroma  
New Jersey (Overlook Hospital) - Cellular fibroma  
New York (Long Island Jewish Medical Center) - Fibroma/thecoma, ovary  
New York (Nassau County Medical Center) - Ovarian fibroma  
New York (Stony Brook University Hospital Residents) - Fibrothecoma  
New York (Westchester Medical Center) - Fibro-thecoma of ovary  
North Carolina (Mountain Area Pathology) - Fibroma (4)  
Oklahoma (Oklahoma University Pathology Residents) - Cellular fibroma  
Pennsylvania (Allegheny General Hospital) - Fibrothecoma  
Pennsylvania (Lehigh Valley Hospital) - Thecoma  
Pennsylvania (Memorial Medical Center) - Fibrothecoma  
Puerto Rico (University of Puerto Rico) - Fibroma, ovary/fibrothecoma  
Rhode Island (RI Hospital Pathology Residents) - Thecoma  
Texas (ProPath Services) - Thecoma (2)  
Texas (Scott & White Memorial Hospital) - Ovarian fibroma  
West Virginia (Greenbrier Valley Medical Center) - Fibro-thecoma  
Wisconsin (Meriter Health Services) - Fibro-thecoma  
Australia (North Queensland Pathology) - Thecofibroma  
Australia (Royal Prince Alfred Hospital) - Thecoma  
Canada (Foothills Medical Center) - Fibrothecoma  
Hong Kong (Hong Kong Baptist Hospital) - Fibroma  
Japan (Shimada City) - Fibroma  
Qatar (Hamad Medical Corporation) - Fibrothecoma

**Case 2 - Diagnosis:**

Fibrothecoma, ovary  
 T-86922, M-86000

**Case 2 - References:**

Troiano RN, Lazzarini KM, Scouff LM, et al. Fibroma and Fibrothecoma of the Ovary. MR Imaging Findings. *Radiol* 1997; 204(3):795-798.  
 Sivanesaratnam V, Dutta R and Jayalakshmi P. Ovarian Fibroma. Clinical and Histopathological Characteristics. *Int J Gynaecol Obstet* 1990; 33(3):243-247.  
 Tilman AJ and Haffajee Z. Sclerosing Stromal Tumors, Thecomas, and Fibromas of the Ovary. An Immunohistochemical Profile. *Int J Gynecol Pathol* 1999; 18(3):254-258.  
 Young RH and Scully RE. Differential Diagnosis of Ovarian Tumors Based Primarily on Their Patterns and Cell Types. *Sem Diagn Pathol* 2001; 18(3):161-235.

**Case No. 3, Accession No. 29446**

**May 2003**

Bakersfield - Yolk sac tumor  
Bay Area - Clear cell tumor of low malignant potential (2); Clear cell carcinoma (1)  
Baldwin Park (Kaiser Permanente) - Clear cell carcinoma (3)  
Hayward/Fremont - Clear cell carcinoma  
Laguna Beach (South Coast Medical Center) - Clear cell carcinoma  
Long Beach (Lakewood Regional Medical Center) - Adenocarcinoma, clear cell type (5)  
Monterey (Community Hospital of Monterey Peninsula) - Clear cell carcinoma  
Mountain View (El Camino Pathology Group) - Clear cell adenocarcinoma  
Oakland (Kaiser Permanente) - Clear cell carcinoma (3)

Orange (Kaiser Permanente) - Clear cell carcinoma (2)  
Orange (UCI Medical Center Residents) - Clear cell carcinoma, ovary  
San Diego (Naval Medical Center) - Clear cell carcinoma  
Santa Barbara (Cottage Hospital) - Clear cell carcinoma  
Santa Rosa (Santa Rosa Memorial Hospital) - Clear cell carcinoma (3)  
Ventura - Endometrioid adenocarcinoma (2)  
Alaska (Alaska Pathology Laboratory) - Clear cell carcinoma  
Alaska (Alaska Native Medical Center) - Clear cell carcinoma  
Arizona (Phoenix Memorial Hospital) - Clear cell carcinoma  
Florida (Baptist Hospital) - Clear cell carcinoma (4)  
Florida (Munroe Regional Medical Center) - Clear cell adenocarcinoma  
Florida (Pathology Associates) - Clear cell carcinoma  
Florida (Winter Haven Hospital) - Mucinous cystadenocarcinoma  
Indiana (Fort Wayne) - Clear cell adenocarcinoma of ovary  
Louisiana (Louisiana State University Medical Center) - Ovary, carcinoma, clear cell  
Maryland (Johns Hopkins Hospital Residents) - Clear cell carcinoma of the ovary  
Maryland (National Naval Medical Center) - Clear cell carcinoma  
Maryland (University of Maryland) - Clear cell carcinoma  
Massachusetts (New England Medical Center Residents) - Clear cell carcinoma  
Michigan (Oakwood Hospital) - Clear cell carcinoma  
Nebraska (Creighton University School of Medicine Residents) - Yolk sac tumor (3); Clear cell carcinoma (4)  
New Jersey (Overlook Hospital) - Clear cell adenocarcinoma  
New York (Long Island Jewish Medical Center) - Clear cell carcinoma, ovary  
New York (Nassau County Medical Center) - Clear cell carcinoma, ovary  
New York (Stony Brook University Hospital Residents) - Clear cell carcinoma of ovary  
New York (Westchester Medical Center) - Clear cell carcinoma arising in ovarian endometriosis  
North Carolina (Mountain Area Pathology) - Struma ovarii (3); Clear cell carcinoma (1)  
Oklahoma (Oklahoma University Pathology Residents) - Clear cell carcinoma of ovary  
Pennsylvania (Allegheny General Hospital) - Endometrioid carcinoma  
Pennsylvania (Lehigh Valley Hospital) - Papillary carcinoma in struma ovarii probably in cystic teratoma  
Pennsylvania (Memorial Medical Center) - Clear cell carcinoma  
Puerto Rico (University of Puerto Rico) - Clear cell carcinoma, ovary  
Rhode Island (RI Hospital Pathology Residents) - Clear cell carcinoma  
Texas (ProPath Services) - Clear cell (renal) carcinoma (2)  
Texas (Scott & White Memorial Hospital) - Clear cell adenocarcinoma  
West Virginia (Greenbrier Valley Medical Center) - Mucinous carcinoma  
Wisconsin (Meriter Health Services) - Clear cell carcinoma of ovary  
Australia (North Queensland Pathology) - Clear cell carcinoma  
Australia (Royal Prince Alfred Hospital) - Clear cell carcinoma  
Canada (Foothills Medical Center) - Clear cell carcinoma  
Hong Kong (Hong Kong Baptist Hospital) - Clear cell carcinoma  
Japan (Shimada City) - Clear cell carcinoma  
Qatar (Hamad Medical Corporation) - Clear cell carcinoma

