



CALIFORNIA  
TUMOR TISSUE REGISTRY

“GENERAL PATHOLOGY”

Minutes – Subscription B

October, 2004



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

The HLA System (First Of Two Parts). Klein J, Sato A. *N Engl J Med*, 2000 Sep 7; 343(10):702-9.

The HLA System (Second Of Two Parts). Klein J, Sato A. *N Engl J Med*, 2000 Sep 14; 343(11):782-6.

The Immune System. (First Of Two Parts). Delves PJ, Roitt IM. *N Engl J Med*, 2000 Jul 13; 343(1):37-49

The Immune System (Second Of Two Parts). Delves PJ, Roitt IM. *N Engl J Med*, 2000 Jul 13; 343(2):108-17.

T-Cell Function And Migration: Two Sides Of The Same Coin. von Andrian UH, Mackay CR. *N Engl J Med*, 2000 Oct 5; 343(14):1020-34.

Primary Immunodeficiency Diseases Due To Defects In Lymphocytes. Buckley RH. *N Engl J Med*; 2000 Nov 2; 343(18):1313-24.

The Major Histocompatibility Complex And Inflammation. Blum A, Miller H. *So Med J*, 2000 Feb; 93(2):169-72.

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## **FILE DIAGNOSES**

(Preferably submitted on website at [www.cttr.org](http://www.cttr.org). Click “subscriptions”, then “submit answers”.)

**CTTR Subscription B**

**October, 2004**

**Case 1:**

**Granulomatous mastitis (idiopathic), breast  
T-04010, M-40000**

**Case 2:**

**Pleomorphic adenoma (“mixed tumor”), parotid  
T-55100, M-89400**

**Case 3:**

**Chromophobe renal cell carcinoma, kidney  
T-71000, M-8312/3**

**Case 4:**

**Yolk sac tumor (endodermal sinus tumor), ovary  
T-87000, M-9071/3**

**Case 5:**

**Low grade chondrosarcoma, proximal humerus  
T-11410, M-9220/3**

**Case 6:**

**Chondromyxoid fibroma, parietal skull  
T-10101, M-9241/0**

**Case 7:**

**Dedifferentiated chondrosarcoma, hand  
T-Y8700, M-9220/3**

**Case 8:**

**Low grade smooth muscle neoplasm (Grade I of III leiomyosarcoma), most likely  
arising within an angiomyolipoma, retroperitoneum  
T-Y4600, M-8890/3**

**Case 9:**

**Malignant peripheral nerve sheath tumor (MPNST), brachial plexus  
T-X9090, M-9560/3**

**Case 10:**

**Diffuse large cell lymphoma, testis  
T-78000, M-9590/3**

Escondido - Chronic granulomatous mastitis (perilobular mastitis)  
Glendale - Granulomatous mastitis  
Granada Hills - Granulomatous mastitis with microscopic abscesses  
Orange (UCI Medical Center Residents) - Granulomatous mastitis  
Sacramento (UC Davis Medical Center) - Granulomatous mastitis  
San Francisco (San Francisco General Hospital) - Non-caseating granulomatous inflammation (sarcoid?)  
Arizona, Phoenix - Granulomatous lobular mastitis (3)  
Arkansas (University of Arkansas Medical Center) - Granulomatous mastitis  
Colorado, Denver - Granulomatous mastitis  
Florida (Winter Haven Hospital) - Granulomatous mastitis  
Georgia, Decatur - Granulomatous mastitis  
Illinois (Heartland Regional Medical Center) - Granulomatous mastitis  
Kansas (Coffeyville Regional Medical Center) - Focal acute and chronic granulomatous mastitis  
Kansas, Manhattan - Granulomatous mastitis  
Louisiana (Shreveport Pathology Residents Study Group) - Foreign body granulomatous mastopathy  
Maryland (Johns Hopkins Hospital) - Chronic granulomatous mastitis  
Maryland (National Naval Medical Center) - Granulomatous mastitis  
Maryland (University of Maryland Medical Center) - Granulomatous mastopathy  
Michigan (St. Joseph Mercy Hospital) - Granulomatous mastitis  
Michigan (Pathology Services of West Michigan) - Granulomatous inflammation  
New York (Nassau University Medical Center) - Granulomatous mastitis  
New York (State University of New York at Stony Brook) - Granulomatous mastitis  
New York (Westchester Medical Center) - Granulomatous mastitis  
North Carolina (WFU Pathology Residents) - Granulomatous lobular mastitis  
Ohio (MCO Pathology) - Granulomatous lobular mastitis  
Pennsylvania (UPMC Health System) - Chronic granulomatous mastitis  
Texas (Scott & White Hospital) - Abscess with granulomatous inflammation  
Texas, Lubbock - Granulomatous mastitis  
Texas, Sugarland - Granulomatous mastitis  
Washington, D.C. - Granulomatous inflammation, sarcoid-type  
Canada (University of Calgary, Foothills Hospital) - Granulomatous mastitis  
Canada (Woodstock General Hospital) - Granulomatous mastitis consistent with sarcoidosis, breast  
China (Sir Run Run Shaw Hospital) - Granulomatous inflammation/plasma cell mastitis  
Italy, Naples - Idiopathic granulomatous mastitis  
Japan (Asahi General Hospital) - Granulomatous mastitis  
Japan (Hamamatsu University School of Medicine) - Granulomatous lobular mastitis  
Japan (Gunma University Hospital) - Granulomatous lobular mastitis  
Japan (Shiga University of Medical Science) - Granulomatous lobular mastitis  
Puerto Rico (University of Puerto Rico) - Granulomatous mastitis  
Qatar, Doha - Granulomatous mastitis  
Spain (Povisa) - Granulomatous mastitis  
The Netherlands, Amstelveen - Breast granulomatous inflammation (Differential diagnosis – Micro-organism?, Crohn's Disease?, Silicone?) (1); Granulomatous mastitis (1)

**Case 1 - Diagnosis:****Granulomatous mastitis (idiopathic), breast****T-04010, M-40000****Case 1 - References:**

- Memis A, Bilgen I, Ustun EE, et al: Granulomatous Mastitis: Imaging Findings With Histopathologic Correlation. *Clin Radiol*, 2002 Nov; 57(11):1001-6.
- Poniecka AW, Krasuski P, Gal E, et al: Granulomatous Inflammation Of The Breast In A Pregnant Woman: Report Of A Case With Fine Needle Aspiration Diagnosis. *Acta Cytol*, 2001 Sep-Oct; 45(5):797-801.
- Belaabidia B, Essadki O, el Mansouri A, Squalli S: Idiopathic Granulomatous Mastitis: Apropos Of 8 Cases And Review Of The Literature. *Gynecol Obstet Fertil*, 2002 May; 30(5):383-9. Review.
- Sakurai T, Oura S, Tanino H, et al: A Case Of Granulomatous Mastitis Mimicking Breast Carcinoma. *Breast Cancer*, 2002; 9(3):265-8.

