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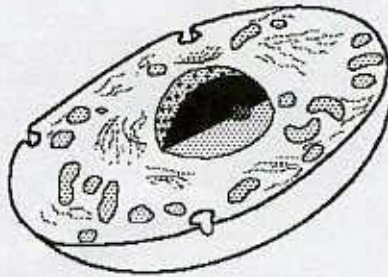


CALIFORNIA  
TUMOR TISSUE REGISTRY

## **“GENERAL PATHOLOGY”**

**Study Cases, Subscription A**

**May 2005**



**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 U.S.A.**

**(909) 558-4788**

**FAX: (909) 558-0188**

**E-mail: [cttr@linkline.com](mailto:cttr@linkline.com)**

**Home Page: [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 relevant 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.  
Note: 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: Nora Ostrzega/Douglas Kahn, M.D.**  
**Sylmar, CA**

**Case No. 1 - May 2005**

**Tissue from: Colon**

**Accession #29828**

**Clinical Abstract:**

A 28-year-old female presented with left lower quadrant pain of five months duration. A barium enema revealed a mucosal-based mass. A polypectomy was performed.

**Gross Pathology:**

Removed was a polypoid structure measuring 3.5 cm in diameter. The polyp was smooth with a homogeneous cut surface.

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**Contributor: Henry Slosser, M.D.**  
**Pasadena, CA**

**Case No. 2 - May 2005**

**Tissue from: Left breast**

**Accession #29570**

**Clinical Abstract:**

Over the past ten years a 39-year-old female had two remarkably large masses in her left breast. A mastectomy was performed.

**Gross Pathology:**

The tumors were similar, consisting of firm gray tissue with focal hemorrhage. The largest mass weighed 5,310 grams and measured 29.0 x 27.0 x 16.0 cm. The second was soft and somewhat ovoid, weighing 326 grams and measuring 11.0 x 10.0 x 6.5 cm.

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

**Case No. 3 - May 2005**

**Tissue from: Breast**

**Accession #29803**

**Clinical Abstract:**

A 30-year-old female presented with a palpable mass in the upper-outer quadrant of her right breast.

**Gross Pathology:**

The excision measured 13.0 x 12.0 x 4.0 cm and contained a fairly well-circumscribed mass that was 7.0 cm in greatest diameter.

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**Contributor: Faramarz Azizi, M.D.**  
**Fontana, CA**

**Case No. 4 - May 2005**

**Tissue from: Ovary**

**Accession #29804**

**Clinical Abstract:**

A 64-year-old gravida 7, para 4, ab 3 female experienced occasional pelvic pain. Ultrasound and CT scan showed an adnexal mass. A TAH/BSO (Marshall-Marchetti-Krantz) was performed.

**Gross Pathology:**

The smooth-surfaced grayish-pink ovary weighed 248 grams and measured 13.0 x 10.0 x 7.0 cm and had a segment of fallopian tube measuring 5.0 x 0.7 cm. Sectioning through the ovary showed multiple various sized cysts as well as solid homogenous areas which included fresh hemorrhage and some suggestion of infarct-like necrosis.

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

**Case No. 5 - May 2005**

**Tissue from: Left parotid**

**Accession #29761**

**Clinical Abstract:**

A 55-year-old diabetic male was noted to have a 5 x 3 cm mass inferior to his left ear. It had been present for about 10 years and had been gradually increasing in size. It had recently become painful, and he underwent FNA and a partial parotidectomy.

**Gross Pathology:**

The 31.8 gram, 5.5 x 4.5 x 2.5 cm pink-tan tissue contained a 3.3 x 3.0 x 2.7 cm circumscribed soft, pink-tan lobulated cut surface with grossly intact thin capsule.

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**Contributor: Yasuchi Tamura, M.D.  
Bellflower, CA**

**Case No. 6 - May 2005**

**Tissue from: Pelvis**

**Accession #29835**

**Clinical Abstract:**

Having a history of hysterectomy (with previously diagnosed leiomyomas) this 70-year-old female had a pelvic mass removed.

**Gross Pathology:**

The reddish-gray retroperitoneal mass measured 9.0 x 6.0 x 4.5 cm.

**SPECIAL STUDIES:**

SMA	positive
Actin	positive
Desmin	positive
Calponin	positive
ER	positive
PR	positive
CAM5.2/AE1	negative
S-100	negative
CD34	negative
CD31	negative
CD117	negative

**Contributor: John Sacoolidge, M.D.**  
**Sylmar, CA**

**Case No. 7 - May 2005**

**Tissue from: Omentum/Right ovary**

**Accession #29968**

**Clinical Abstract:**

A 69-year-old female complained of increased abdominal girth. A transabdominal and endovaginal ultrasound of the pelvis showed only a retroverted uterus but also noted thickened omentum. An FNA favored a poorly differentiated adenocarcinoma. A serum CA-125 was normal. An open excisional biopsy was performed.

**Gross Pathology:**

The resected omentum consisted of a piece of multilobulated fatty tissue measuring 5.0 x 2.0 x 1.0 cm. The surface was studded with pink-yellow nodules ("omental cake").

**SPECIAL STUDIES:**

CK7	positive
Calretinin	focally positive
EMA	positive
CK20	negative
GCDFP	negative
TTF1	negative
Mucin	negative
S100	negative
CD117	negative
E-cadherin	negative

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

**Case No. 8 - May 2005**

**Tissue from: Right knee**

**Accession #29840**

**Clinical Abstract:**

A 17-year-old male developed a mass on his right knee.

**Gross Pathology:**

The excised specimen was ovoid and 5.0 x 5.0 x 4.5 x 1.0 cm. It was firm tan-white nodular and 5.0 cm in greatest diameter.

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

**Case No. 9 - May 2005**

**Tissue from: Testicle**

**Accession #30205**

**Clinical Abstract:**

A 57 y/o male presented with a 3-4 month history of an enlarged, firm non-tender testicle. Physical exam showed a left, solid testicular mass approximating 6.0 cm in greatest diameter. An echogram showed enlargement with "inhomogeneous echoic densities and increasing vascularity most consistent with testicular tumor".

**Gross Pathology:**

The testis was 127 grams and contained a white-tan whorled nodule measuring 4.5 x 4.0 x 4.0 cm.

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**Contributor: John McGill, M.D.**  
**Pasadena, CA**

**Case No. 10 - May 2005**

**Tissue from: Sternum**

**Accession #29843**

**Clinical Abstract:**

A slow-growing mass was noted on the sternum of an 85-year-old male.

**Gross Pathology:**

A composite resection of the sternum and ribs showed a 9.0 x 5.0 x 5.0 cm solid well-circumscribed mass. Soft tissue invasion was not seen.



CALIFORNIA  
TUMOR TISSUE REGISTRY

*GENERAL PATHOLOGY*

Minutes – Subscription A

May, 2005



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

- Diagnostic Accuracy of Second-Opinion Diagnoses Based on Still Images. Nordrum I, Johansen M, Amin A, et al. *Hum Pathol* 2004; 35(1):129-135.
- Proliferative Activity in Primary Breast Carcinomas is a Salient Prognostic Factor. Michels J-J, Marnay J, Delozier T, et al. *Cancer* 2004; 100(3):455-464.
- Laparoscopic Surgical Staging in Cervical Cancer. Chu KK, Chang S-D, Chen FP, et al. Preliminary Experience Among Chinese. *Gynecol Oncol* 1997; 64(1):49-53.
- Telomerase Activity in Gynecologic Tumors. Zheng P-S, Iwasaka T, Yanasaki F, et al. *Gynecol Oncol* 1997; 64(1):171-175.
- Primer on Medical Genomics. Part X1: Visualizing Human Chromosomes. Spurbeck JL, Adams SA, Stupca PJ, et al. *Mayo Clin Proc* 2004; 79:58-75.