### **Case 3 - Diagnosis:**

Clear cell carcinoma, ovary  
 T-87000, M-83103

### **Case 3 - References:**

Marth C, Kistic J, Kaern J, et al. Circulating Tumor Cells in the Peripheral Blood and Bone Marrow of Patients with Ovarian Carcinoma Do Not Predict Prognosis. *Cancer* 2002; 94(3):707-712.  
 Silverberg SG. Ultrastructure and Histogenesis of Clear Cell Carcinoma of the Ovary. *Am J Obstet Gynecol* 1973; 115(3):394-400.  
 Nolan LP and Heatley MK. The Value of Immunocytochemistry in Distinguishing Between Clear Cell Carcinoma of the Kidney and Ovary. *Int J Gynecol Pathol* 2001; 20(2):155-159.

Fujimura M, Hidaka T, Kataoka K, et al. Absence of Estrogen Receptor-Alpha Expression in Human Ovarian Clear Cell Adenocarcinoma Compared with Ovarian Serous, Endometrioid, and Mucinous Adenocarcinoma. *Am J Surg Pathol* 2001; 25(5):667-672.

Shimizu M, Nikaido T, Toki T, et al. Clear Cell Carcinoma Has An Expression Pattern of Cell Cycle Regulatory Molecules that is Unique Among Ovarian Adenocarcinomas. *Cancer* 1999; 85(3):669-677.

**Case No. 4, Accession No. 29556**

**May 2003**

Bakersfield - Krukenberg tumor

Bay Area - Metastatic adenocarcinoma (Krukenberg tumor) (3)

Baldwin Park (Kaiser Permanente) - Metastatic adenocarcinoma, signet ring cell type, Krukenberg (1); Metastatic poorly differentiated signet ring carcinoma (Krukenberg's tumor) (1); Metastatic carcinoma (Krukenberg tumor) (1)

Hayward/Fremont - Krukenberg tumor (metastatic carcinoma of prob. gastric origin)

Laguna Beach (South Coast Medical Center) - Krukenberg tumor (metastatic signet ring cell carcinoma)

Long Beach (Lakewood Regional Medical Center) - Poorly differentiated signet-ring cell carcinoma (Krukenberg) (5)

Monterey (Community Hospital of Monterey Peninsula) - Metastatic mucinous carcinoma (Krukenberg)

Mountain View (El Camino Pathology Group) - Metastatic signet-ring cell adenocarcinoma "Krukenberg tumor"

Oakland (Kaiser Permanente) - Krukenberg tumor (3)

Orange (Kaiser Permanente) - Krukenberg tumor (2)

Orange (UCI Medical Center Residents) - Metastatic (signet ring cell carcinoma), ovaries (Krukenberg tumor)

San Diego (Naval Medical Center) - Metastatic signet ring cell adenocarcinoma (1); Krukenberg tumor

Santa Barbara (Cottage Hospital) - Metastatic signet ring cell carcinoma

Santa Rosa (Santa Rosa Memorial Hospital) - Krukenberg tumor (2); Metastatic signet ring adenocarcinoma (Krukenberg tumor)

Ventura - Krukenberg tumor (2)

Alaska (Alaska Pathology Laboratory) - Krukenberg tumor (signet ring cells)

Alaska (Alaska Native Medical Center) - Krukenberg tumor

Arizona (Phoenix Memorial Hospital) - Krukenberg tumor

Florida (Baptist Hospital) - Krukenberg tumor, metastatic signet ring cell adenocarcinoma (1); Adenocarcinoma with signet ring component (? metastatic) (1); Adenocarcinoma, signet ring?, Krukenberg (1); Signet ring cell adenocarcinoma (Krukenberg) (1)

Florida (Munroe Regional Medical Center) - Metastatic adenocarcinoma

Florida (Pathology Associates) - Mucinous carcinoma

Florida (Winter Haven Hospital) - Krukenberg tumor

Indiana (Fort Wayne) - Krukenberg tumor of ovaries

Louisiana (Louisiana State University Medical Center) - Krukenberg tumor

Maryland (Johns Hopkins Hospital Residents) - Metastatic adenocarcinoma with signet ring features, favor GI (stomach), primary vs. breast

Maryland (National Naval Medical Center) - Krukenberg tumor

Maryland (University of Maryland) - Krukenberg tumor

Massachusetts (New England Medical Center Residents) - Krukenberg tumor

Michigan (Oakwood Hospital) - Metastatic mucinous carcinoma

Nebraska (Creighton University School of Medicine Residents) - Metastatic signet cell ring carcinoma

New Jersey (Overlook Hospital) - Metastatic adenocarcinoma (probably appendiceal in origin)

New York (Long Island Jewish Medical Center) - Krukenberg tumor (metastatic carcinoma), ovary

New York (Nassau County Medical Center) - Krukenberg tumor

New York (Stony Brook University Hospital Residents) - Metastatic adenocarcinoma of ovary (Krukenberg tumor)

New York (Westchester Medical Center) - Metastatic adenocarcinoma (signet ring), Krukenberg tumor

North Carolina (Mountain Area Pathology) - Krukenberg tumor (metastatic adenocarcinoma) (2); Metastatic signet ring cell carcinoma (1); Metastatic adenocarcinoma (Krukenberg tumor)

Oklahoma (Oklahoma University Pathology Residents) - Metastatic signet ring adenocarcinoma (Krukenberg tumor)

Pennsylvania (Allegheny General Hospital) - Krukenberg tumor

Pennsylvania (Lehigh Valley Hospital) - Signet ring cell carcinoma probably metastatic