Escondido - Pleomorphic adenoma  
Glendale - Pleomorphic adenoma  
Granada Hills - Adenoid cystic carcinoma  
Orange (UCI Medical Center Residents) - Pleomorphic adenoma  
Sacramento (UC Davis Medical Center) - Adenoid cystic carcinoma  
San Francisco (San Francisco General Hospital) - Pleomorphic adenoma  
Arizona, Phoenix - Pleomorphic adenoma (benign mixed tumor) (3)  
Arkansas (University of Arkansas Medical Center) - Pleomorphic adenoma  
Colorado, Denver - Mixed tumor  
Florida (Winter Haven Hospital) - Adenoma  
Georgia, Decatur - Pleomorphic adenoma  
Illinois (Heartland Regional Medical Center) - Pleomorphic adenoma  
Kansas (Coffeyville Regional Medical Center) - Basal cell (basaloid) adenoma, trabecular/membranous type  
Kansas, Manhattan - Pleomorphic adenoma, cellular type  
Louisiana (Shreveport Pathology Residents Study Group) - Pleomorphic adenoma  
Maryland (Johns Hopkins Hospital) - Pleomorphic adenoma  
Maryland (National Naval Medical Center) - Monomorphic adenoma  
Maryland (University of Maryland Medical Center) - Polymorphic adenoma  
Michigan (St. Joseph Mercy Hospital) - Basal cell adenoma  
Michigan (Pathology Services of West Michigan) - Adenoid cystic carcinoma  
New York (Nassau University Medical Center) - Pleomorphic adenoma  
New York (State University of New York at Stony Brook) - Pleomorphic adenoma  
New York (Westchester Medical Center) - Pleomorphic adenoma  
North Carolina (WFU Pathology Residents) - Pleomorphic adenoma  
Ohio (MCO Pathology) - Pleomorphic adenoma  
Pennsylvania (UPMC Health System) - Epithelial-myoepithelial carcinoma  
Texas (Scott & White Hospital) - Cellular pleomorphic adenoma  
Texas, Lubbock - Monomorphic adenoma  
Texas, Sugarland - Pleomorphic adenoma  
Washington, D.C. - Mixed tumor  
Canada (University of Calgary, Foothills Hospital) - Basal cell adenoma  
Canada (Woodstock General Hospital) - Pleomorphic adenoma, parotid gland  
China (Sir Run Run Shaw Hospital) - Pleomorphic adenoma  
Italy, Naples - Basal cell adenoma  
Japan (Asahi General Hospital) - Basal cell adenoma, tubular type  
Japan (Hamamatsu University School of Medicine) - Adenoid cystic carcinoma  
Japan (Gunma University Hospital) - Mixed tumor  
Japan (Shiga University of Medical Science) - Mixed tumor  
Puerto Rico (University of Puerto Rico) - Pleomorphic adenoma  
Qatar, Doha - Pleomorphic adenoma  
Spain (Povisa) - Mixed tumor  
The Netherlands, Amstelveen - Adenoid cystic carcinoma (1)

**Case 2 - Diagnosis:**

**Pleomorphic adenoma (“mixed tumor”), parotid**  
**T-55100, M-89400**

**Case 2 - References:**

Stennert E, Guntinas-Lichius O, Klusmann JP, Arnold G: Histopathology Of Pleomorphic Adenoma In The Parotid Gland: A Prospective Unselected Series Of 100 Cases. *Laryngoscope*, 2001 Dec; 111(12):2195-200.  
 Lam KH, Wei WI, Ho HC, Ho CM: Whole Organ Sectioning Of Mixed Parotid Tumors. *Am J Surg*, 1990 Oct; 160(4):377-81.  
 Takahashi M, Kumai M, Kamito T, et al: Clinico-Pathological Findings Of Recurrent Pleomorphic Adenomas Of The Parotid Gland. *Nippon Jibiinkoka Gakkai Kaiho*, 1991 Apr; 94(4):489-94.  
 Clairmont AA, Richardson GS, Hanna DC: The Pseudocapsule Of Pleomorphic Adenomas (Benign Mixed Tumors): The Argument Against Enucleation. *Am J Surg*, 1977 Aug; 134(2):242-3.