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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, 2005

**Case 1:**

Juvenile polyp with focal low grade dysplasia, colon  
T-67000, M-75640

**Case 2:**

Phyllodes tumor, low grade, breast  
T-04000, M-90213

**Case 3:**

Phyllodes tumor, malignant, breast -  
T-04000, M-90213

**Case 4:**

Ovarian fibroma/fibroma with changes likely due to torsion  
T-87000, M-86000

**Case 5:**

Acinic cell carcinoma, low grade, parotid gland  
T-55100, M-85501

**Case 6:**

Epithelial leiomyosarcoma, low grade, pelvis and retroperitoneum  
T-Y4600, M-88913

**Case 7:**

High grade mesothelioma, peritoneum  
T-87000, M-90503

**Case 8:**

Synovial sarcoma, biphasic knee  
T-78000, M-88900

**Case 9:**

Leiomyoma, paratesticular/scrotal  
T-78000, M-88900

**Case 10:**

Low grade chondrosarcoma, sternum  
T-78000, M-88900

Alameda (Alameda County Medical Center) - Tubulovillous adenoma  
Baldwin Park (Kaiser Permanente) - Peutz-Jegher polyp (3)  
Fontana (Kaiser Permanente) - Juvenile polyp  
Glendale - Villoglandular adenoma  
Irvine (University of California Residents) - Tubular adenoma with features of prolapse  
Long Beach - Hamartomatous polyp (Peutz-Jeghers) (7)  
Monterey Park (Monterey Peninsula Residents) - Benign hyperplastic polyp (1); Tubular adenoma (1)  
Sacramento (UC Davis Medical Center Residents) - Tubular adenoma  
San Diego (Naval Medical Center) - Juvenile polyp with adenomatous change  
San Francisco (San Francisco General Hospital) - Peutz-Jeghers polyp  
Santa Barbara (Cottage Hospital) - Tubulovillous adenoma  
Santa Rosa (Santa Rosa Memorial Hospital) - Peutz-Jeghers polyp (3)  
Ventura - Villoglandular adenoma  
Arizona (Marvvalle Medical Center) - Peutz-Jeghers polyp, colon  
Colorado, Evergreen - Peutz-Jegher polyp  
Colorado (Lutheran Medical Center) - Juvenile polyp  
Connecticut - Tubular adenoma with pseudoinvasion  
Florida (Baptist Pathology) - Hamartomatous polyp with moderate dysplasia  
Florida (Winter Haven Hospital) - Tubular adenoma  
Illinois, Burr Ridge - Juvenile polyp  
Indiana (Ball Memorial Hospital) - Juvenile polyp  
Indiana (Howard Community Hospital) - Cronkite-canada polyp  
Louisiana (Louisiana State University Health Science Center) - Tubular adenoma  
Maryland (National Naval Medical Center) - Tubular adenoma (10); Juvenile Polyp (1)  
Maryland (University of Maryland Residents) - Juvenile polyp  
Massachusetts (New England Medical Center) - Juvenile polyp  
Michigan (Oakwood Hospital) - Juvenile polyp  
Minnesota (Fairview Ridges Hospital) - Juvenile polyp  
Nebraska (Creighton University School of Medicine) - Juvenile (retention) polyp  
New York (Presbyterian/Weill Cornell Campus) - Adenomatous polyp (tubular adenoma)  
New York (Stony Brook University Hospital Residents) - Peutz-Jeghers, syndrome  
North Carolina (Mountain Area Pathology) - Tubular adenoma (5)  
Ohio (McCullough Hyde Memorial Hospital) - Juvenile polyp  
Ohio (Medical College of Ohio) - Tubulovillous adenoma  
Ohio (Valley Pathologists, Inc.) - Adenoma (1); Tubular adenoma (1); Tubulovillous adenoma (1)  
Pennsylvania (Conemaugh Memorial Medical Center) - Juvenile polyp with dysplasia  
Pennsylvania (Lehigh Valley Hospital) - Juvenile polyp  
Pennsylvania (Mt. Nittany Medical Center) - Peutz-Jeghers polyp with low-grade dysplasia, colon  
Pennsylvania (Pennsylvania Hospital Pathology Residents) - Juvenile polyp  
Puerto Rico (University of Puerto Rico) - Peutz-Jeghers polyp with adenomatous transformation  
Texas, Lubbock - Adenomatous polyp with focal severe dysplasia  
Texas (Propath Associates) - Hamartomatous polyp of colon (2)  
Texas (San Antonio) - Peutz-Jegher polyp with adenomatous change  
Texas (Scott & White Memorial Hospital) - Peutz-Jegher polyp  
West Virginia (Greenbrier Valley Medical Center) - Tubular adenoma  
Australia (North Queensland Pathology) - Peutz-Jegher polyp  
Australia (Royal Prince Alfred Hospital) - Hamartomatous polyp of Peutz-Jeghers type, dysplasia  
Brazil (UNIFESP/EPM) - Intramucosal carcinoma arising in tubular adenoma  
Canada (Woodstock General Hospital) - Tubular adenoma with entrapped glands, colon  
Germany, Hamburg - Tubular adenoma with low-moderate dysplasia  
Hong Kong (Hong Kong Baptist Hospital) - Tubular adenoma with pseudoinvasion

Italy, Naples - Peutz-Jeghers polyp  
Netherlands, Amsterdam - Tubulovillous adenoma  
Qatar (Hamad Medical Corporation) - Tubular adenomatous polyp

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

Juvenile polyp with focal low grade dysplasia, colon

Director's note: Note close similarity in places to a Peutz-Jegher polyp. (drc)

T-67000, M-75640

#### **Case 1 – References:**

- Dajani YF and Kamal MF. Colorectal Juvenile Polyps. An Epidemiological and Histopathological Study of 144 Cases in Jordanians. *Histopathol* 1984; 8(5):765-779.
- Lipper S, Kahn LB, Sandler RS, et al. Multiple Juvenile Polyposis. A Study of Pathogenesis of Juvenile Polyps and Their Relationship to Colonic Adenomas. *Hum Pathol* 1981; 12(9):804-813.
- Mills SE and Fechner RE. Unusual Adenomatous Polyps in Juvenile Polyposis Coli. *Am J Surg Pathol* 1982; 6(2):177-183.
- Grotsky HW, Rickert RR, Smith WD, et al. Familial Juvenile Polyposis Coli. A Clinical and Pathologic Study of a Large Kindred. *Gastroenterology* 1982; 82(3):494-501.
- Jarvinen H and Franssila KO. Familial Juvenile Polyposis Coli. Increased Risk of Colorectal Cancer. *Gut* 1984; 25(7):792-800.
- Goodman ZD, Yardley JH and Milligan FD. Pathogenesis of Colonic Polyps in Multiple Juvenile Polyposis. Report of a Case Associated with Gastric Polyps and Carcinoma of the Rectum. *Cancer* 1979; 43(5):1906-1913.

#### **Case No. 2, Accession No. 29570**

**May 2005**

Alameda (Alameda County Medical Center) - Phyllodes tumor  
Baldwin Park (Kaiser Permanente) - Phyllodes tumor (1); Low grade phyllodes tumor (2)  
Fontana (Kaiser Permanente) - Malignant Phyllodes tumor  
Glendale - Phyllodes tumor  
Irvine (University of California Residents) - Malignant Phyllodes tumor with rhabdomyoblastic tumor  
Long Beach - Phyllodes tumor, malignant (7)  
Monterey Park (Monterey Peninsula Residents) - Phyllodes tumor, high grade (1); Phyllodes tumor (1)  
Sacramento (UC Davis Medical Center Residents) - Phyllodes tumor  
San Diego (Naval Medical Center) - Juvenile fibroadenoma (giant)  
San Francisco (San Francisco General Hospital) - Phyllodes tumor  
Santa Barbara (Cottage Hospital) - Angiosarcoma  
Santa Rosa (Santa Rosa Memorial Hospital) - Phyllodes tumor (3)  
Ventura - Phyllodes tumor  
Arizona (Maryvale Medical Center) - Phyllodes tumor, malignant  
Colorado, Evergreen - Phyllodes tumor  
Colorado (Lutheran Medical Center) - Phyllodes tumor  
Connecticut - Phyllodes tumor, intermediate or borderline  
Florida (Baptist Pathology) - Phyllodes tumor  
Florida (Winter Haven Hospital) - Phyllodes tumor, intermediate grade  
Illinois, Burr Ridge - Cystosarcoma phyllodes  
Indiana (Ball Memorial Hospital) - Adenomyoepithelioma  
Indiana (Howard Community Hospital) - Cellular phyllodes tumor  
Louisiana (Louisiana State University Health Science Center) - Phyllodes tumor, low malignant potential  
Maryland (National Naval Medical Center) - Phyllodes tumor  
Maryland (University of Maryland Residents) - Juvenile (cellular) fibroadenoma  
Massachusetts (New England Medical Center) - Malignant Phyllodes tumor  
Michigan (Oakwood Hospital) - Phyllodes tumor  
Minnesota (Fairview Ridges Hospital) - Phyllodes tumor, low grade with pseudoangiomatous stroma  
Nebraska (Creighton University School of Medicine) - Phyllodes tumor, borderline