Pennsylvania (Memorial Medical Center) - Signet ring carcinoma

Puerto Rico (University of Puerto Rico) - Krukenberg tumor

Rhode Island (RI Hospital Pathology Residents) - Metastatic gastric carcinoma

Texas (ProPath Services) - Krukenberg tumor (metastatic signet ring adenocarcinoma to ovary) (1); Krukenberg, signet cell carcinoma (1)

Texas (Scott & White Memorial Hospital) - Metastatic signet ring cell adenocarcinoma

West Virginia (Greenbrier Valley Medical Center) - Krukenberg tumor

Wisconsin (Meriter Health Services) - Metastatic signet ring adenocarcinoma

Australia (North Queensland Pathology) - Krukenberg tumour

Australia (Royal Prince Alfred Hospital) - Krukenberg tumour

Canada (Foothills Medical Center) - Metastatic adenocarcinoma (Krukenberg tumor)

Hong Kong (Hong Kong Baptist Hospital) - Metastatic adenocarcinoma consistent with Krukenberg tumor

Japan (Shimada City) - Krukenberg tumor

Qatar (Hamad Medical Corporation) - Krukenberg tumour, metastatic mucin secreting carcinoma

#### **Case 4 - Diagnosis:**

Metastatic signet ring adenocarcinoma, ovary (so-called "Krukenberg tumor")

T-86920, M-80103

#### **Case 4 - References:**

Mrad K, Morice P, Fabre A, et al. Krukenberg Tumor. A Clinico-Pathological Study of 15 Cases. *Ann Pathol* 2000; 20(3):202-206.

McGill F, Ritter DB, Rickard C, et al. Management of Krukenberg Tumors. An 11-Year Experience and Review of the Literature. *Prim Care Update Ob Gyns* 1998; 5(4):157-158.

Kim HK, Heo DS, Bang YJ, et al. Prognostic Factors of Krukenberg's Tumor. *Gynecol Oncol* 2001; 82(1):105-109.

Takenoue T, Yamada Y, Miyagawa S, et al. Krukenberg Tumor from Gastric Mucosal Carcinoma Without Lymphatic or Venous Invasion. Report of a Case. *Hepatogastroenterology* 2001; 48(40):1211-1214.

McGill FM, Ritter DB, Rickard CS, Kaley RN, et al. Krukenberg Tumors. Can Management be Improved? *Gynecol Obstet Invest* 1999; 48(1):61-65.

#### **Case No. 5, Accession No. 29300**

**May 2003**

Bakersfield - Rhabdomyosarcoma

Bay Area - Rhabdomyosarcoma (3)

Baldwin Park (Kaiser Permanente) - Sarcoma (s/p ?chemo) possible rhabdomyosarcoma (1); Sarcoma?, possible rhabdomyosarcoma (1); Sarcoma (rhabdomyosarcoma) (1)

Hayward/Fremont - Rhabdomyosarcoma

Laguna Beach (South Coast Medical Center) - Pleomorphic rhabdomyosarcoma

Long Beach (Lakewood Regional Medical Center) - Rhabdomyosarcoma (5)

Monterey (Community Hospital of Monterey Peninsula) - Rhabdomyosarcoma

Mountain View (El Camino Pathology Group) - Embryonal rhabdomyosarcoma

Oakland (Kaiser Permanente) - Rhabdomyosarcoma (3)

Orange (Kaiser Permanente) - Sarcoma, favor rhabdo (2)

Orange (UCI Medical Center Residents) - Embryonal rhabdomyosarcoma, right upper eyelid

San Diego (Naval Medical Center) - Rhabdomyosarcoma (1); Anaplastic embryonal rhabdomyosarcoma (1)

Santa Barbara (Cottage Hospital) - Rhabdomyosarcoma

Santa Rosa (Santa Rosa Memorial Hospital) - Rhabdomyosarcoma (1); Embryonal rhabdomyosarcoma (2)

Ventura - Embryonal rhabdomyosarcoma (2)

Alaska (Alaska Pathology Laboratory) - Rhabdomyosarcoma

Alaska (Alaska Native Medical Center) - Rhabdomyosarcoma

Arizona (Phoenix Memorial Hospital) - Sebaceous carcinoma

Florida (Baptist Hospital) - Undifferentiated malignant tumor, rule out metastatic melanoma vs. rhabdomyosarcoma (1); Malignant adnexal tumor (1); Sebaceous carcinoma (1); Rhabdomyosarcoma (1)

Florida (Munroe Regional Medical Center) - Sebaceous carcinoma

Florida (Pathology Associates) - Rhabdomyoma, rhabdomyosarcoma

Florida (Winter Haven Hospital) - Sebaceous carcinoma

Indiana (Fort Wayne) - Rhabdomyosarcoma, upper eyelid

Louisiana (Louisiana State University Medical Center) - Embryonal rhabdomyosarcoma

Maryland (Johns Hopkins Hospital Residents) - Embryonal rhabdomyosarcoma with anaplasia  
Maryland (National Naval Medical Center) - Rhabdomyosarcoma (embryonal/pleomorphic)  
Maryland (University of Maryland) - Myosarcoma, probably embryonal rhabdomyosarcoma  
Massachusetts (New England Medical Center Residents) - Rhabdomyosarcoma  
Michigan (Oakwood Hospital) - Embryonal rhabdomyosarcoma  
Nebraska (Creighton University School of Medicine Residents) - Rhabdomyosarcoma  
New Jersey (Overlook Hospital) - Malignant tumor, NOS  
New York (Long Island Jewish Medical Center) - Embryonal rhabdomyosarcoma, eyelid  
New York (Nassau County Medical Center) - Rhabdomyosarcoma  
New York (Stony Brook University Hospital Residents) - Rhabdomyosarcoma  
New York (Westchester Medical Center) - Rhabdomyosarcoma  
North Carolina (Mountain Area Pathology) - Rhabdomyosarcoma (4)  
Oklahoma (Oklahoma University Pathology Residents) - Anaplastic rhabdomyosarcoma  
Pennsylvania (Allegheny General Hospital) - Pleomorphic rhabdomyosarcoma  
Pennsylvania (Lehigh Valley Hospital) - Rhabdomyosarcoma  
Pennsylvania (Memorial Medical Center) - Malignant neoplasm (eccrine spiroadenoma/rhabdomyosarcoma)  
Puerto Rico (University of Puerto Rico) - Rhabdomyosarcoma, embryonal  
Rhode Island (RI Hospital Pathology Residents) - Embryonal rhabdomyosarcoma  
Texas (ProPath Services) - Malignant peripheral nerve sheath tumor, ovary (2)  
Texas (Scott & White Memorial Hospital) - Rhabdomyosarcoma  
West Virginia (Greenbrier Valley Medical Center) - Rhabdomyosarcoma  
Wisconsin (Meriter Health Services) - Pleomorphic rhabdomyosarcoma  
Australia (North Queensland Pathology) - Rhabdomyosarcoma, embryonal type  
Australia (Royal Prince Alfred Hospital) - (Embryonal) rhabdomyosarcoma  
Canada (Foothills Medical Center) - Sebaceous carcinoma  
Hong Kong (Hong Kong Baptist Hospital) - Rhabdomyosarcoma/undifferentiated sarcoma  
Japan (Shimada City) - Anaplastic embryonal rhabdomyosarcoma  
Qatar (Hamad Medical Corporation) - Embryonal rhabdomyosarcoma