Escondido - Chromophobe renal cell carcinoma  
Glendale - Chromophobe cell carcinoma  
Granada Hills - Chromophobe cell carcinoma  
Orange (UCI Medical Center Residents) - Chromophobe renal cell carcinoma  
Sacramento (UC Davis Medical Center) - Renal cell carcinoma, chromophobe type  
San Francisco (San Francisco General Hospital) - Chromophobe renal cell carcinoma  
Arizona, Phoenix - Chromophobe renal cell carcinoma (3)  
Arkansas (University of Arkansas Medical Center) - Chromophobe renal cell carcinoma  
Colorado, Denver - Oxyphilic renal cell carcinoma  
Florida (Winter Haven Hospital) - Chromophobe carcinoma  
Georgia, Decatur - Chromophobe renal cell carcinoma  
Illinois (Heartland Regional Medical Center) - Renal cell carcinoma, chromophobe cell type  
Kansas (Coffeyville Regional Medical Center) - Renal cell carcinoma, chromophobe cell type  
Kansas, Manhattan - Renal cell carcinoma, chromophobe cell type  
Louisiana (Shreveport Pathology Residents Study Group) - Chromophobe renal cell carcinoma  
Maryland (Johns Hopkins Hospital) - Renal cell carcinoma, chromophobe  
Maryland (National Naval Medical Center) - Renal cell carcinoma, chromophobe type  
Maryland (University of Maryland Medical Center) - Chromophobe renal cell carcinoma  
Michigan (St. Joseph Mercy Hospital) - Renal cell carcinoma, chromophobe type  
Michigan (Pathology Services of West Michigan) - Renal cell carcinoma  
New York (Nassau University Medical Center) - Chromophobe renal cell carcinoma  
New York (State University of New York at Stony Brook) - Chromophobe renal cell carcinoma  
New York (Westchester Medical Center) - Chromophobe renal cell carcinoma  
North Carolina (WFU Pathology Residents) - Chromophobe renal cell carcinoma  
Ohio (MCO Pathology) - Chromophobe renal cell carcinoma  
Pennsylvania (UPMC Health System) - Chromophobe renal carcinoma  
Texas (Scott & White Hospital) - Renal cell carcinoma, chromophobe type  
Texas, Lubbock - Chromophobe carcinoma  
Texas, Sugarland - Chromophobe renal cell carcinoma  
Washington, D.C. - Renal cell carcinoma, chromophobe  
Canada (University of Calgary, Foothills Hospital) - Chromophobe renal cell carcinoma  
Canada (Woodstock General Hospital) - Chromophobe renal cell carcinoma, kidney  
China (Sir Run Run Shaw Hospital) - Renal chromophobe cell carcinoma  
Italy, Naples - Renal cell carcinoma, chromophobe type  
Japan (Asahi General Hospital) - Chromophobe renal cell carcinoma  
Japan (Hamamatsu University School of Medicine) - Chromophobe renal cell carcinoma  
Japan (Gunma University Hospital) - Renal cell carcinoma, chromophobe type  
Japan (Shiga University of Medical Science) - Chromophobe renal cell carcinoma  
Puerto Rico (University of Puerto Rico) - Renal cell carcinoma, chromophobe type  
Qatar, Doha - Renal cell carcinoma, chromophobe variant  
Spain (Povisa) - Chromophobe renal cell carcinoma  
The Netherlands, Amstelveen - Chromophobe renal cell carcinoma (2)

**CASE 3 - Diagnosis:**

**Chromophobe renal cell carcinoma, kidney**  
**T-71000, M-8312/3**

**Case 3 - References:**

- Nagy A, Wilhelm M, Sukosd F, et al: Somatic Mitochondrial DNA Mutations In Human Chromophobe Renal Cell Carcinomas. *Genes Chromosomes Cancer*, 2002 Nov; 35(3):256-60.  
 Itoh T, Chikai K, Ota S, et al: Chromophobe Renal Cell Carcinoma With Osteosarcoma-Like Differentiation. *Am J Surg Pathol*, 2002 Oct; 26(10):1358-62.  
 Onishi T, Oishi Y, Yanada S, et al: Prognostic Implications Of Histological Features In Patients With Chromophobe Cell Renal Carcinoma. *BJU Int*, 2002 Oct; 90(6):529-32.  
 Wu SL, Kothari P, Wheeler TM, et al: Cytokeratins 7 And 20 Immunoreactivity In Chromophobe Renal Cell Carcinoma And Renal Oncocytomas. *Mod Pathol*, 2002 Jul; 15(7):712-7.  
 Delahunt B, Velickovic M, Grebe SK: Evolving Classification Of Renal Cell Neoplasia. *Expert Rev Anticancer Ther*, 2001 Dec; 1(4):576-84. Review.

Escondido - Yolk sac tumor  
Glendale - Yolk sac tumor  
Granada Hills - Endodermal sinus tumor (yolk sac)  
Orange (UCI Medical Center Residents) - Yolk sac tumor, endodermal sinus tumor  
Sacramento (UC Davis Medical Center) - Yolk sac tumor  
San Francisco (San Francisco General Hospital) - Yolk sac tumor, polyvesicular vitelline pattern  
Arizona, Phoenix - Yolk sac tumor (endodermal sinus tumor) (3)  
Arkansas (University of Arkansas Medical Center) - Yolk sac tumor, ovary  
Colorado, Denver - Yolk sac tumor  
Florida (Winter Haven Hospital) - Yolk sac carcinoma  
Georgia, Decatur - Yolk sac tumor  
Illinois (Heartland Regional Medical Center) - Endodermal sinus tumor (yolk sac tumor)  
Kansas (Coffeyville Regional Medical Center) - Yolk sac tumor, polyvesicular – vitelline variant  
Kansas, Manhattan - Yolk sac tumor  
Louisiana (Shreveport Pathology Residents Study Group) - Yolk sac tumor  
Maryland (Johns Hopkins Hospital) - Yolk sac tumor  
Maryland (National Naval Medical Center) - Yolk sac tumor  
Maryland (University of Maryland Medical Center) - Yolk sac tumor  
Michigan (St. Joseph Mercy Hospital) - Yolk sac tumor  
Michigan (Pathology Services of West Michigan) - Yolk sac tumor  
New York (Nassau University Medical Center) - Yolk sac tumor  
New York (State University of New York at Stony Brook) - Yolk sac tumor  
New York (Westchester Medical Center) - Yolk sac tumor  
North Carolina (WFU Pathology Residents) - Yolk sac tumor  
Ohio (MCO Pathology) - Yolk sac tumor  
Pennsylvania (UPMC Health System) - Yolk sac tumor  
Texas (Scott & White Hospital) - Yolk sac tumor  
Texas, Lubbock - Yolk sac tumor  
Texas, Sugarland - Yolk sac tumor  
Washington, D.C. - Yolk sac tumor  
Canada (University of Calgary, Foothills Hospital) - Yolk sac tumor  
Canada (Woodstock General Hospital) - Yolk sac tumor, ovary  
China (Sir Run Run Shaw Hospital) - Endodermal sinus tumor  
Italy, Naples - Yolk sac tumor  
Japan (Asahi General Hospital) - Yolk sac tumor  
Japan (Hamamatsu University School of Medicine) - Yolk sac tumor  
Japan (Gunma University Hospital) - Yolk sac tumor  
Japan (Shiga University of Medical Science) - Yolk sac tumor  
Puerto Rico (University of Puerto Rico) - Yolk sac tumor (arising from a teratoma?)  
Qatar, Doha - Yolk sac tumor of ovary  
Spain (Povisa) - Yolk sac tumor  
The Netherlands, Amstelveen - Yolk sac tumor (2)