New York (Presbyterian/Weill Cornell Campus) - Phyllodes tumor (benign)  
New York (Stony Brook University Hospital Residents) - Pleomorphic adenoma  
North Carolina (Mountain Area Pathology) - Phyllodes tumor, low grade (4); Phyllodes tumor (1)  
Ohio (McCullough Hyde Memorial Hospital) - Cystosarcoma  
Ohio (Medical College of Ohio) - Low-grade malignant Phyllodes tumor (borderline Phyllodes)  
Ohio (Valley Pathologists, Inc.) - Benign mesenchymal tumor (2); Myoepithelioma (1)  
Pennsylvania (Conemaugh Memorial Medical Center) - Low grade Phyllodes tumor  
Pennsylvania (Lehigh Valley Hospital) - Metaplastic carcinoma  
Pennsylvania (Mt. Nittany Medical Center) - Amyloid tumor, breast  
Pennsylvania (Pennsylvania Hospital Pathology Residents) - Adenomyoepithelioma  
Puerto Rico (University of Puerto Rico) - Phyllodes tumor, benign  
Texas, Lubbock - Malignant Phyllodes tumor  
Texas (Propath Associates) - Malignant Phyllodes tumor (2)  
Texas (San Antonio) - Phyllodes tumor (? rhabdomyoblasts in stroma)  
Texas (Scott & White Memorial Hospital) - Phyllodes tumor  
West Virginia (Greenbrier Valley Medical Center) - Metaplastic carcinoma (spindle cell)  
Australia (North Queensland Pathology) - Benign Phyllodes tumor  
Australia (Royal Prince Alfred Hospital) - Malignant Phyllodes tumor of breast  
Brazil (UNIFESP/EPM) - Borderline Phyllodes tumor (2)  
Canada (Woodstock General Hospital) - Myofibroblastoma, breast (rule/out spindle cell carcinoma)  
Germany, Hamburg - Pseudoangiomatous stromal hyperplasia  
Hong Kong (Hong Kong Baptist Hospital) - Phyllodes tumor  
Italy, Naples - Phyllodes tumor  
Jamaica (University Hospital of the West Indies) - Pseudoangiomatous stromal hyperplasia, breast  
Netherlands, Amsterdam - Malignant Phyllodes tumor  
Qatar (Hamad Medical Corporation) - Phyllodes tumor, most probably benign

#### **Case 2 - Diagnosis:**

Phyllodes tumor, low grade, breast  
T-04000, M-90213

#### **Case 2 - References:**

- Krishnamurthy S, Ashfaq R, Shin HJ, et al. Distinction of Phyllodes Tumor From Fibroadenoma. A Reappraisal of an Old Problem. *Cancer* 2000; 25; 90(6):342-349.
- Geisler DP, Boyle MJ, Malnar KF, et al. Phyllodes Tumors of the Breast. A Review of 32 Cases. *Am Surg* 2000; 66(4):360-366.
- Chheng DC, Cangiarella JF, Waisman J, et al. Fine-Needle Aspiration Cytology of Spindle Cell Lesions of the Breast. *Cancer* 1999; 87(6):359-371.
- Kleer CG, Giordano TJ, Braun T, et al. Pathologic, Immunohistochemical, and Molecular Features of Benign and Malignant Phyllodes Tumors of the Breast. *Mod Pathol* 2001; 14(3):185-190.

#### **Case No. 3, Accession No. 29803**

**May 2005**

Alameda (Alameda County Medical Center) - Sarcoma (pending special stains)  
Baldwin Park (Kaiser Permanente) - Phyllodes tumor, malignant (3)  
Fontana (Kaiser Permanente) - Sarcoma  
Glendale - High-grade Phyllodes tumor  
Irvine (University of California Residents) - Metaplastic carcinoma/Phyllodes tumor  
Long Beach - Phyllodes tumor, malignant (7)  
Monterey Park (Monterey Peninsula Residents) - Low grade stroma sarcoma (1); Sarcoma, ? muscle vs. vascular (1)  
Sacramento (UC Davis Medical Center Residents) - Giant fibroadenoma  
San Diego (Naval Medical Center) - Adenomyoepithelioma  
San Francisco (San Francisco General Hospital) - Borderline Phyllodes tumor  
Santa Barbara (Cottage Hospital) - Malignant neoplasm; sarcoma vs. metaplastic carcinoma

Santa Rosa (Santa Rosa Memorial Hospital) - Stromal tumor of breast, probably malignant (1); Phyllodes tumor, probably malignant (1); Myoepithelioma (1)

Ventura - Leiomyosarcoma

Arizona (Maryvale Medical Center) - Liposarcoma, well-differentiated, breast

Colorado, Evergreen - Fibrosarcoma

Colorado (Lutheran Medical Center) - Adenomyoepithelioma

Connecticut - Malignant Phyllodes

Florida (Baptist Pathology) - High grade sarcoma, spindle cell sarcoma vs. angiosarcoma

Florida (Winter Haven Hospital) - Phyllodes tumor, high grade

Illinois, Burr Ridge - Stromal sarcoma

Indiana (Ball Memorial Hospital) - Myoepithelial carcinoma

Indiana (Howard Community Hospital) - Fibrosarcoma

Louisiana (Louisiana State University Health Science Center) - Leiomyosarcoma

Maryland (National Naval Medical Center) - Leiomyosarcoma (5); Angiosarcoma (6)

Maryland (University of Maryland Residents) - Phyllodes tumor

Massachusetts (New England Medical Center) - Juvenile fibroadenoma

Michigan (Oakwood Hospital) - Fibrosarcoma (rule out metaplastic carcinoma)

Nebraska (Creighton University School of Medicine) - High grade sarcoma

New York (Presbyterian/Weill Cornell Campus) - Myofibroblastic tumor

New York (Stony Brook University Hospital Residents) - Myofibroblastoma

North Carolina (Mountain Area Pathology) - Phyllodes tumor, malignant (2); Phyllodes tumor, low grade malignant (1); Phyllodes tumor, malignant potential uncertain (1); Adenomyoepithelioma vs. Phyllodes tumor (1)

Ohio (McCullough Hyde Memorial Hospital) - Low grade sarcoma

Ohio (Medical College of Ohio) - Low-grade fibrosarcoma

Ohio (Valley Pathologists, Inc.) - Leiomyosarcoma (3)

Pennsylvania (Conemaugh Memorial Medical Center) - Fibrosarcoma, high grade

Pennsylvania (Lehigh Valley Hospital) - Leiomyosarcoma

Pennsylvania (Mt. Nittany Medical Center) - Myofibroblastoma, breast

Pennsylvania (Pennsylvania Hospital Pathology Residents) - Nodular fasciitis

Puerto Rico (University of Puerto Rico) - Spindle cell sarcoma

Texas, Lubbock - Nodular fasciitis

Texas (ProPath Associates) - Fibrosarcoma (2)

Texas (San Antonio) - Malignant spindle cell neoplasm (favor spindle cell carcinoma)

Texas (Scott & White Memorial Hospital) - Malignant Phyllodes tumor

West Virginia (Greenbrier Valley Medical Center) - Sarcoma, NOS

Australia (North Queensland Pathology) - Malignant Phyllodes tumor

Australia (Royal Prince Alfred Hospital) - Malignant Phyllodes tumor of breast

Brazil (UNIFESP/EPM) - Malignant Phyllodes tumor (2)