#### **Case 5 - Diagnosis:**

Embryonal rhabdomyosarcoma, eyelid  
 T-XX821, M-89103

#### **Case 5 - References:**

Kilpatrick SE, et al. Relationship of DNA Ploidy to Histology and Prognosis in Rhabdomyosarcoma. Comparison of Flow Cytometry and Image Analysis. *Cancer* 1994; 74(2):3227-3233.  
 Nagar RC, et al. Rhabdomyosarcoma of the Head and Neck in Adults. A Study of 26 Patients. *Laryngoscope* 1993; 103(12):1362-1366.  
 Simon JH, Paulino AC, Smith RB, et al. Prognostic Factors in Head and Neck Rhabdomyosarcoma. *Head Neck* 2002; 24(5):466-473.  
 Raney RB, Anderson JR, Barr FG, et al. Rhabdomyosarcoma and Undifferentiated Sarcoma in the First Two Decades of Life. A Selective Review of Intergroup Rhabdomyosarcoma Study Group Experience and Rationale For Intergroup Rhabdomyosarcoma Study V. *J Pediatr Hematol Oncol* 2001; 23(4):215-220.  
 Dagher R and Helman L. Rhabdomyosarcoma. An Overview. *Oncol* 1999; 4(1):34-44.

#### **Case No. 6, Accession No. 29485**

**May 2003**

Bakersfield - Gastrointestinal stromal tumor  
Bay Area - Gastrointestinal stromal tumor "GIST" (3)  
Baldwin Park (Kaiser Permanente) - GIST (? malignant) (1); GIST tumor (1); GIST (gastrointestinal stromal tumor, with malignant features) (1)  
Hayward/Fremont - Leiomyoma (UMP)  
Laguna Beach (South Coast Medical Center) - Malignant GIST  
Long Beach (Lakewood Regional Medical Center) - Low grade malignant GIST (5)  
Monterey (Community Hospital of Monterey Peninsula) - GIST

Mountain View (El Camino Pathology Group) - GI stromal tumor, malignant  
Oakland (Kaiser Permanente) - GI stromal tumor (3)  
Orange (Kaiser Permanente) - Stromal tumor, malignant GIST (2)  
Orange (UCI Medical Center Residents) - GIST, esophagus  
San Diego (Naval Medical Center) - Malignant gastrointestinal stromal tumor (2)  
Santa Barbara (Cottage Hospital) - Gastrointestinal stromal tumor  
Santa Rosa (Santa Rosa Memorial Hospital) - Gastrointestinal stromal tumor, probably malignant (3)  
Ventura - Gastrointestinal stromal tumor (2)  
Alaska (Alaska Pathology Laboratory) - Leiomyosarcoma  
Alaska (Alaska Native Medical Center) - GIST, malignant  
Arizona (Phoenix Memorial Hospital) - Gastrointestinal stromal tumor  
Florida (Baptist Hospital) - Gastrointestinal stromal tumor (4)  
Florida (Munroe Regional Medical Center) - GIST tumor  
Florida (Pathology Associates) - Malignant GIST  
Florida (Winter Haven Hospital) - GIST of uncertain malignant potential  
Indiana (Fort Wayne) - GIST of esophagus  
Louisiana (Louisiana State University Medical Center) - Esophageal GIST  
Maryland (Johns Hopkins Hospital Residents) - Malignant gastrointestinal stromal tumor  
Maryland (National Naval Medical Center) - Gastrointestinal stromal tumor, malignant  
Maryland (University of Maryland) - Gastrointestinal stromal tumor  
Massachusetts (New England Medical Center Residents) - GIST  
Michigan (Oakwood Hospital) - Gastrointestinal stromal tumor  
Nebraska (Creighton University School of Medicine Residents) - GIST  
New Jersey (Overlook Hospital) - GIST (low grade)  
New York (Long Island Jewish Medical Center) - GIST, esophagus  
New York (Nassau County Medical Center) - GIST  
New York (Stony Brook University Hospital Residents) - Gastrointestinal stromal tumor of esophagus  
New York (Westchester Medical Center) - Gastrointestinal stromal tumor  
North Carolina (Mountain Area Pathology) - GIST probably malignant (1); GIST (3)  
Oklahoma (Oklahoma University Pathology Residents) - Gastrointestinal stromal tumor, malignant  
Pennsylvania (Allegheny General Hospital) - Gastrointestinal stromal tumor  
Pennsylvania (Lehigh Valley Hospital) - Gastrointestinal stromal tumor  
Pennsylvania (Memorial Medical Center) - GIST  
Puerto Rico (University of Puerto Rico) - Gastrointestinal stromal tumor  
Rhode Island (RI Hospital Pathology Residents) - Gastrointestinal stromal tumor  
Texas (ProPath Services) - GIST (gastrointestinal stromal tumor) (1); Gastrointestinal stromal tumor, low malignant potential (1)  
Texas (Scott & White Memorial Hospital) - GIST  
West Virginia (Greenbrier Valley Medical Center) - Stromal tumor  
Wisconsin (Meriter Health Services) - Gastrointestinal stromal tumor (27 cm) with necrosis  
Australia (North Queensland Pathology) - GIST  
Australia (Royal Prince Alfred Hospital) - Gastrointestinal stromal tumour  
Canada (Foothills Medical Center) - GI stromal tumor  
Hong Kong (Hong Kong Baptist Hospital) - Gastrointestinal stromal tumor  
Japan (Shimada City) - Esophageal stromal tumor of borderline malignancy  
Qatar (Hamad Medical Corporation) - Gastrointestinal stromal tumour, most probably malignant

#### **Case 6 - Diagnosis:**

Gastrointestinal stromal tumor, esophagus  
T-62000, M-88903

#### **Case 6 - References:**

Miettinen M, Sarlomo-Rikala M and Lasota J. Gastrointestinal Stromal Tumors. Recent Advances in Understanding of Their Biology. *Hum Pathol* 1999; 30(10):1213-1220.