**Case 4 - Diagnosis:****Yolk sac tumor (endodermal sinus tumor), ovary****T-87000, M-9071/3****Case 4 - References:**

- Curtin JP, Morrow CP, D'Ablaing G, Schlaerth JB: Malignant Germ Cell Tumors Of The Ovary: 20-Year Report Of LAC-USC Women's Hospital. *Int J Gynecol Cancer*, 1994 Jan; 4(1):29-35.  
 Nawa A, Obata N, Kikkawa F, et al: Prognostic Factors Of Patients With Yolk Sac Tumors Of The Ovary. *Am J Obstet Gynecol*, 2001 May; 184(6):1182-8.  
 Bafna UD, Umadevi K, Kumaran C, et al: Germ Cell Tumors Of The Ovary: Is There A Role For Aggressive Cytoreductive Surgery For Nondysgerminomatous Tumors? *Int J Gynecol Cancer*, 2001 Jul-Aug; 11(4):300-4.  
 Jung SE, Lee JM, Rha SE, et al: CT And MR Imaging Of Ovarian Tumors With Emphasis On Differential Diagnosis. *Radiographics*, 2002 Nov-Dec; 22(6):1305-25. Review.  
 Major T, Borsos A, Lampe L, Juhasz B: Ovarian Malignancies In Childhood And Adolescence. *Eur J Obstet Gynecol Reprod Biol*, 1995 Nov; 63(1):65-8.

Escondido - Chondrosarcoma  
Glendale - Low-grade chondrosarcoma  
Granada Hills - Chondrosarcoma, well-differentiated  
Orange (UCI Medical Center Residents) - Chondrosarcoma (Grade II or higher)  
Sacramento (UC Davis Medical Center) - Chondrosarcoma  
San Francisco (San Francisco General Hospital) - Chondrosarcoma  
Arizona, Phoenix - Chondrosarcoma, low grade (I/III) (3)  
Arkansas (University of Arkansas Medical Center) - Enchondroma versus low-grade chondrosarcoma  
Colorado, Denver - Chondrosarcoma  
Florida (Winter Haven Hospital) - Well-differentiated chondrosarcoma  
Georgia, Decatur - Osteochondroma  
Illinois (Heartland Regional Medical Center) - Chondrosarcoma, Grade I  
Kansas (Coffeyville Regional Medical Center) - Chondrosarcoma, low grade  
Kansas, Manhattan - Enchondroma  
Louisiana (Shreveport Pathology Residents Study Group) - Well-differentiated chondrosarcoma  
Maryland (Johns Hopkins Hospital) - Chondrosarcoma  
Maryland (National Naval Medical Center) - Chondrosarcoma arising in osteochondroma (10), Osteochondroma, recurrent (1)  
Maryland (University of Maryland Medical Center) - Chondrosarcoma, low grade  
Michigan (St. Joseph Mercy Hospital) - Chondrosarcoma  
Michigan (Pathology Services of West Michigan) - Chondroma  
New York (Nassau University Medical Center) - Well-differentiated chondrosarcoma  
New York (State University of New York at Stony Brook) - Chondrosarcoma  
New York (Westchester Medical Center) - Dedifferentiated chondrosarcoma  
North Carolina (WFU Pathology Residents) - Chondrosarcoma, low grade  
Ohio (MCO Pathology) - Chondrosarcoma  
Pennsylvania (UPMC Health System) - Chondrosarcoma, Grade II  
Texas (Scott & White Hospital) - Chondrosarcoma  
Texas, Lubbock - Chondrosarcoma  
Texas, Sugarland - Chondrosarcoma, Grade I  
Washington, D.C. - Chondrosarcoma  
Canada (University of Calgary, Foothills Hospital) - Low grade chondrosarcoma  
Canada (Woodstock General Hospital) - Osteochondroma, proximal humerus  
China (Sir Run Run Shaw Hospital) - Chondroma  
Italy, Naples - Enchondroma, recurrent  
Japan (Asahi General Hospital) - Chondrosarcoma  
Japan (Hamamatsu University School of Medicine) - Chondrosarcoma  
Japan (Gunma University Hospital) - Chondrosarcoma, Grade II  
Japan (Shiga University of Medical Science) - Chondrosarcoma, low grade  
Puerto Rico (University of Puerto Rico) - Chondrosarcoma, Grade II  
Qatar, Doha - Enchondroma (5); Well-differentiated chondrosarcoma (2)  
Spain (Povisa) - Chondrosarcoma  
The Netherlands, Amstelveen - Chondrosarcoma (2)

**Case 5 - Diagnosis:****Low grade chondrosarcoma, proximal humerus****T-11410, M-9220/3****Outside Consultation:** Howard Dorfman, M.D.: Low Grade Chondrosarcoma**Case 5 - References:**

- Lee FY, Mankin HJ, Fondren G, et al: Chondrosarcoma Of Bone: An Assessment Of Outcome. *J Bone Joint Surg Am*, 1999 Mar; 81(3):326-38.
- Huvos AG, Marcove RC: Chondrosarcoma In The Young: A Clinicopathologic Analysis Of 79 Patients Younger Than 21 Years Of Age. *Am J Surg Pathol*, 1987 Dec; 11(12):930-42.
- Capanna R, Bertoni F, Bettelli G, et al: Dedifferentiated Chondrosarcoma. *J Bone Joint Surg Am*, 1988 Jan; 70(1):60-9.
- Eriksson AI, Schiller A, Mankin HJ: The Management Of Chondrosarcoma Of Bone. *Clin Orthop*, 1980 Nov-Dec; (153):44-66.
- Ozaki T, Lindner N, Hillmann A, et al: Influence Of Intralesional Surgery On Treatment Outcome Of Chondrosarcoma. *Cancer*, 1996 Apr 1; 77(7):1292-7.
- Rizzo M, Ghert MA, Harrelson JM, Scully SP: Chondrosarcoma Of Bone: Analysis Of 108 Cases And Evaluation For Predictor Of Outcome. *Clin Orthop*, 2001 Oct; (391):224-33.