Canada (Woodstock General Hospital) - Sarcoma, breast (r/o spindle cell carcinoma and Phyllodes tumor)

Germany, Hamburg - Myoepithelial carcinoma

Hong Kong (Hong Kong Baptist Hospital) - Spindle cell sarcoma

Italy, Naples - Solitary fibrous tumor

Jamaica (University Hospital of the West Indies) - Myofibroblastoma, breast

Netherlands, Amsterdam - Benign Phyllodes tumor

Qatar (Hamad Medical Corporation) - Phyllodes tumor, malignant

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

Phyllodes tumor, malignant, breast

Directors note: This case also probably fits into the spectrum of periductal stromal sarcoma. (drc)

T-04000, M-90213

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

- Burga AM and Tavassoli FA. Periductal Stromal Tumor. A Rare Lesion with Low-Grade Sarcomatous Behavior. *Am J Surg Pathol* 2003; 27(3):343-348.
- Asoglu O, Ugurlu MM, Blanchard K, et al. Risk Factors for Recurrence and Death After Primary Surgical Treatment of Malignant Phyllodes Tumors. *Ann Surg Oncol* 2004; 11(11):1011-1017.
- Vladescu T, Kljanienko J, Caillaud JM, et al. Fine-Needle Sampling in Malignant Phyllodes Tumors. Clinicopathologic Study of 22 Cases Seen at the Institut Curie. *Diagn Cytopathol* 2004; 31(2):71-76.
- Guerrero MA, Ballard BR and Grau AM. Malignant Phyllodes Tumor of the Breast. Review of the Literature and Case Report of Stromal Overgrowth. *Surg Oncol* 2003; 12(1):27-37.

- Alameda (Alameda County Medical Center) - Thecoma
- Baldwin Park (Kaiser Permanente) - Granulosa cell tumor (3)
- Fontana (Kaiser Permanente) - Fibroma
- Glendale - Fibrothecoma
- Irvine (University of California Residents) - Massive ovarian edema with torsion
- Long Beach - Ovarian stromal tumor (Leydig's cell?) (7)
- Monterey Park (Monterey Peninsula Residents) - Theca-Lutein cyst (1); Granulosa cell tumor (1)
- Sacramento (UC Davis Medical Center Residents) - Sertoli-Leydig cell tumor
- San Diego (Naval Medical Center) - Sclerosing stromal tumor
- San Francisco (San Francisco General Hospital) - Sclerosing stromal tumor
- Santa Barbara (Cottage Hospital) - Probable stromal tumor, favor benign
- Santa Rosa (Santa Rosa Memorial Hospital) - Stromal tumor of ovary with necrosis (1); Necrosing stromal tumor, NOS (1); Ovarian thecoma with edema and necrosis-? torsion effect (1)
- Ventura - Malignant thecoma
- Arizona (Maryvale Medical Center) - Krukenberg tumor
- Colorado, Evergreen - Inflammatory myofibroblastoma
- Colorado (Lutheran Medical Center) - Adult granulosa cell tumor
- Connecticut - Ovarian stromal tumor
- Florida (Baptist Pathology) - Stromal luteoma
- Florida (Winter Haven Hospital) - Infarcted granulosa cell tumor
- Illinois, Burr Ridge - Thecoma
- Indiana (Ball Memorial Hospital) - Hyperreactio luteinalis
- Indiana (Howard Community Hospital) - Ovarian myxoma
- Louisiana (Louisiana State University Health Science Center) - Granulosa cell tumor
- Maryland (National Naval Medical Center) - Thecoma
- Maryland (University of Maryland Residents) - Fibrothecoma with infarction
- Massachusetts (New England Medical Center) - Fibrothecoma consistent with ovarian torsion
- Michigan (Oakwood Hospital) - Granulosa cell tumor
- Minnesota (Fairview Ridges Hospital) - Sex-cord stromal tumor vs. metastatic melanoma
- Nebraska (Creighton University School of Medicine) - Sclerosing stromal tumor
- New York (Presbyterian/Weill Cornell Campus) - Juvenile granulosa cell tumor
- New York (Stony Brook University Hospital Residents) - Thecoma
- North Carolina (Mountain Area Pathology) - Fibroma, infarcted (1); Fibroma with degenerative changes (1); Sex cord stromal tumor possibly Leydig-cell tumor (1); Sex cord stromal tumor, NOS consistent with necrosis (1); Thecoma (1)
- Ohio (McCullough Hyde Memorial Hospital) - Granulosa cell tumor with hemorrhage
- Ohio (Medical College of Ohio) - Massive ovarian edema associated with infarction
- Ohio (Valley Pathologists, Inc.) - Sex cord stromal tumor (2); Granulosa cell tumor (1)
- Pennsylvania (Conemaugh Memorial Medical Center) - Sclerosing stromal tumor
- Pennsylvania (Lehigh Valley Hospital) - Sex cord stromal tumor
- Pennsylvania (Mt. Nittany Medical Center) - Adult granulosa cell tumor, ovary
- Pennsylvania (Pennsylvania Hospital Pathology Residents) - Thecoma with torsion
- Puerto Rico (University of Puerto Rico) - Myxoma/inflammatory pseudotumor
- Texas, Lubbock - Twisted ovary
- Texas (ProPath Associates) - Ovarian stromal tumor (2)
- Texas (San Antonio) - ? old endometriotic cyst, ? benign stromal tumor vs. massive edema
- Texas (Scott & White Memorial Hospital) - Sclerosing stromal tumor
- West Virginia (Greenbrier Valley Medical Center) - Granulosa cell tumor
- Australia (North Queensland Pathology) - Torted stromal tumor
- Australia (Royal Prince Alfred Hospital) - Malignant sex cord stromal tumor; ? poorly differentiated Sertoli-Leydig cell tumor
- Brazil (UNIFESP/EPM) - Fibrothecoma (2)
- Canada (Woodstock General Hospital) - Massive edema with necrosis, ovary

Germany, Hamburg - Thecoma with infarct  
Hong Kong (Hong Kong Baptist Hospital) - Stromal hyperthecosis  
Italy, Naples - Fibrothecoma  
Jamaica (University Hospital of the West Indies) - Infarction, ovary  
Netherlands, Amsterdam - Reactive changes due to torsion? (infarction, bleeding, fibroblastic proliferation & chronic inflammation)  
Qatar (Hamad Medical Corporation) - Granulosa cell tumor

**Case 4 - Diagnosis:**

Ovarian fibroma/fibroma with changes likely due to torsion  
T-87000, M-86000

**Case 4 - References:**

Bozot M, Ghossain MA, Buy JN, et al. Fibrothecomas of the Ovary. CT and US Findings. *J Comput Assist Tomogr* 1993; 17(5):754-759.  
Kimura I, Togashi K, Kawakami S, et al. Ovarian Torsion. CT and MR Imaging Appearances. *Radiol* 1994; 190(2):337-341.  
Troiano RN, Lazzarini KM, Scoutt LM, et al. Fibroma and Fibrothecoma of the Ovary. MR Imaging Findings. *Radiol* 1997; 204(3):795-798.  
Conte M, Guariglia L, Benedetti PP, et al. Ovarian Fibrothecoma. Sonographic and Histologic Findings. *Gynecol Obstet Invest* 1991; 32(1):51-54.