- Franquemont DW. Differentiation and Risk Assessment of Gastrointestinal Stromal Tumors. *Am J Clin Pathol* 1995; 103(1):41-47.
- Wang X, Mori I, Tang W, et al. Gastrointestinal Stromal Tumors. Are They of Cajal Cell Origin? *Ex Mol Pathol* 2002; 72(2):172-177.
- Miettinen M. New Challenges in the Identification of Gastrointestinal Stromal Tumors and Other Possible KIT-Driven Tumors. *Am J Clin Pathol* 2002; 117(2):183-185.
- Trupiano JK, Stewart RE, Misick C, et al. Gastric Stromal Tumors. A Clinicopathologic Study of 77 Cases with Correlation of Features with Nonaggressive and Aggressive Clinical Behaviors. *Am J Surg Pathol* 2002; 26(6):705-714.
- Lee JR, Joshi V, Griffin JW, et al. Gastrointestinal Autonomic Nerve Tumor. Immunohistochemical and Molecular Identity with Gastrointestinal Stromal Tumor. *Am J Surg Pathol* 2002; 26(3):396.
- Hasegawa T, Matsuno Y, Shimoda T, et al. Gastrointestinal Stromal Tumor. Consistent CD117 Immunostaining for Diagnosis, and Prognosis Classification Based on Tumor Size and MIB-1 Grade. *Hum Pathol* 2002; 33(6):669-676.

**Case No. 7, Accession No. 29576**

**May 2003**

- Bakersfield - Solid cystic, papillary epithelial neoplasm
- Bay Area - Solid cystic papillary epithelial neoplasm (3)
- Baldwin Park (Kaiser Permanente) - Solid cystic papillary epithelial tumor (of pancreas) (3)
- Hayward/Fremont - Solid pseudopapillary tumor
- Laguna Beach (South Coast Medical Center) - Solid cystic papillary epithelial neoplasm
- Long Beach (Lakewood Regional Medical Center) - Solid and papillary tumor of pancreas (5)
- Monterey (Community Hospital of Monterey Peninsula) - Solid cystic papillary epithelial neoplasm vs. well-differentiated neuroendocrine tumor
- Mountain View (El Camino Pathology Group) - Solid and cystic papillary tumor
- Oakland (Kaiser Permanente) - Solid cystic papillary epithelial tumor (3)
- Orange (Kaiser Permanente) - Solid pseudopapillary tumor (2)
- Orange (UCI Medical Center Residents) - Solid pseudopapillary tumor, pancreas
- San Diego (Naval Medical Center) - Pancreatic endocrine neoplasm (1); Solid and papillary epithelial neoplasm (1)
- Santa Barbara (Cottage Hospital) - Papillary and solid epithelial neoplasm of pancreas
- Santa Rosa (Santa Rosa Memorial Hospital) - Solid pseudopapillary tumor (3)
- Ventura - Borderline pancreatic endocrine tumor (2)
- Alaska (Alaska Pathology Laboratory) - PSEN
- Alaska (Alaska Native Medical Center) - Solid pseudopapillary tumor
- Arizona (Phoenix Memorial Hospital) - Solid pseudopapillary tumor
- Florida (Baptist Hospital) - Papillary pseudopapillary tumor (1); Solid pseudopapillary tumor (papillary cystic tumor) (1); Papillary and solid neoplasm (PSEN) (1); Solid cystic papillary epithelial neoplasm (1)
- Florida (Munroe Regional Medical Center) - Acinar cell carcinoma
- Florida (Pathology Associates) - Solid pseudopapillary tumor of the pancreas
- Florida (Winter Haven Hospital) - Pseudopapillary solid and cystic neoplasm
- Indiana (Fort Wayne) - Solid papillary tumor of pancreas
- Louisiana (Louisiana State University Medical Center) - Pancreas solid pseudopapillary carcinoma
- Maryland (Johns Hopkins Hospital Residents) - Favor Hammoudi tumor (so-called solid pseudopapillary tumor of the pancreas), DDx: includes pancreatic neuroendocrine neoplasm
- Maryland (National Naval Medical Center) - Solid pseudopapillary tumor
- Maryland (University of Maryland) - Solid pseudopapillary (cystic) tumor
- Massachusetts (New England Medical Center Residents) - Solid pseudopapillary tumor
- Michigan (Oakwood Hospital) - Solid cystic tumor of pancreas
- Nebraska (Creighton University School of Medicine Residents) - Islet cell tumor
- New Jersey (Overlook Hospital) - Solid pseudopapillary neoplasm
- New York (Long Island Jewish Medical Center) - Solid pseudopapillary tumor, pancreas
- New York (Nassau County Medical Center) - Papillary pseudocystic solid tumor
- New York (Stony Brook University Hospital Residents) - Neuroendocrine tumor of pancreas
- New York (Westchester Medical Center) - Solid pseudopapillary tumor of pancreas
- North Carolina (Mountain Area Pathology) - Solid pseudopapillary tumor (4)
- Oklahoma (Oklahoma University Pathology Residents) - Solid pseudopapillary tumor of the pancreas

