



CALIFORNIA
TUMOR TISSUE REGISTRY

GENERAL PATHOLOGY

Minutes – Subscription A

January, 2008



SUGGESTED READING (General Topics from Recent Literature):

- Pathology Features in Bethesda Guidelines Predict Colorectal Cancer Microsatellite Instability. A Population-Based Study. Jenkins MA, Hayashi S, et al. *Gastroenterology* 2007; 133:48-56.
- Trends in Head and Neck Cancer Incidence in Relation to Smoking Prevalence. An Emerging Epidemic of Human Papillomavirus-Associated Cancers? Sturgis EM and Cinciripini PM. *Cancer* 2007; 110:1429-1435.
- Prognostic Significance of Drug-Regulated Genes in High-Grade Osteosarcoma. Fellenberg J, Bernd L, et al. *Mod Pathol* 2007; 20:1085-1094.
- Site-Dependent Differential KIT and PDGFRA Expression in Gastric and Intestinal Gastrointestinal Stromal Tumors. Haller F, Happel N, et al. *Mod Pathol* 2007; 20:1103-1111
- Cancer Mortality in the United States by Education Level and Race. Albano JD, Ward E, et al. *J Natl Cancer Inst* 2007; 99:1384-1394.

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FILE DIAGNOSES

CTTR Subscription A

January 2008

Case 1:

Atrial/cardiac myxoma
T-32100, M-88400

Case 2:

Thymic hyperplasia (“true”)
T-Y4600, M-72000

Case 3:

Thymoma, type B
T-Y2300, M-85800

Case 4:

Mediastinal malignant teratoma with rhabdomyosarcoma and mixed germ cell components
T-Y2300, M-86310

Case 5:

Osteochondroma, hip
T-Y1500, M-92100

Case 6:

Mesenteric fibromatosis
T-50500, M-76100

Case 7:

High grade sarcoma (nos), branchial plexus
T-Y2100, M-80413

Case 8:

Melanoma, heel
T-Y9600, M-87203

Case 9:

Nodular sclerosing Hodgkin lymphoma, cervical lymph node
T-08200, M-95903

Case 10:

Osteoblastic osteosarcoma, distal femur
T-11710, M-91803

Arcadia (ABC Laboratories) - Atrial myxoma
Fontana (Kaiser Permanente) - Myxoma
Hayward/Fremont - Rt atrial myxoma
Long Beach (Long Beach VA Hospital) - Atrial myxoma (6)
Oakland - Myxoma
Orange - Cardiac myxoma
Oxnard (St. John's Regional Medical Center) - Atrial myxoma
Riverside (Riverside County Medical Center) - Cardiac myxoma
San Diego (Naval Medical Center) - Cardiac myxoma
San Diego (Scripps Clinic) - Cardiac myxoma
Santa Barbara - Organizing thrombus
Santa Rosa (Santa Rosa Memorial Hospital) - Myxoma, atrial (4)
Woodland Hills (Kaiser Permanente) - Atrial myxoma
Alabama (Baptist Medical Center) - Cardiac myxoma
Alabama, Mt. Olive - Atrial myxoma
Colorado (McKee Medical Center) - Atrial myxoma
Florida (Baptist Hospital) - Cardiac myxoma (3)
Georgia, Decatur - Cardiac myxoma
Illinois, Burr Ridge - Myxoma
Illinois (Heartland Regional Medical Center) - Cardiac myxoma
Indiana (St. Joseph Hospital) - Cardiac myxoma (2)
Iowa (Winneshiek Medical Center) - Thrombus
Louisiana (Orleans Coroners Office) - Cardiac myxoma
Maryland (National Naval Medical Center) - Myxoma
Massachusetts (Tufts-New England Medical Center) - Atrial myxoma
Minnesota (Fairview Ridges Hospital) - Atrial myxoma
Missouri (Missouri Delta Center) - Hemangioma
Nevada (Sunrise Hospital) - Atrial myxoma
New York, Buffalo - Cardiac myxoma
New York (Long Island Jewish Medical Center) - Myxoma
New York (Stony Brook University) - Myxoma
Pennsylvania (Conemaugh Memorial Hospital) - Myxoma
Pennsylvania (Lehigh Valley Hospital) - Atrial myxoma
Pennsylvania (Magee Women's Hospital) - Myxoma
Pennsylvania (St. Elizabeth Health Center) - Atrial myxoma
Texas (Crystal Beach) - Recanalized thrombus
Texas, Lubbock - Myxoma
Texas (St. Lukes Hospital) - Atrial myxoma
Washington (Seattle VA Medical Center) - Myxoma vs organizing thrombus
West Virginia (Greenbrier Valley Medical Center) - Neural thrombus
Australia (Royal Hobart Hospital) - Atrial myxoma
Brazil, Sao Paulo - Atrial myxoma with extramedullary hematopoiesis
Canada (Pasqua Hospital) - Atrial myxoma
Canada (Sherbrooke University Hospital) - Cardiac myxoma
Hong Kong (Kwong Wah Hospital) - Atrial myxoma
Ireland (Kerry General Hospital) - Atrial myxoma
Ireland (University College Hospital) - Atrial myxoma
Japan (Asashi General Hospital) - Cavernous hemangioma
Japan (Kyoto University Hospital) - Cardiac myxoma with incorporation of thrombus
United Kingdom (Oxford Study Group) - Cardiac myxoma