**Case No. 5, Accession No. 29761**

**May 2005**

Alameda (Alameda County Medical Center) - Acinic cell adenocarcinoma  
Baldwin Park (Kaiser Permanente) - Acinic cell carcinoma (3)  
Fontana (Kaiser Permanente) - Acinic cell carcinoma  
Glendale - Acinic cell adenocarcinoma  
Irvine (University of California Residents) - Acinic cell carcinoma  
Long Beach - Acinic cell carcinoma (7)  
Monterey Park (Monterey Peninsula Residents) - Low grade acinic cell tumor (2)  
Sacramento (UC Davis Medical Center Residents) - Acinic cell adenoma  
San Diego (Naval Medical Center) - Acinic cell carcinoma  
San Francisco (San Francisco General Hospital) - Acinic cell carcinoma  
Santa Barbara (Cottage Hospital) - Acinic cell carcinoma  
Santa Rosa (Santa Rosa Memorial Hospital) - Acinic cell carcinoma (3)  
Ventura - Oncocytoma  
Arizona (Maryvale Medical Center) - Acinic cell adenocarcinoma  
Colorado, Evergreen - Acinic cell carcinoma  
Colorado (Lutheran Medical Center) - Acinic cell carcinoma  
Connecticut - Acinic cell carcinoma  
Florida (Baptist Pathology) - Acinic cell carcinoma  
Florida (Winter Haven Hospital) - Acinic cell carcinoma  
Illinois, Burr Ridge - Oxyphilic tumor  
Indiana (Ball Memorial Hospital) - Acinic cell carcinoma  
Indiana (Howard Community Hospital) - Acinic cell carcinoma  
Louisiana (Louisiana State University Health Science Center) - Acinic cell carcinoma  
Maryland (National Naval Medical Center) - Acinic cell carcinoma  
Maryland (University of Maryland Residents) - Acinic cell carcinoma  
Massachusetts (New England Medical Center) - Acinic cell carcinoma  
Michigan (Oakwood Hospital) - Acinic cell carcinoma  
Minnesota (Fairview Ridges Hospital) - Acinic cell carcinoma, ? ex-pleomorphic melanoma  
Nebraska (Creighton University School of Medicine) - Acinic cell carcinoma  
New York (Presbyterian/Weill Cornell Campus) - Acinic cell carcinoma

New York (Stony Brook University Hospital Residents) - Acinic cell carcinoma  
North Carolina (Mountain Area Pathology) - Acinic cell carcinoma (5)  
Ohio (McCullough Hyde Memorial Hospital) - Acinic cell carcinoma  
Ohio (Medical College of Ohio) - Acinic cell adenocarcinoma  
Ohio (Valley Pathologists, Inc.) - Acinic cell carcinoma (3)  
Pennsylvania (Conemaugh Memorial Medical Center) - Pleomorphic adenoma  
Pennsylvania (Lehigh Valley Hospital) - Acinic cell carcinoma  
Pennsylvania (Mt. Nittany Medical Center) - Acinic cell carcinoma, parotid gland  
Pennsylvania (Pennsylvania Hospital Pathology Residents) - Oncocytoma  
Puerto Rico (University of Puerto Rico) - Acinic cell carcinoma  
Texas, Lubbock - Cellular pleomorphic adenoma  
Texas (Propath Associates) - Acinic cell adenocarcinoma (2)  
Texas (San Antonio) - Acinar cell carcinoma  
Texas (Scott & White Memorial Hospital) - Acinic cell carcinoma  
West Virginia (Greenbrier Valley Medical Center) - Acinic cell carcinoma  
Australia (North Queensland Pathology) - Acinic cell adenocarcinoma  
Australia (Royal Prince Alfred Hospital) - Acinic cell carcinoma  
Brazil (UNIFESP/EPM) - Acinic cell carcinoma (2)  
Canada (Woodstock General Hospital) - Acinic cell tumor, parotid  
Germany, Hamburg - Acinar cell carcinoma  
Hong Kong (Hong Kong Baptist Hospital) - Acinic cell carcinoma  
Italy, Naples - Acinic cell carcinoma  
Jamaica (University Hospital of the West Indies) - Acinic cell tumor, parotid gland  
Netherlands, Amsterdam - Acinic cell carcinoma of the parotid gland  
Qatar (Hamad Medical Corporation) - Acinic cell carcinoma

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

Acinic cell carcinoma, low grade, parotid gland  
 T-55100, M-85501

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

Sakai O, Nakashima N, Takata Y, et al. Acinic Cell Carcinoma of the Parotid Gland. CT and MRI. *Neuroradiol* 1996; 38(7):675-679.  
 Miki H, Masuda E, Ohata S, et al. Late Recurrence of Acinic Cell Carcinoma of the Parotid Gland. *J Med Invest* 1999; 46(3-4):213-216.  
 Tucci FM, Bianchi PM, Bottero S, et al. Acinic Cell Carcinoma of the Parotid Gland in Childhood. *Int J Pediatr Otorhinolaryngol* 1993; 27(2):187-191.  
 Henley JD, Geary WA, Jackson CL, et al. Dedifferentiated Acinic Cell Carcinoma of the Parotid Gland. A Distinct Rarely Described Entity. *Hum Pathol* 1997; 28(7):869-873.  
 Mishevich I, Podoshin L, Fradis M, et al. Salivary Gland Double Tumor. Synchronous Ipsilateral Pleomorphic Adenoma and Acinic Cell Carcinoma of the Parotid Gland. *Ann Otol Rhinol Laryngol* 1997; 106(3):226-229.

#### **Case No. 6, Accession No. 29835**

**May 2005**

Alameda (Alameda County Medical Center) - Leiomyosarcoma  
Baldwin Park (Kaiser Permanente) - Leiomyosarcoma (3)  
Fontana (Kaiser Permanente) - Pecoma  
Glendale - Leiomyosarcoma  
Irvine (University of California Residents) - Leiomyosarcoma  
Long Beach - Leiomyosarcoma (7)  
Monterey Park (Monterey Peninsula Residents) - Epithelioid leiomyoma (1); Intravenous leiomyomatosis vs. sarcoma (1)  
Sacramento (UC Davis Medical Center Residents) - Stromal sarcoma  
San Diego (Naval Medical Center) - Endometrial stromal sarcoma vs. epithelioid leiomyoma  
San Francisco (San Francisco General Hospital) - Cellular leiomyoma  
Santa Barbara (Cottage Hospital) - Leiomyosarcoma

Santa Rosa (Santa Rosa Memorial Hospital) - Epithelioid leiomyoma, rule out malignancy (3)  
Ventura - Leiomyosarcoma  
Arizona (Maryvale Medical Center) - Cellular leiomyoma with focal hemorrhagic infarction  
Colorado, Evergreen - Leiomyosarcoma  
Colorado (Lutheran Medical Center) - Leiomyosarcoma  
Connecticut - Leiomyosarcoma vs. endometrial stromal sarcoma  
Florida (Baptist Pathology) - Epithelioid leiomyosarcoma  
Florida (Winter Haven Hospital) - Leiomyoma  
Illinois, Burr Ridge - Leiomyosarcoma  
Indiana (Ball Memorial Hospital) - Epithelioid leiomyosarcoma  
Indiana (Howard Community Hospital) - Leiomyosarcoma  
Louisiana (Louisiana State University Health Science Center) - Leiomyoma, decidualized  
Maryland (National Naval Medical Center) - Leiomyosarcoma  
Maryland (University of Maryland Residents) - Leiomyoma, epithelioid type  
Massachusetts (New England Medical Center) - Epithelioid leiomyosarcoma  
Michigan (Oakwood Hospital) - Epithelioid leiomyosarcoma  
Minnesota (Fairview Ridges Hospital) - Endometrioid stromal sarcoma, low grade  
Nebraska (Creighton University School of Medicine) - Leiomyosarcoma  
New York (Presbyterian/Weill Cornell Campus) - Glomangioma  
New York (Stony Brook University Hospital Residents) - Cellular leiomyoma  
North Carolina (Mountain Area Pathology) - STUMP, cannot exclude leiomyosarcoma (1); Leiomyosarcoma (1); Smooth muscle of LMP (1); Cellular leiomyoma with apoplectic changes vs. STUMP (1)  
Ohio (McCullough Hyde Memorial Hospital) - Leiomyosarcoma  
Ohio (Medical College of Ohio) - Low grade leiomyosarcoma  
Ohio (Valley Pathologists, Inc.) - Leiomyosarcoma (2); Endometrial stromal sarcoma (1)  
Pennsylvania (Conemaugh Memorial Medical Center) - Cellular leiomyoma  
Pennsylvania (Lehigh Valley Hospital) - Cellular leiomyoma focally infarcted  
Pennsylvania (Mt. Nittany Medical Center) - Endometrial stromal sarcoma, low-grade, retroperitoneum  
Pennsylvania (Pennsylvania Hospital Pathology Residents) - Endometrial stromal sarcoma  
Puerto Rico (University of Puerto Rico) - Combined smooth muscle stromal tumor  
Texas, Lubbock - Epithelioid leiomyosarcoma  
Texas (ProPath Associates) - Stromal cells sarcoma (2)  
Texas (San Antonio) - Epithelioid leiomyosarcoma (? Pecoma ? HMB-45)  
Texas (Scott & White Memorial Hospital) - Leiomyoma  
West Virginia (Greenbrier Valley Medical Center) - Leiomyosarcoma  
Australia (North Queensland Pathology) - Epithelioid leiomyoma  
Australia (Royal Prince Alfred Hospital) - Epithelioid leiomyoma  
Brazil (UNIFESP/EPM) - Retroperitoneal, smooth muscle tumor, hormonally, sensitive (leiomyoma?) (2)  
Canada (Woodstock General Hospital) - Cellular leiomyoma, retroperitoneum  
Germany, Hamburg - Intravascular epithelioid leiomyoma  
Hong Kong (Hong Kong Baptist Hospital) - Leiomyosarcoma  
Italy, Naples - Cellular leiomyoma  
Netherlands, Amsterdam - Leiomyosarcoma  
Qatar (Hamad Medical Corporation) - Epithelioid leiomyosarcoma