Escondido - Chondrosarcoma  
Glendale - ? Meningioma  
Granada Hills - Langerhans cell histiocytosis  
Orange (UCI Medical Center Residents) - Telangiectatic osteosarcoma  
Sacramento (UC Davis Medical Center) - Osteosarcoma, low grade  
San Francisco (San Francisco General Hospital) - Mesenchymal chondrosarcoma  
Arizona, Phoenix - Chondrosarcoma, high grade (III/III) (3)  
Arkansas (University of Arkansas Medical Center) - Chondromyxoid fibroma  
Colorado, Denver - Meningioma  
Florida (Winter Haven Hospital) - Chondromyxoid fibroma  
Georgia, Decatur - Osteosarcoma  
Illinois (Heartland Regional Medical Center) - Atypical chondromyxoid fibroma  
Kansas (Coffeyville Regional Medical Center) - Chondromyxoid fibroma  
Kansas, Manhattan - Osteosarcoma  
Louisiana (Shreveport Pathology Residents Study Group) - Chondromyxoid fibroma  
Maryland (Johns Hopkins Hospital) - Aneurysmal bone cyst  
Maryland (National Naval Medical Center) - Chondromyxoid fibroma  
Maryland (University of Maryland Medical Center) - Osteosarcoma  
Michigan (St. Joseph Mercy Hospital) - Solitary fibrous tumor  
Michigan (Pathology Services of West Michigan) - Osteosarcoma  
New York (Nassau University Medical Center) - Chondromyxoid fibroma  
New York (State University of New York at Stony Brook) - Chondroblastic osteosarcoma  
New York (Westchester Medical Center) - Chondromyxoid fibroma  
North Carolina (WFU Pathology Residents) - Chondromyxoid fibroma  
Ohio (MCO Pathology) - Chondromyxoid fibroma  
Pennsylvania (UPMC Health System) - Sclerosing epithelioid fibrosarcoma  
Texas (Scott & White Hospital) - Eosinophilic granuloma  
Texas, Lubbock - Hemangiopericytoma  
Texas, Sugarland - Osteosarcoma  
Washington, D.C. - Osteosarcoma, well-differentiated  
Canada (University of Calgary, Foothills Hospital) - Chondroblastoma with aneurismal bone cyst formation  
Canada (Woodstock General Hospital) - Osteosarcoma, parietal skull  
China (Sir Run Run Shaw Hospital) - Chondromyxoid fibroma  
Japan (Asahi General Hospital) - Chondroblastoma  
Japan (Hamamatsu University School of Medicine) - Low grade fibromyxoid sarcoma  
Japan (Gunma University Hospital) - Chondromyxoid fibroma  
Japan (Shiga University of Medical Science) - Chondroblastoma, skull  
Puerto Rico (University of Puerto Rico) - Chondroblastoma  
Qatar, Doha - Cranial fasciitis {proliferative fasciitis} (3); Osteoblastoma (4)  
Spain (Povisa) - Aneurysmal bone cyst vs vascular tumor  
The Netherlands, Amstelveen - Osteosarcoma {?} (1), Meningioma (1)

**Case 6 - Diagnosis:****Chondromyxoid fibroma, parietal skull****T-10101, M-9241/0****Outside Consultation:** Dr. K. Unni, Mayo Clinic: "Chondromyxoid Fibroma".**Case 6 - References:**

- Wu CT, Inwards CY, O'Laughlin S, et al: Chondromyxoid Fibroma Of Bone: A Clinicopathologic Review Of 278 Cases. *Hum Pathol*, 1998 May; 29(5):438-46.
- Granter SR, Renshaw AA, Kozakewich HP, Fletcher JA: The Pericentromeric Inversion, Inv (6)(P25q13), Is A Novel Diagnostic Marker Of Chondromyxoid Fibroma. *Mod Pathol*, 1998 Nov; 11(11):1071-4.
- Patino-Cordoba JI, Turner J, McCarthy SW, Fagan P: Chondromyxoid Fibroma Of The Skull Base. *Otolaryngol Head Neck Surg*, 1998 Mar; 118(3 Pt 1):415-8. Review.
- Shek TW, Peh WC, Leung G: Chondromyxoid Fibroma Of Skull Base: A Tumour Prone To Local Recurrence. *J Laryngol Otol*, 1999 Apr; 113(4):380-5. Review.



Keel SB, Bhan AK, Liebsch NJ, Rosenberg AE: Chondromyxoid Fibroma Of The Skull Base: A Tumor Which May Be Confused With Chordoma And Chondrosarcoma: A Report Of Three Cases And Review Of The Literature. *Am J Surg Pathol*, 1997 May; 21(5):577-82. Review.