Case 1 - Diagnosis:

Atrial/cardiac myxoma

T-32100, M-88400

Case 1 - References:

- Hemachandran M, Kakar N and Khandelwal N. Giant-Cell-Rich Myxoma of Right Atrium. An Ultrastructural Analysis. *Cardiovasc Pathol* 2003; 12(5):287-289.
- Karlf E, Salzberg SP, Anyanwu AC, et al. How Fast Does An Atrial yxoma Grow? *Ann Thorac Surg* 2006; 82(4):1510-1512.
- Maintz D, Gunia S, Baumgart P, et al. Acute Myocardial Infarction as the First Manifestation of Left Atrial Myxoma. *AJR Am J Roentgenol* 2004; 183(6):1838-1839.
- Padalino Ma, Basso C, Moreolo GS, et al. Left atrial Myxoma in a Child. Case Report and Review of the Literature. *Cardiovasc Pathol* 2003; 12(4):233-236.
- Di Virgilio A, Chello M, Bevacqua E, et al. Giant Left Atrial Myxoma Like “Mickey Mouse”. *Asian Cardiovasc Thorac Ann* 2003; 11(2):187.

Case No. 2, Accession No. 30409**January 2008 A**

Arcadia (ABC Laboratories) - Benign thymus gland

Fontana (Kaiser Permanente) - Thymic hyperplasia vs. thymoma

Hayward/Fremont - Thymic hyperplasia

Long Beach (Long Beach VA Hospital) - Thymic hyperplasia (6)

Oakland - Thymoma

Orange - Thymic hyperplasia

Oxnard (St. John's Regional Medical Center) - Thymolipoma (2); Thymic hyperplasia vs. thymoma (1)

Riverside (Riverside County Medical Center) - Thymic hyperplasia rule out thymoma

San Diego (Naval Medical Center) - Thymic hyperplasia

San Diego (Scripps Clinic) - Thymolipoma (ddx thymic hyperplasia)

Santa Barbara - Thymic cysts

Santa Rosa (Santa Rosa Memorial Hospital) - Thymoma, type A (2); True thymic hyperplasia (1) Lymphocytic thymoma (1)

Woodland Hills (Kaiser Permanente) - Persistent thymic tissue

Alabama (Baptist Medical Center) - Thymic hyperplasia

Alabama, Mt. Olive - Thymic hyperplasia

Colorado (McKee Medical Center) - Benign thymoma vs. thymic hyperplasia

Florida (Baptist Hospital) - Thymolipoma (3)