**Case 6 - Diagnosis:**

Epithelial leiomyosarcoma, low grade, pelvis and retroperitoneum  
 T-Y4600, M-88913

Consultation: Orthopaedic Hospital, Joseph M. Mirra, M.D. "Epithelioid Leiomyosarcoma, low grade (leiomyoblastoma), low grade, showing 1 of 3 anaplasia."

**Case 6 - References:**

- Shmookler BM and Lauer DH. Retroperitoneal Leiomyosarcoma. A Clinicopathologic Analysis of 36 Cases. *Am J Surg Pathol* 1983; 7(3):269-280.
- Paal E and Miettinen M. Retroperitoneal Leiomyomas. A Clinicopathologic and Immunohistochemical Study of 56 Cases with a Comparison to Retroperitoneal Leiomyosarcomas. *Am J Surg Pathol* 2001; 25(11):1355-1363.
- Oda Y, Miyajima K, Kawaguchi K, et al. Pleomorphic Leiomyosarcoma. Clinicopathologic and Immunohistochemical Study with Special Emphasis on Its Distinction from Ordinary Leiomyosarcoma and Malignant Fibrous Histiocytoma. *Am J Surg Pathol* 2001; 25(8):1030-1038.
- Todd CS, Michael H and Sutton G. Retroperitoneal Leiomyosarcoma. Eight Cases and a Literature Review. *Gynecol Oncol* 1995; 59(3):333-337.
- Rajani B, Smith TA, Reith JD, et al. Retroperitoneal Leiomyosarcomas Unassociated with the Gastrointestinal Tract. A Clinicopathologic Analysis of 17 Cases. *Mod Pathol* 1999; 12(1):21-28.

## Case No. 7, Accession No. 29968

May 2005

- Alameda (Alameda County Medical Center) - Malignant mesothelioma
- Baldwin Park (Kaiser Permanente) - Poorly differentiated carcinoma (1); Malignant mesothelioma (2)
- Fontana (Kaiser Permanente) - Mesothelioma
- Glendale - Mesothelioma
- Irvine (University of California Residents) - Mesothelioma
- Long Beach - Malignant mesothelioma (7)
- Monterey Park (Monterey Peninsula Residents) - Malignant mesothelioma, grade #1 (1); Mesothelioma, epithelioid (1)
- Sacramento (UC Davis Medical Center Residents) - Mesothelioma
- San Diego (Naval Medical Center) - Poorly differentiated carcinoma, primary peritoneal vs. metastatic ovarian
- San Francisco (San Francisco General Hospital) - Undifferentiated carcinoma
- Santa Barbara (Cottage Hospital) - Malignant neoplasm, high grade, favor mesothelioma
- Santa Rosa (Santa Rosa Memorial Hospital) - Malignant mesothelioma (1); Mesothelioma, epithelioid type (1)
- Ventura - Mesothelioma
- Arizona (Marviale Medical Center) - Diffuse malignant epithelial mesothelioma
- Colorado, Evergreen - Mesothelioma
- Colorado (Lutheran Medical Center) - Epithelioid malignant mesothelioma
- Connecticut - Mesothelioma
- Florida (Baptist Pathology) - Poorly differentiated mesothelioma
- Florida (Winter Haven Hospital) - Poorly differentiated carcinoma
- Illinois, Burr Ridge - Malignant mesothelioma
- Indiana (Ball Memorial Hospital) - Mesothelioma
- Indiana (Howard Community Hospital) - Malignant mesothelioma
- Louisiana (Louisiana State University Health Science Center) - Mesothelioma
- Maryland (National Naval Medical Center) - Mesothelioma
- Maryland (University of Maryland Residents) - Mesothelioma
- Massachusetts (New England Medical Center) - Metastatic poorly differentiated carcinoma
- Michigan (Oakwood Hospital) - Mesothelioma
- Minnesota (Fairview Ridges Hospital) - Malignant mesothelioma
- Nebraska (Creighton University School of Medicine) - Peritoneal mesothelioma
- New York (Presbyterian/Weill Cornell Campus) - Poorly differentiated adenocarcinoma
- New York (Stony Brook University Hospital Residents) - Malignant mesothelioma
- North Carolina (Mountain Area Pathology) - Deciduoid mesothelioma (2); Mesothelioma (2); Epithelioid mesothelioma (1)
- Ohio (McCullough Hyde Memorial Hospital) - Peritoneal mesothelioma
- Ohio (Medical College of Ohio) - High-grade peritoneal serous carcinoma (primary peritoneal carcinoma)
- Ohio (Valley Pathologists, Inc.) - Mesothelioma (3)
- Pennsylvania (Conemaugh Memorial Medical Center) - Metastatic epithelial carcinoma, favor breast carcinoma
- Pennsylvania (Lehigh Valley Hospital) - Poorly differentiated carcinoma involving ovarian
- Pennsylvania (Mt. Nittany Medical Center) - Malignant mesothelioma with deciduoid features, peritoneum
- Pennsylvania (Pennsylvania Hospital Pathology Residents) - Mesothelioma
- Puerto Rico (University of Puerto Rico) - Mesothelioma
- Texas, Lubbock - Desmoplastic small cell tumor
- Texas (Propath Associates) - Poorly differentiated ovarian adenocarcinoma (2)
- Texas (San Antonio) - Metastatic carcinoma (doubt mesothelioma)
- Texas (Scott & White Memorial Hospital) - Epithelioid mesothelioma
- West Virginia (Greenbrier Valley Medical Center) - Mesothelioma
- Australia (North Queensland Pathology) - Epithelioid mesothelioma
- Australia (Royal Prince Alfred Hospital) - High grade mesothelioma

Brazil (UNIFESP/EPM) - Malignant mesothelioma (2)  
Canada (Woodstock General Hospital) - Mesothelioma, omentum  
Germany, Hamburg - Mesothelioma  
Hong Kong (Hong Kong Baptist Hospital) - Malignant mesothelioma  
Italy, Naples - Malignant mesothelioma  
Netherlands, Amsterdam - Malignant mesothelioma  
Qatar (Hamad Medical Corporation) - Peritoneal epithelioid mesothelioma

**Case 7 - Diagnosis:**

High grade mesothelioma, peritoneum  
T-87000, M-90503

**Case 7 - References:**

Ordenez NG. Role of Immunohistochemistry In Distinguishing Epithelial Peritoneal Mesotheliomas from Peritoneal and Ovarian Serous Carcinomas. *Am J Surg Pathol* 1998; 22(10):1203-1214.  
Roberts F, Harper CM, Downie I, et al. Immunohistochemical Analysis Still Has a Limited Role in the Diagnosis of Malignant Mesothelioma. A Study of Thirteen Antibodies. *Am J Clin Pathol* 2001; 116(2):253-262.  
Bailey ME, Brown RW, Mody DR, et al. Ber EP4 for Differentiating Adenocarcinoma from Reactive and Neoplastic Mesothelial Cells in Serous Effusions. Comparison with Carcinoembryonic Antigen, B72.3 and Leu-M1. *Acta Cytol* 1996; 40(6):1212-1216.  
Sato S, Okamoto S, Ito K, et al. Differential Diagnosis of Mesothelial and Ovarian Cancer Cells in Ascites by Immunocytochemistry Using Ber-EP4 and Calretinin. *Acta Cytol* 200; 44(3):485-488.  
Khoury N, Raju U, Crissman JD, et al. A Comparative Immunohistochemical Study of Peritoneal and Ovarian Serous Tumors, and Mesotheliomas. *Hum Pathol* 1990; 21(8):811-819.