Pennsylvania (Allegheny General Hospital) - Solid and papillary tumor  
Pennsylvania (Lehigh Valley Hospital) - Papillary and solid epithelial neoplasm  
Pennsylvania (Memorial Medical Center) - Solid cystic papillary neoplasm  
Puerto Rico (University of Puerto Rico) - Solid pseudopapillary tumor  
Rhode Island (RI Hospital Pathology Residents) - Solid pseudopapillary tumor  
Texas (ProPath Services) - Carcinoid tumor (2)  
Texas (Scott & White Memorial Hospital) - Pancreatic neuroendocrine tumor  
West Virginia (Greenbrier Valley Medical Center) - Endocrine carcinoma  
Wisconsin (Meriter Health Services) - Solid cystic papillary epithelial neoplasm of pancreas  
Australia (North Queensland Pathology) - Solid pseudopapillary tumour  
Australia (Royal Prince Alfred Hospital) - Papillary and solid epithelial neoplasm  
Canada (Foothills Medical Center) - Solid pseudopapillary tumor  
Hong Kong (Hong Kong Baptist Hospital) - Pancreatic neuroendocrine tumor/papillary adenocarcinoma  
Japan (Shimada City) - Endocrine tumor of borderline malignancy  
Qatar (Hamad Medical Corporation) - Neuroendocrine tumour, low grade

#### **Case 7 - Diagnosis:**

Solid-pseudopapillary tumor, pancreas  
 T-59000, M-80001

#### **Case 7 - References:**

Klimsta DS, Wenig BM and Heffess CS. Solid-Pseudopapillary Tumor of the Pancreas. A Typically Cystic Carcinoma of Low Malignant Potential. *Semin Diagn Pathol* 2000; 17(1):66-80.  
 Muller-Hocker J, Zietz CH and Sendelhofert A. Deregulated Expression of Cell Cycle-Associated Proteins in Solid Pseudopapillary Tumor of the Pancreas. *Mod Pathol* 2001; 14(2):47-53.  
 Notohara K, Hamazaki S, Tsukayama C, et al. Solid-Pseudopapillary Tumor of the Pancreas. Immunohistochemical Localization of Neuroendocrine Markers and CD10. *Am J Surg Pathol* 2000; 24(10):1361-1371.  
 Maitra A, Weinberg AG, Schneider N, et al. Detection of t(11;22)(q24;q12) Translocation and EWS-FLI-1 Fusion Transcript in a Case of Solid Pseudopapillary Tumor of the Pancreas. *Pediatr Dev Pathol* 2000; 3(6):603-605.  
 Yoon DY, Hines OJ, Bilchik AJ, et al. Solid and Papillary Epithelial Neoplasms of the Pancreas. Aggressive Resection for Cure. *Am Surg* 2001; 67(12):1195-1199.

#### **Case No. 8, Accession No. 29510**

**May 2003**

Bakersfield - Mesenteric fibromatosis  
Bay Area - Mesenteric fibromatosis (3)  
Baldwin Park (Kaiser Permanente) - Intra-abdominal fibromatosis (desmoid) (1); Desmoid tumor (2)  
Hayward/Fremont - Mesenteric fibromatosis  
Laguna Beach (South Coast Medical Center) - Mesenteric fibromatosis  
Long Beach (Lakewood Regional Medical Center) - Mesenteric fibromatosis (5)  
Monterey (Community Hospital of Monterey Peninsula) - Fibromatosis  
Mountain View (El Camino Pathology Group) - Fibromatosis  
Oakland (Kaiser Permanente) - Mesenteric fibromatosis (3)  
Orange (Kaiser Permanente) - Mesenteric fibromatosis (2)  
Orange (UCI Medical Center Residents) - Intra-abdominal fibromatosis, small bowel mesentery  
San Diego (Naval Medical Center) - Intra-abdominal fibromatosis (1); Mesenteric fibromatosis (1)  
Santa Barbara (Cottage Hospital) - Mesenteric fibromatosis  
Santa Rosa (Santa Rosa Memorial Hospital) - Mesenteric fibromatosis (3)  
Ventura - Mesenteric fibromatosis (2)  
Alaska (Alaska Pathology Laboratory) - Fibromatosis  
Alaska (Alaska Native Medical Center) - Aggressive mesenteric fibromatosis/desmoid  
Arizona (Phoenix Memorial Hospital) - Desmoid fibromatosis  
Florida (Baptist Hospital) - Intestinal fibromatosis (desmoid tumor) (1); Desmoid tumor (3)  
Florida (Munroe Regional Medical Center) - Desmoid

Florida (Pathology Associates) - Mesenteric fibromatosis  
Florida (Winter Haven Hospital) - Mesenteric fibromatosis  
Indiana (Fort Wayne) - Gastric mesenteric fibromatosis (desmoid), abdominal  
Louisiana (Louisiana State University Medical Center) - Fibromatosis  
Maryland (Johns Hopkins Hospital Residents) - Mesenteric fibromatosis (could confirm with B catenin immunostian) DDX; includes GIST (CKIT, CD34+) and SFT  
Maryland (National Naval Medical Center) - Mesenteric fibromatosis  
Maryland (University of Maryland) - Fibromatosis  
Massachusetts (New England Medical Center Residents) - Fibromatosis  
Michigan (Oakwood Hospital) - Fibromatosis  
Nebraska (Creighton University School of Medicine Residents) - Aggressive mesenteric fibromatosis  
New Jersey (Overlook Hospital) - Fibromatosis  
New York (Long Island Jewish Medical Center) - Desmoid, small bowel mesentery  
New York (Nassau County Medical Center) - Intra-abdominal fibromatosis  
New York (Stony Brook University Hospital Residents) - Fibromatosis  
New York (Westchester Medical Center) - Mesenteric fibromatosis  
North Carolina (Mountain Area Pathology) - Reactive nodular fibrous pseudotumor (4)  
Oklahoma (Oklahoma University Pathology Residents) - Intra-abdominal fibromatosis  
Pennsylvania (Allegheny General Hospital) - Fibromatosis  
Pennsylvania (Lehigh Valley Hospital) - Fibromatosis  
Pennsylvania (Memorial Medical Center) - GIST/neurofibroma  
Puerto Rico (University of Puerto Rico) - Fibromatosis  
Rhode Island (RI Hospital Pathology Residents) - Mesenteric fibromatosis  
Texas (ProPath Services) - Desmoid tumor (2)  
Texas (Scott & White Memorial Hospital) - Inflammatory myofibroblastic tumor vs. mesenteric fibromatosis  
West Virginia (Greenbrier Valley Medical Center) - Stromal tumor  
Wisconsin (Meriter Health Services) - Fibromatosis  
Australia (North Queensland Pathology) - Mesenteric fibromatosis  
Australia (Royal Prince Alfred Hospital) - Fibromatosis  
Canada (Foothills Medical Center) - Fibromatosis  
Hong Kong (Hong Kong Baptist Hospital) - Fibromatosis  
Japan (Shimada City) - Mesenteric fibromatosis  
Qatar (Hamad Medical Corporation) - Mesenteric fibromatosis