**Case No. 7 Accession No. 29862**

**October, 2004**

Escondido - Synovial sarcoma  
Glendale - Dedifferentiated chondrosarcoma  
Granada Hills - Chondrosarcoma, poorly-differentiated  
Orange (UCI Medical Center Residents) - Dedifferentiated chondrosarcoma  
Sacramento (UC Davis Medical Center) - Dedifferentiated chondrosarcoma  
San Francisco (San Francisco General Hospital) - Dedifferentiated chondrosarcoma  
Arizona, Phoenix - Clear cell chondrosarcoma (3)  
Arkansas (University of Arkansas Medical Center) - Carcinosarcoma ex cutaneous mixed tumor (malignant chondroid syringoma)  
Colorado, Denver - Chondrosarcoma  
Florida (Winter Haven Hospital) - Dedifferentiated chondrosarcoma  
Georgia, Decatur - Myxoid chondrosarcoma  
Illinois (Heartland Regional Medical Center) - Chondrosarcoma, Grade III  
Kansas (Coffeyville Regional Medical Center) - Sarcoma (? Chondrofibrosarcoma)  
Kansas, Manhattan - Dedifferentiated chondrosarcoma  
Louisiana (Shreveport Pathology Residents Study Group) - Dedifferentiated chondrosarcoma  
Maryland (Johns Hopkins Hospital) - Fibrohistiocytic sarcoma vs. melanoma/clear cell sarcoma, pending stains  
Maryland (National Naval Medical Center) - Chondrosarcoma, dedifferentiated (6); Osteosarcoma (5)  
Maryland (University of Maryland Medical Center) - Dedifferentiated chondrosarcoma  
Michigan (St. Joseph Mercy Hospital) - Dedifferentiated chondrosarcoma  
Michigan (Pathology Services of West Michigan) - Chondrosarcoma  
New York (Nassau University Medical Center) - Dedifferentiated chondrosarcoma  
New York (State University of New York at Stony Brook) - Dedifferentiated chondrosarcoma  
New York (Westchester Medical Center) - Parosteal chondroma vs low grade chondrosarcoma  
North Carolina (WFU Pathology Residents) - Dedifferentiated chondrosarcoma  
Ohio (MCO Pathology) - Dedifferentiated chondrosarcoma  
Pennsylvania (UPMC Health System) - Dedifferentiated chondrosarcoma  
Texas (Scott & White Hospital) - Dedifferentiated chondrosarcoma  
Texas, Lubbock - Extraskelatal chondrosarcoma  
Texas, Sugarland - Dedifferentiated chondrosarcoma  
Washington, D.C. - Dedifferentiated chondrosarcoma  
Canada (University of Calgary, Foothills Hospital) - Dedifferentiated chondrosarcoma  
Canada (Woodstock General Hospital) - Mesenchymal chondrosarcoma, hand  
China (Sir Run Run Shaw Hospital) - Dedifferentiated chondrosarcoma  
Italy, Naples - Dedifferentiated chondrosarcoma  
Japan (Asahi General Hospital) - Dedifferentiated chondrosarcoma  
Japan (Hamamatsu University School of Medicine) - Dedifferentiated chondrosarcoma  
Japan (Gunma University Hospital) - Dedifferentiated chondrosarcoma  
Japan (Shiga University of Medical Science) - Dedifferentiated chondrosarcoma  
Puerto Rico (University of Puerto Rico) - Dedifferentiated chondrosarcoma  
Qatar, Doha - Dedifferentiated chondrosarcoma  
Spain (Povisa) - Dedifferentiated chondrosarcoma  
The Netherlands, Amstelveen - Chondrosarcoma (1); Dedifferentiated chondrosarcoma (1)

**Case 7 - Diagnosis:**

**Dedifferentiated chondrosarcoma, hand  
T-Y8700, M-9220/3**

**Outside Consultation:** K. Krishnan Unni, M.D., Mayo Clinic: Dedifferentiated Chondrosarcoma

**Case 7 - References:**

Mitchell AD, Ayoub K, Mangham DC, et al: Experience In The Treatment Of Dedifferentiated Chondrosarcoma. *J Bone Joint Surg Br*, 2000 Jan; 82(1):55-61.

Frassica FJ, Unni KK, Beabout JW, Sim FH: Dedifferentiated Chondrosarcoma: A Report Of The Clinicopathological Features And Treatment Of Seventy-Eight Cases. *J Bone Joint Surg Am*, 1986 Oct; 68(8):1197-205.

Johnson S, Tetu B, Ayala AG, Chawla SP: Chondrosarcoma With Additional Mesenchymal Component (Dedifferentiated Chondrosarcoma): I. A Clinicopathologic Study of 26 Cases. *Cancer*, 1986 Jul 15; 58(2):278-86.

Ogose A, Unni KK, Swee RG, et al: Chondrosarcoma Of Small Bones Of The Hands And Feet. *Cancer*, 1997 Jul 1; 80(1):50-9.

Tallini G, Dorfman H, Brys P, et al: Correlation Between Clinicopathological Features And Karyotype In 100 Cartilaginous And Chordoid Tumours: A Report From The Chromosomes And Morphology (CHAMP) Collaborative Study Group. *J Pathol*, 2002 Feb; 196(2):194-203. Review.

**Case No. 8 Accession No. 29814**

**October, 2004**

Escondido - Angiomyolipoma  
Glendale - Lymphangioleiomyoma  
Granada Hills - Angiomyolipoma  
Orange (UCI Medical Center Residents) - Angiomyolipoma  
Sacramento (UC Davis Medical Center) - Angiomyolipoma  
San Francisco (San Francisco General Hospital) - Angiomyolipoma  
Arizona, Phoenix - Angiomyolipoma (3)  
Arkansas (University of Arkansas Medical Center) - Angiomyolipoma  
Colorado, Denver - Rhabdomyosarcoma  
Florida (Winter Haven Hospital) - Angiomyolipoma  
Georgia, Decatur - Angiomyolipoma  
Illinois (Heartland Regional Medical Center) - Angiomyolipoma  
Kansas (Coffeyville Regional Medical Center) - Angiomyolipoma  
Kansas, Manhattan - Angiomyolipoma  
Louisiana (Shreveport Pathology Residents Study Group) - Angiomyolipoma  
Maryland (Johns Hopkins Hospital) - Angiomyolipoma  
Maryland (National Naval Medical Center) - Angiomyolipoma  
Maryland (University of Maryland Medical Center) - Angiomyolipoma  
Michigan (St. Joseph Mercy Hospital) - Angiomyolipoma  
Michigan (Pathology Services of West Michigan) - Clear cell sarcoma  
New York (Nassau University Medical Center) - Angiomyolipoma  
New York (State University of New York at Stony Brook) - Angiomyolipoma  
New York (Westchester Medical Center) - Angiomyolipoma  
North Carolina (WFU Pathology Residents) - Angiomyolipoma  
Ohio (MCO Pathology) - Angiomyolipoma  
Pennsylvania (UPMC Health System) - Angiomyolipoma  
Texas (Scott & White Hospital) - Angiomyolipoma  
Texas, Lubbock - Angiomyolipoma  
Texas, Sugarland - Angiomyolipoma  
Washington, D.C. - Angiomyolipoma  
Canada (University of Calgary, Foothills Hospital) - Angiomyolipoma  
Canada (Woodstock General Hospital) - Angiomyolipoma, retroperitoneum  
China (Sir Run Run Shaw Hospital) - Angiomyolipoma  
Italy, Naples - Angiomyolipoma  
Japan (Asahi General Hospital) - Angiomyolipoma  
Japan (Hamamatsu University School of Medicine) - Angiomyolipoma  
Japan (Gunma University Hospital) - Lymphangioleiomyoma  
Japan (Shiga University of Medical Science) - Angiomyolipoma  
Puerto Rico (University of Puerto Rico) - Angiomyolipoma  
Qatar, Doha - Lymphangioleiomyoma  
Spain (Povisa) - Angiomyolipoma  
The Netherlands, Amstelveen - Angiomyolipoma (2)