**Case No. 8, Accession No. 29840**

May 2005

Alameda (Alameda County Medical Center) - Synovial sarcoma  
Baldwin Park (Kaiser Permanente) - Synovial sarcoma, biphasic (3)  
Fontana (Kaiser Permanente) - Synovial sarcoma  
Glendale - Biphasic synovial sarcoma  
Irvine (University of California Residents) - Synovial sarcoma  
Long Beach - Synovial sarcoma, biphasic (7)  
Monterey Park (Monterey Peninsula Residents) - Nodular tenosynovitis (1); Synovial sarcoma, biphasic (1)  
Sacramento (UC Davis Medical Center Residents) - Biphasic synovial sarcoma  
San Diego (Naval Medical Center) - Synovial sarcoma  
San Francisco (San Francisco General Hospital) - Synovial sarcoma  
Santa Barbara (Cottage Hospital) - Biphasic synovial sarcoma  
Santa Rosa (Santa Rosa Memorial Hospital) - Synovial sarcoma, biphasic (3)  
Ventura - Synovial sarcoma  
Arizona (Maryvale Medical Center) - Synovial sarcoma  
Colorado, Evergreen - Synovial sarcoma  
Colorado (Lutheran Medical Center) - Synovial sarcoma  
Connecticut - Synovial sarcoma, biphasic  
Florida (Baptist Pathology) - Biphasic synovial sarcoma  
Florida (Winter Haven Hospital) - Synovial sarcoma  
Illinois, Burr Ridge - Synovial sarcoma  
Indiana (Ball Memorial Hospital) - Synovial sarcoma  
Indiana (Howard Community Hospital) - Synovial sarcoma  
Louisiana (Louisiana State University Health Science Center) - Synovial sarcoma, biphasic  
Maryland (National Naval Medical Center) - Synovial sarcoma  
Maryland (University of Maryland Residents) - Synovial sarcoma, biphasic  
Massachusetts (New England Medical Center) - Synovial sarcoma, biphasic type  
Michigan (Oakwood Hospital) - Synovial sarcoma  
Minnesota (Fairview Ridges Hospital) - Synovial sarcoma, biphasic

Nebraska (Creighton University School of Medicine) - Biphasic synovial sarcoma  
New York (Presbyterian/Weill Cornell Campus) - Biphasic synovial sarcoma  
New York (Stony Brook University Hospital Residents) - Ossifying synovial sarcoma  
North Carolina (Mountain Area Pathology) - Synovial sarcoma (5)  
Ohio (McCullough Hyde Memorial Hospital) - Synovial sarcoma  
Ohio (Medical College of Ohio) - Biphasic synovial sarcoma (predominately epithelioid)  
Ohio (Valley Pathologists, Inc.) - Synovial sarcoma (3)  
Pennsylvania (Conemaugh Memorial Medical Center) - Synovial sarcoma, biphasic type  
Pennsylvania (Lehigh Valley Hospital) - Biphasic synovial sarcoma  
Pennsylvania (Mt. Nittany Medical Center) - Synovial sarcoma, knee  
Pennsylvania (Pennsylvania Hospital Pathology Residents) - Biphasic synovial sarcoma  
Puerto Rico (University of Puerto Rico) - Biphasic synovial sarcoma  
Texas, Lubbock - Synoviosarcoma  
Texas (ProPath Associates) - Synovial sarcoma (1); Synovial, mixed pattern (1)  
Texas (San Antonio) - Synovial sarcoma (biphasic)  
Texas (Scott & White Memorial Hospital) - Synovial sarcoma  
West Virginia (Greenbrier Valley Medical Center) - Synovial sarcoma  
Australia (North Queensland Pathology) - Biphasic synoviosarcoma  
Australia (Royal Prince Alfred Hospital) - Biphasic synovial sarcoma  
Brazil (UNIFESP/EPM) - Synovial sarcoma (2)  
Canada (Woodstock General Hospital) - Biphasic synovial sarcoma, knee  
Germany, Hamburg - Synovial sarcoma  
Hong Kong (Hong Kong Baptist Hospital) - Synovial sarcoma, biphasic type  
Italy, Naples - Synovial sarcoma  
Jamaica (University Hospital of the West Indies) - Synovial sarcoma  
Netherlands, Amsterdam - Synoviosarcoma (biphasic)  
Qatar (Hamad Medical Corporation) - Synovial sarcoma

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

Synovial sarcoma, biphasic knee  
 T-Y9200, M-90403

#### **Case 8 – References:**

dos Santos NR, de Bruijn DR, van Kessel AG, et al. Molecular Mechanisms Underlying Human Synovial Sarcoma Development of *Gene Chromosomes Cancer* 2001; 30(1):1-14.  
 Miettinen M and Virtanen I. Synovial Sarcoma. A Misnomer. *Am J Pathol* 1984; 117(1); 18-25.  
 Cormier JN and Pollock RE. Soft Tissue Sarcomas. *CA Cancer J Clin* 2004; 54(2):94-109.  
 Nakasone J, Shimizu T, Gomyo H, et al. Assessment of Microinvasion with Reverse Transcriptase Polymerase Chain Reaction in a Case of Synovial Sarcoma. *J Orthop Sci* 2004; 9(2):162-165.  
 Weidner N, Goldman R and Johnson J et al. Epithelioid Monophasic Synovial Sarcoma. *Ultrastruct Pathol* 1993; 17(3-4):287-294.

**Case No. 9, Accession No. 30205**

**May 2005**

Alameda (Alameda County Medical Center) - Leiomyoma  
Baldwin Park (Kaiser Permanente) - Leiomyoma (3)  
Fontana (Kaiser Permanente) - Leiomyoma vs. peri-testicular spindle cell rhabdomyosarcoma  
Glendale - Leiomyoma  
Irvine (University of California Residents) - Angiomyoma  
Long Beach - Leiomyoma (7)  
Monterey Park (Monterey Peninsula Residents) - Leiomyoma (2)  
Sacramento (UC Davis Medical Center Residents) - Leiomyoma  
San Diego (Naval Medical Center) - Adenomatoid leiomyoma