#### **Case 8 - Diagnosis:**

Mesenteric fibromatosis, small bowel  
 T-64000, M-76100

#### **Case 8 – References:**

Burke AP, Sobin LH, Shekitka KM, et al. Intra-Abdominal Fibromatosis. A Pathologic Analysis of 130 Tumors with Comparison of Clinical Sub-Groups. *Am J Surg Pathol* 1990; 14(4):335-341.  
 Shons AR, Estrin S and Najarian JS. Gardner's Syndrome and Fibromatosis. Review of the Problem and Report of a Case. *Dis Colon Rectum* 1975; 18(2):128-133.  
 Richards RC, Rogers SW and Gardner EJ. Spontaneous Mesenteric Fibromatosis in Gardner's Syndrome. *Cancer* 1981; 47:597-601.  
 Bridge JA, Sreekantaiah C, Mouron B, et al. Clonal Chromosomal Abnormalities in Desmoid Tumors. Implications for Histogenesis. *Cancer* 1992; 69(2):430-436.  
 Yantiss RK, Spiro IJ, Compton CC, et al. Gastrointestinal Stromal Tumor Versus Intra-Abdominal Fibromatosis of the Bowel Wall. A Clinically Important Differential Diagnosis. *Am J Surg Pathol* 2000; 24(7):947-957.

#### **Case No. 9, Accession No. 29457**

**May 2003**

Bakersfield - Angiosarcoma

Bay Area - Solitary fibrous tumor (3)

Baldwin Park (Kaiser Permanente) - Solitary fibrous tumor (consistent with polykaryon formation) (1); Hemangiopericytoma/solitary fibrous tumor with polykaryon formation (1); Solitary fibrous tumor with polykaryon formation (extraorbital giant cell angiofibroma) (1)

Hayward/Fremont - Liposarcoma

Laguna Beach (South Coast Medical Center) - Angiosarcoma

Long Beach (Lakewood Regional Medical Center) - Pleomorphic hyalinizing angiectatic tumor (5)

Monterey (Community Hospital of Monterey Peninsula) - Angiosarcoma

Mountain View (El Camino Pathology Group) - Giant cell fibroblastoma

Oakland (Kaiser Permanente) - Pleomorphic hyalinizing angiectatic tumor (3)

Orange (Kaiser Permanente) - Deep B-9 fibrous histiocytoma (2)

Orange (UCI Medical Center Residents) - Giant cell myofibroblastoma, buttock

San Diego (Naval Medical Center) - Giant cell angiofibroma (1); Pleomorphic hyalinizing angioectatic tumor of soft parts (1)

Santa Barbara (Cottage Hospital) - Typical decubital fibroplasia

Santa Rosa (Santa Rosa Memorial Hospital) - Angiosarcoma (2); Epithelioid hemangioma (angiolymphoid hyperplasia with eosinophilia) (1)

Ventura - Hemangiopericytoma (2)

Alaska (Alaska Pathology Laboratory) - Solitary fibrous tumor of soft tissue

Alaska (Alaska Native Medical Center) - Epithelioid hemangioendothelioma (2); Angiomatoid fibrous histiocytoma (1)

Arizona (Phoenix Memorial Hospital) - Dermatofibrosarcoma protuberans

Florida (Baptist Hospital) - Angiosarcoma (2); Malignant fibrous histiocytoma (2)

Florida (Munroe Regional Medical Center) - Solitary fibrous tumor

Florida (Pathology Associates) - DFSP

Florida (Winter Haven Hospital) - Solitary fibrous tumor (benign)

Indiana (Fort Wayne) - Solitary fibrous tumor of left buttock

Louisiana (Louisiana State University Medical Center) - Solitary fibrous tumor

Maryland (Johns Hopkins Hospital Residents) - Favor solitary fibrous tumor

Maryland (National Naval Medical Center) - Solitary fibrous tumor

Maryland (University of Maryland) - Solitary fibrous tumor

Massachusetts (New England Medical Center Residents) - Epithelioid hemangioendothelioma

Michigan (Oakwood Hospital) - Angiosarcoma

Nebraska (Creighton University School of Medicine Residents) - Giant cell angioblastoma

New Jersey (Overlook Hospital) - Fibrous histiocytoma

New York (Long Island Jewish Medical Center) - Pleomorphic hyalinizing angioectatic tumor of soft parts

New York (Nassau County Medical Center) - Solitary fibrous tumor, atypical

New York (Stony Brook University Hospital Residents) - Dermatofibrosarcoma protuberans, giant cell fibroblastoma

New York (Westchester Medical Center) - Dermatofibrosarcoma protuberans (DFSP)

North Carolina (Mountain Area Pathology) - Giant cell fibroblastoma (4)

Oklahoma (Oklahoma University Pathology Residents) - Pleomorphic hyalinizing angiectatic tumor (5); Solitary fibrous tumor (1)

Pennsylvania (Allegheny General Hospital) - Giant cell angiofibroma

Pennsylvania (Lehigh Valley Hospital) - Solitary fibrous tumor

Pennsylvania (Memorial Medical Center) - Solitary fibrous tumor/angiosarcoma

Puerto Rico (University of Puerto Rico) - Giant cell angiofibroma

Rhode Island (RI Hospital Pathology Residents) - Hemangiopericytoma or deep fibrous histiocytoma

Texas (ProPath Services) - Angiosarcoma (2)

Texas (Scott & White Memorial Hospital) - Solitary fibrous tumor

West Virginia (Greenbrier Valley Medical Center) - Angiosarcoma

Wisconsin (Meriter Health Services) - Solitary fibrous tumor of soft tissue

Australia (North Queensland Pathology) - Solitary fibrous tumour, DDx: Dermatofibrosarcoma protuberans

Australia (Royal Prince Alfred Hospital) - Pleomorphic hyalinizing angioectatic tumour of soft parts

Canada (Foothills Medical Center) - Giant cell angiofibroma

Hong Kong (Hong Kong Baptist Hospital) - Dermatofibrosarcoma protuberans

Japan (Shimada City) - DFSP

Qatar (Hamad Medical Corporation) - Solitary fibrous tumour

**Case 9 - Diagnosis:**

Solitary fibrous tumor, buttock  
T-Y1600, M-91600

**Consultation:** Andrew L. Folpe, M.D., Emory University, Atlanta, Georgia. "Solitary fibrous tumor with polykaryon formation (extra-orbital giant cell angiofibroma), histologically benign".