**Case 8 - Diagnosis:**

**Low grade smooth muscle neoplasm (Grade I of III leiomyosarcoma), most likely arising within an angiomyolipoma, retroperitoneum  
T-Y-46000, M-8890/3**

**Director's Note:** The diagnosis above is a reflection of my diagnostic rendering, based upon morphology, particularly the sinusoidal growth pattern, immunostain pattern, mitotic activity, and the Ki-67 which was found to be positive in over 20% of the cells. (drc)

Case 8 - References:

- Christiano AP, Yang X, Gerber GS: Malignant Transformation Of Renal Angiomyolipoma. *J Urol*, 1999 Jun; 161(6):1900-1.
- Dalle I, Sciot R, de Vos R, et al: Malignant Angiomyolipoma Of The Liver: A Hitherto Unreported Variant. *Histopathology*, 2000 May; 36(5):443-50.
- Martignoni G, Pea M, Rigaud G, et al: Renal Angiomyolipoma With Epithelioid Sarcomatous Transformation And Metastases: Demonstration Of The Same Genetic Defects In The Primary And Metastatic Lesions. *Am J Surg Pathol*, 2000 Jun; 24(6):889-94.
- Mai KT, Perkins DG: Malignant Epithelioid Angiomyolipoma. Comment On: *Am J Surg Pathol*, 1998 Feb; 22(2):180-7.

**Case No. 9 Accession No. 29583**

**October, 2004**

Escondido - Malignant peripheral nerve sheath tumor  
Glendale - MPNST  
Granada Hills - Malignant peripheral nerve sheath tumor  
Orange (UCI Medical Center Residents) - Malignant peripheral nerve sheath tumor  
Sacramento (UC Davis Medical Center) - Malignant peripheral nerve sheath tumor  
San Francisco (San Francisco General Hospital) - Malignant peripheral nerve sheath tumor  
Arizona, Phoenix - Neurogenic sarcoma (malignant schwannoma) (3)  
Arkansas (University of Arkansas Medical Center) - Malignant peripheral nerve sheath tumor  
Colorado, Denver - Neurofibrosarcoma  
Florida (Winter Haven Hospital) - Fibrosarcoma  
Georgia, Decatur - Malignant peripheral nerve sheath tumor  
Illinois (Heartland Regional Medical Center) - Malignant peripheral nerve sheath tumor  
Kansas (Coffeyville Regional Medical Center) - Malignant peripheral nerve sheath tumor (MPNST)  
Kansas, Manhattan - Malignant peripheral nerve sheath tumor  
Louisiana (Shreveport Pathology Residents Study Group) - High grade malignant peripheral nerve sheath tumor  
Maryland (Johns Hopkins Hospital) - Malignant peripheral nerve sheath tumor  
Maryland (National Naval Medical Center) - Malignant peripheral nerve sheath tumor  
Maryland (University of Maryland Medical Center) - Malignant peripheral nerve sheath tumor  
Michigan (St. Joseph Mercy Hospital) - Malignant peripheral nerve sheath tumor  
Michigan (Pathology Services of West Michigan) - Synovial sarcoma  
New York (Nassau University Medical Center) - Malignant peripheral nerve sheath tumor  
New York (State University of New York at Stony Brook) - Malignant peripheral nerve sheath tumor  
New York (Westchester Medical Center) - Malignant peripheral nerve sheath tumor  
North Carolina (WFU Pathology Residents) - Malignant peripheral nerve sheath tumor  
Ohio (MCO Pathology) - Malignant peripheral nerve sheath tumor  
Pennsylvania (UPMC Health System) - MPNST  
Texas (Scott & White Hospital) - MPNST  
Texas, Lubbock - Neurosarcoma  
Texas, Sugarland - Malignant peripheral nerve sheath tumor  
Washington, D.C. - Malignant peripheral nerve sheath tumor  
Canada (University of Calgary, Foothills Hospital) - Malignant peripheral nerve sheath tumor  
Canada (Woodstock General Hospital) - Malignant peripheral nerve sheath tumor, brachial plexus  
China (Sir Run Run Shaw Hospital) - Malignant peripheral nerve sheath tumor  
Italy, Naples - Malignant peripheral nerve sheath tumor  
Japan (Asahi General Hospital) - Malignant peripheral nerve sheath tumor  
Japan (Hamamatsu University School of Medicine) - Malignant peripheral nerve sheath tumor  
Japan (Gunma University Hospital) - Malignant peripheral nerve sheath tumor  
Japan (Shiga University of Medical Science) - Malignant peripheral nerve sheath tumor  
Puerto Rico (University of Puerto Rico) - Malignant peripheral nerve sheath tumor  
Qatar, Doha - Malignant peripheral nerve sheath tumor  
Spain (Povisa) - MPNST  
The Netherlands, Amstelveen - Malignant peripheral nerve sheath tumor (2)