San Francisco (San Francisco General Hospital) - Leiomyoma  
Santa Barbara (Cottage Hospital) - Leiomyoma  
Santa Rosa (Santa Rosa Memorial Hospital) - Spindle cell tumor consistent with leiomyoma (1); Leiomyoma (1)  
Ventura - Fibrous pseudotumor  
Arizona (Maryvale Medical Center) - Leiomyosarcoma  
Colorado, Evergreen - Leiomyoma  
Colorado (Lutheran Medical Center) - Leiomyoma  
Connecticut - Spindle cell neoplasm, favor leiomyoma  
Florida (Baptist Pathology) - Leiomyoma  
Florida (Winter Haven Hospital) - Leiomyoma  
Illinois, Burr Ridge - Cellular leiomyoma  
Indiana (Ball Memorial Hospital) - Leiomyoma  
Indiana (Howard Community Hospital) - Leiomyoma  
Louisiana (Louisiana State University Health Science Center) - Leiomyoma  
Maryland (National Naval Medical Center) - Leiomyoma  
Maryland (University of Maryland Residents) - Leiomyoma  
Massachusetts (New England Medical Center) - Leiomyoma  
Michigan (Oakwood Hospital) - Leiomyoma  
Minnesota (Fairview Ridges Hospital) - Leiomyoma  
Nebraska (Creighton University School of Medicine) - Leiomyoma  
New York (Presbyterian/Weill Cornell Campus) - Leiomyoma  
New York (Stony Brook University Hospital Residents) - Atypical leiomyoma  
North Carolina (Mountain Area Pathology) - Leiomyoma (5)  
Ohio (McCullough Hyde Memorial Hospital) - Leiomyoma  
Ohio (Medical College of Ohio) - Leiomyoma  
Ohio (Valley Pathologists, Inc.) - Leiomyosarcoma (3)  
Pennsylvania (Conemaugh Memorial Medical Center) - Paratesticular leiomyoma  
Pennsylvania (Lehigh Valley Hospital) - Leiomyoma  
Pennsylvania (Mt. Nittany Medical Center) - Scrotal leiomyoma  
Pennsylvania (Pennsylvania Hospital Pathology Residents) - Leiomyoma  
Puerto Rico (University of Puerto Rico) - Leiomyoma  
Texas, Lubbock - Leiomyoma  
Texas (ProPath Associates) - Leiomyoma (2)  
Texas (San Antonio) - Leiomyoma  
Texas (Scott & White Memorial Hospital) - Leiomyoma  
West Virginia (Greenbrier Valley Medical Center) - Unclassified sex cord-stromal tumor  
Australia (North Queensland Pathology) - Sex cord stromal tumor spindle cell unclassified; DDX: parenchymal fibroma of gonadal stromal origin  
Australia (Royal Prince Alfred Hospital) - Leiomyosarcoma, low grade  
Brazil (UNIFESP/EPM) - Leiomyoma (2)  
Canada (Woodstock General Hospital) - Leiomyoma, testis  
Germany, Hamburg - Leiomyoma  
Hong Kong (Hong Kong Baptist Hospital) - Leiomyoma  
Italy, Naples - Leiomyoma  
Jamaica (University Hospital of the West Indies) - Angioma/vascular leiomyoma  
Netherlands, Amsterdam - Leiomyoma  
Qatar (Hamad Medical Corporation) - Leiomyoma

**Case 9 - Diagnosis:**

Leiomyoma, paratesticular/scrotal  
 T-78000, M-88900

### Case 9 – References:

- Chiaromonte RM. Leiomyoma of Tunica Albuginea of Testis. *Urol* 1988; 31(4):344-345.
- Longchamp E, Cariou G, Arborio M, et al. The Intratesticular Leiomyoma. An Unusual Location. Report of a Case. *Ann Pathol* 1998; 18(5):418-421.
- Lia-Beng T, Wei-Wuang H, Biing-Rorn C, et al. Bilateral Synchronous Leiomyomas of the Testicular Tunica Albuginea. A Case Report and Review of the Literature. *Int Urol Nephrol* 1996; 28(4):549-552.
- Nino-Murcia M. and Kosek J. Leiomyoma of the Testis. Sonographic and Pathologic Findings. *Can Assoc Radiol J* 1989; 40(3):178-179.
- Srigley JR and Hartwick RW. Tumors and Cysts of the Paratesticular Region. *Pathol Annu* 1990; 25 (pt 2):51-108.

### Case No. 10, Accession No. 29843

May 2005

- Alameda (Alameda County Medical Center) - Chondrosarcoma
- Baldwin Park (Kaiser Permanente) - Chondrosarcoma, grade 1 (1); Chondrosarcoma (1); Low grade chondrosarcoma arising in enchondroma (1)
- Fontana (Kaiser Permanente) - Chondrosarcoma
- Glendale - Low grade chondrosarcoma
- Irvine (University of California Residents) - Chondrosarcoma
- Long Beach - Chondrosarcoma, low-grade (7)
- Monterey Park (Monterey Peninsula Residents) - Chondrosarcoma (2)
- Sacramento (UC Davis Medical Center Residents) - Well-differentiated chondrosarcoma
- San Diego (Naval Medical Center) - Chondrosarcoma, high grade
- San Francisco (San Francisco General Hospital) - Well-differentiated chondrosarcoma
- Santa Barbara (Cottage Hospital) - Chondrosarcoma, grade II/III
- Santa Rosa (Santa Rosa Memorial Hospital) - Low-grade chondrosarcoma (2); Chondrosarcoma, well-differentiated (1)
- Ventura - Chondrosarcoma
- Arizona (Maryvale Medical Center) - Chondrosarcoma
- Colorado, Evergreen - Chondrosarcoma
- Colorado (Lutheran Medical Center) - Chondrosarcoma
- Connecticut - Chondrosarcoma, low grade
- Florida (Baptist Pathology) - Well-differentiated chondrosarcoma
- Florida (Winter Haven Hospital) - Chondrosarcoma
- Illinois, Burr Ridge - Chondrosarcoma
- Indiana (Ball Memorial Hospital) - Chondrosarcoma
- Indiana (Howard Community Hospital) - Chondrosarcoma
- Louisiana (Louisiana State University Health Science Center) - Chondrosarcoma, low grade
- Maryland (National Naval Medical Center) - Low grade chondrosarcoma
- Maryland (University of Maryland Residents) - Chondrosarcoma
- Massachusetts (New England Medical Center) - Chondrosarcoma
- Michigan (Oakwood Hospital) - Low grade chondrosarcoma
- Minnesota (Fairview Ridges Hospital) - Chondrosarcoma, low grade
- Nebraska (Creighton University School of Medicine) - Low grade chondrosarcoma
- New York (Presbyterian/Weill Cornell Campus) - Conventional chondrosarcoma, grade II
- New York (Stony Brook University Hospital Residents) - Chondrosarcoma, grade 2-3
- North Carolina (Mountain Area Pathology) - Low grade chondrosarcoma (4); Clear cell chondrosarcoma (1)
- Ohio (McCullough Hyde Memorial Hospital) - Chondrosarcoma
- Ohio (Medical College of Ohio) - Low-grade chondrosarcoma
- Ohio (Valley Pathologists, Inc.) - Chondrosarcoma (2); Low-grade chondrosarcoma (1)
- Pennsylvania (Conemaugh Memorial Medical Center) - Chondrosarcoma
- Pennsylvania (Lehigh Valley Hospital) - Well-differentiated chondrosarcoma
- Pennsylvania (Mt. Nittany Medical Center) - Central chondrosarcoma, sternum

Pennsylvania (Pennsylvania Hospital Pathology Residents) - Chondrosarcoma  
Puerto Rico (University of Puerto Rico) - Chondrosarcoma, grade 2  
Texas, Lubbock - Chondrosarcoma  
Texas (Propath Associates) - Chondrosarcoma (2)  
Texas (San Antonio) - Conventional chondrosarcoma with myxoid change, grade 2-3 of 3  
Texas (Scott & White Memorial Hospital) - Chondrosarcoma  
West Virginia (Greenbrier Valley Medical Center) - Chondrosarcoma  
Australia (North Queensland Pathology) - Chondrosarcoma, low grade  
Australia (Royal Prince Alfred Hospital) - Chondrosarcoma, grade II  
Brazil (UNIFESP/EPM) - Well-differentiated chondrosarcoma (2)  
Canada (Woodstock General Hospital) - Low-grade chondrosarcoma, sternum  
Germany, Hamburg - Chondrosarcoma GII  
Hong Kong (Hong Kong Baptist Hospital) - Chondrosarcoma, low grade  
Italy, Naples - Low grade chondrosarcoma  
Jamaica (University Hospital of the West Indies) - Chondrosarcoma  
Netherlands, Amsterdam - Chondrosarcoma  
Qatar (Hamad Medical Corporation) - Chondrosarcoma, well-differentiated

**Case 10 - Diagnosis:**

Low grade chondrosarcoma, sternum  
T-78000, M-88900

**Case 10 - References:**

Athanassiadi K, Kalavrouziotis G, Rondogianni D, et al. Primary Chest Wall Tumors. Early and Long-Term Results of Surgical Treatment. *Eur J Cardiothorac Surg*. 2001; 19(5):589-593.  
McAfee MK, Pairolero PC, Bergstralh EJ, et al. Chondrosarcoma of the Chest Wall. Factors Affecting Survival. *Ann Thorac Surg* 1985; 40(6):535-541.  
Fong YC, Pairolero PC, Sim FH, et al. Chondrosarcoma of the Chest Wall. A Retrospective Clinical Analysis. *Clin Orthop* 2004; 427:184-189.