**Case 9 - References:**

- Guillou L, Gebhard S and Coindre JM. Orbital and Extra-Orbital Giant Cell Angiofibroma. A Giant Cell-Rich Variant of a Solitary Fibrous Tumor? Clinicopathologic and Immunohistochemical Analysis of a Series of a Unifying Concept. *Am J Surg Pathol* 2000; 24(7):971-979.
- Thomas R, Banerjee SS, Eyden BP, et al. A Study of Four Cases of Extra-Orbital Giant Cell Angiofibroma with Documentation of Some Unusual Features. *Histopathol* 2001; 39(4):390-396.

**Case No. 10, Accession No. 29338**

**May 2003**

- Bakersfield - Hemangiopericytoma
- Bay Area - Solitary fibrous tumor (2); Hemangiopericytoma (1)
- Baldwin Park (Kaiser Permanente) - Solitary fibrous tumor (2); Hemangiopericytoma/solitary fibrous tumor (1)
- Hayward/Fremont - Solitary fibrous tumor
- Laguna Beach (South Coast Medical Center) - Solitary fibrous tumor
- Long Beach (Lakewood Regional Medical Center) - Solitary fibrous tumor (5)
- Monterey (Community Hospital of Monterey Peninsula) - Hemangiopericytoma
- Mountain View (El Camino Pathology Group) - DFSP
- Oakland (Kaiser Permanente) - Solitary fibrous tumor (3)
- Orange (Kaiser Permanente) - Hemangiopericytoma (2)
- Orange (UCI Medical Center Residents) - Hemangiopericytoma, retroperitoneum
- San Diego (Naval Medical Center) - Solitary fibrous tumor (5); Hemangiopericytoma (12)
- Santa Barbara (Cottage Hospital) - Solitary fibrous tumor
- Santa Rosa (Santa Rosa Memorial Hospital) - Solitary fibrous tumor (hemangiopericytoma) (1); Malignant hemangiopericytoma (1); Hemangiopericytoma (1)
- Ventura - Hemangiopericytoma
- Alaska (Alaska Pathology Laboratory) - Hemangiopericytoma
- Alaska (Alaska Native Medical Center) - Hemangiopericytoma (2); Solitary fibrous tumor (1)
- Arizona (Phoenix Memorial Hospital) - Angiosarcoma
- Florida (Baptist Hospital) - Hemangiopericytoma (4)
- Florida (Munroe Regional Medical Center) - Low grade fibromyxoid tumor
- Florida (Pathology Associates) - Solitary fibrous tumor
- Florida (Winter Haven Hospital) - Hemangiopericytoma
- Indiana (Fort Wayne) - Hemangiopericytoma of retroperitoneum
- Louisiana (Louisiana State University Medical Center) - Solitary fibrous tumor vs. hemangiopericytoma
- Maryland (Johns Hopkins Hospital Residents) - Solitary fibrous tumor vs. gastrointestinal stromal tumor (would perform CKIT immunostain to differentiate)
- Maryland (National Naval Medical Center) - Hemangiopericytoma
- Maryland (University of Maryland) - Favor hemangiopericytoma vs. solitary fibrous tumor
- Massachusetts (New England Medical Center Residents) - Hemangiopericytoma
- Michigan (Oakwood Hospital) - Extra gastrointestinal stromal tumor, malignant
- Nebraska (Creighton University School of Medicine Residents) - Angiosarcoma
- New Jersey (Overlook Hospital) - Hemangiopericytoma, indeterminate biological potential
- New York (Long Island Jewish Medical Center) - Solitary fibrous tumor (hemangiopericytoma-like pattern), retroperitoneum
- New York (Nassau County Medical Center) - Hemangiopericytoma
- New York (Stony Brook University Hospital Residents) - Solitary fibrous tumor
- New York (Westchester Medical Center) - Solitary fibrous tumor (hemangiopericytoma type)

North Carolina (Mountain Area Pathology) - Solitary fibrous tumor (3)  
Oklahoma (Oklahoma University Pathology Residents) - Hemangiopericytoma  
Pennsylvania (Allegheny General Hospital) - Hemangiopericytoma  
Pennsylvania (Lehigh Valley Hospital) - Solitary fibrous tumor  
Pennsylvania (Memorial Medical Center) - Hemangiopericytoma  
Puerto Rico (University of Puerto Rico) - Hemangiopericytoma/solitary fibrous tumor  
Rhode Island (RI Hospital Pathology Residents) - Solitary fibrous tumor  
Texas (ProPath Services) - Hemangiopericytoma (2)  
Texas (Scott & White Memorial Hospital) - Hemangiopericytoma  
West Virginia (Greenbrier Valley Medical Center) - Solitary fibrous tumor  
Wisconsin (Meriter Health Services) - Hemangiopericytoma  
Australia (North Queensland Pathology) - Hemangiopericytoma  
Australia (Royal Prince Alfred Hospital) - Solitary fibrous tumor  
Canada (Foothills Medical Center) - Solitary fibrous tumor  
Hong Kong (Hong Kong Baptist Hospital) - Hemangiopericytoma  
Japan (Shimada City) - Hemangiopericytoma  
Qatar (Hamad Medical Corporation) - Hemangioendothelioma, spindle cell variant

**Case 10 - Diagnosis:**

Hemangiopericytoma/solitary fibrous tumor, intra-abdominal

Directors Note: Many soft tissue tumor authorities are now viewing hemangiopericytoma and solitary fibrous tumors as ends of a morphologic spectrum, and that they may actually be the same neoplasm. (drc)

T-Y4100, M-91503

**Case 10 - References:**

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