### **Case 9 - Diagnosis:**

#### **Malignant peripheral nerve sheath tumor (MPNST), brachial plexus T-X9090, M-9560/3**

### **Case 9 - References:**

- Meis JM, Enzinger FM, Martz KL, Neal JA: Malignant Peripheral Nerve Sheath Tumors (Malignant Schwannoma) In Children. *Am J Surg Pathol*, 1992 Jul; 16(7):694-707.
- Johnson MD, Glick AD, Davis BW: Immunohistochemical Evaluation Of Leu-7, Myelin-Basic Protein, S100-Protein, Glial-Fibrillary Acidic-Protein And LN3, Immunoreactivity In Nerve Sheath Tumors And Sarcomas. *Arch Pathol Lab Med*, 1988 Feb; 112(2):155-60.
- Scheithauer BW, Woodruff JM, Erlandson RA: Atlas of Tumor Pathology, Third Series, Fascicle 24. *Tumors of the Peripheral Nervous System*. Armed Forces Institute of Pathology, 1999, Table 7-12, page 149.
- Leu YS, Chang KC: Extracranial Head And Neck Schwannomas: A Review Of 8 Years Experience. *Acta Otolaryngol*, 2002 Jun; 122(4):435-7.
- Guerra MF, Campo FR, de Artinano FO, Perez JS: Schwannoma Of The Brachial Plexus: An Unusual Cause For A Cervical Mass. *J Oral Maxillofac Surg*, 2001 Aug; 59(8):942-4.

### **Case No. 10 Accession No. 29666**

**October, 2004**

Escondido - Large B-cell lymphoma  
Glendale - Anaplastic lymphoma  
Granada Hills - Anaplastic seminoma  
Orange (UCI Medical Center Residents) - Diffuse large B-cell lymphoma  
Sacramento (UC Davis Medical Center) - Seminoma, spermatocystic  
San Francisco (San Francisco General Hospital) - Large cell lymphoma  
Arizona, Phoenix - Diffuse large cell lymphoma (3)  
Arkansas (University of Arkansas Medical Center) - Diffuse large cell lymphoma, testis  
Colorado, Denver - Seminoma  
Florida (Winter Haven Hospital) - Large cell lymphoma  
Georgia, Decatur - Large cell lymphoma  
Illinois (Heartland Regional Medical Center) - Malignant lymphoma, diffuse, large cell type  
Kansas (Coffeyville Regional Medical Center) - Seminoma  
Kansas, Manhattan - Large cell lymphoma, favor anaplastic  
Louisiana (Shreveport Pathology Residents Study Group) - Large cell lymphoma, probably B-cell  
Maryland (Johns Hopkins Hospital) - Large cell lymphoma, pending stains  
Maryland (National Naval Medical Center) - Diffuse large cell lymphoma (high grade)  
Maryland (University of Maryland Medical Center) - Large cell lymphoma  
Michigan (St. Joseph Mercy Hospital) - Diffuse large cell lymphoma  
Michigan (Pathology Services of West Michigan) - Lymphoma vs seminoma vs sarcoma  
New York (Nassau University Medical Center) - Malignant lymphoma, large cell type  
New York (State University of New York at Stony Brook) - Large cell lymphoma  
New York (Westchester Medical Center) - Diffuse large cell lymphoma, probably B-cell  
North Carolina (WFU Pathology Residents) - Diffuse large cell lymphoma  
Ohio (MCO Pathology) - Anaplastic large cell lymphoma  
Pennsylvania (UPMC Health System) - Malignant lymphoma, B-cell type  
Texas (Scott & White Hospital) - Diffuse large cell lymphoma  
Texas, Lubbock - Malignant lymphoma, large cell  
Texas, Sugarland - Malignant lymphoma, diffuse large cell type  
Washington, D.C. - Malignant lymphoma, large cell, diffuse  
Canada (University of Calgary, Foothills Hospital) - Diffuse large B-cell lymphoma  
Canada (Woodstock General Hospital) - Immunoblastic lymphoma, testis  
China (Sir Run Run Shaw Hospital) - Diffuse large cell lymphoma  
Italy, Naples - Seminoma  
Japan (Asahi General Hospital) - Malignant lymphoma, diffuse, large cell type  
Japan (Hamamatsu University School of Medicine) - Malignant lymphoma  
Japan (Gunma University Hospital) - Malignant lymphoma, diffuse large cell  
Japan (Shiga University of Medical Science) - Malignant lymphoma, diffuse large cell type  
Puerto Rico (University of Puerto Rico) - Large cell lymphoma  
Qatar, Doha - Large "B" cell lymphoma

Spain (Povisa) - Lymphoma vs seminoma

The Netherlands, Amstelveen - Diffuse large B-cell lymphoma (1); Lymphoma, diffuse large B-cell type (1)

**Case 10 - Diagnosis:**

**Diffuse large cell lymphoma, testis**

**T-78000, M-9590/3**

**Case 10 - References:**

Leite KR, Garicochea B, Srougi M, et al: Monoclonality Of Asynchronous Bilateral Lymphoma Of The Testis. *Eur Urol*, 2000 Dec; 38(6):774-7.

Bentley RC, Devlin B, Kaufman RE, et al: Genotypic Divergence Precedes Clinical Dissemination In A Case Of Synchronous Bilateral B-Cell Malignant Lymphoma Of The Testes. *Hum Pathol*, 1993 Jun; 24(6):675-8.

Lasota J, Nordling S, Miettinen M: Testicular Diffuse Large Cell Lymphoma With Tubule Preservation--Molecular And Genetic Evidence Of Transformation From Previous Follicular Lymphoma. *Virchows Arch*, 2000 Mar; 436(3):276-83.

Hyland J, Lasota J, Jasinski M, et al: Molecular Pathological Analysis Of Testicular Diffuse Large Cell Lymphomas. *Hum Pathol*, 1998 Nov; 29(11):1231-9.

Lagrange JL, Ramaioli A, Theodore CH, et al: Non-Hodgkin's Lymphoma Of The Testis: A Retrospective Study Of 84 Patients Treated In The French Anticancer Centres. *Ann Oncol*, 2001 Sep; 12(9):1313-9.