Georgia, Decatur - Thymoma

Illinois, Burr Ridge - Thymoma

Illinois (Heartland Regional Medical Center) - True thymic hyperplasia

Indiana (St. Joseph Hospital) - Thymic hyperplasia (2)

Iowa (Winneshiek Medical Center) - Thymoma

Louisiana (Orleans Coroners Office) - Thymic hyperplasia

Maryland (National Naval Medical Center) - Thymic follicular hyperplasia

Massachusetts (Tufts-New England Medical Center) - Thymic hyperplasia

Minnesota (Fairview Ridges Hospital) - True thymic hyperplasia

Missouri (Missouri Delta Center) - Thymus

Nevada (Sunrise Hospital) - Thymic hyperplasia

New York, Buffalo - True thymic hyperplasia
New York (Long Island Jewish Medical Center) - Thymic hyperplasia
New York (Stony Brook University) - True thymic hyperplasia
Pennsylvania (Conemaugh Memorial Hospital) - Thymic hyperplasia
Pennsylvania (Lehigh Valley Hospital) - Thymic hyperplasia
Pennsylvania (Magee Women's Hospital) - Thymic hyperplasia
Pennsylvania (St. Elizabeth Health Center) - Thymic hyperplasia
Texas (Crystal Beach) - Thymic hyperplasia
Texas, Lubbock - Thymic hyperplasia
Texas (St. Lukes Hospital) - Thymoma
Washington (Seattle VA Medical Center) - Hyperplastic thymus
West Virginia (Greenbrier Valley Medical Center) - Thymoma, lymphocytic predominance
Australia (Royal Hobart Hospital) - True thymic hyperplasia
Brazil, Sao Paulo - Thymic hyperplasia
Canada (Pasqua Hospital) - Hyperplastic thymus
Canada (Sherbrooke University Hospital) - Thymic hyperplasia
Hong Kong (Kwong Wah Hospital) - Thymic rest
Ireland (Kerry General Hospital) - Type B1 thymoma
Ireland (University College Hospital) - Type B1 thymoma
Japan (Asashi General Hospital) - Type B1 thymoma
Japan (Kyoto University Hospital) - True thymic hyperplasia
United Kingdom (Oxford Study Group) - Thymic hyperplasia

Case 2 - Diagnosis:

Thymic hyperplasia ("true")
 T-Y4600, M-72000

Case 2 - References:

Scharifker D. True Thymic Hyperplasia Associated with a Unilocular Thymic Cyst. An Unusual Combination Not Previously Reported. *Ann Diagn Pathol* 2006; 10(1):32-35.
 Ascani S, Went P, Liberati AM, et al. Difficult Diagnostic and Therapeutic Cases. Case 1. True Thymic Hyperplasia in a Patient Treated for T-Cell Lymphoma. *J Clin Oncol* 2004; 22(5):953-954.
 Niendorf ER, Parker JA, Yechoor V, et al. Thymic Hyperplasia in Thyroid Cancer Patients. *J Thor Imaging* 2005; 20(1):1-4.
 Goichot B, Vinzio S, Massard G, et al. An Unusual Cause of Anterior Mediastinal Mass. Thymic Hyperplasia Resulting From Graves Disease. *Am J Clin Oncol* 2006; 29(3):322-323.
 Budavari AI, Whitaker MD and Helmers RA. Thymic Hyperplasia Presenting as Anterior Mediastinal Mass in 2 Patient with Graves Disease. *Mayo Clin Proc* 2002; 77(5):495-499.

Case No. 3, Accession No. 30648

January 2008 A

Arcadia (ABC Laboratories) - Aggressive thymoma
Fontana (Kaiser Permanente) - Thymoma
Hayward/Fremont - Thymoma, B-1 type
Long Beach (Long Beach VA Hospital) - Thymoma (6)
Oakland - Thymic carcinoma
Orange - Thymoma
Oxnard (St. John's Regional Medical Center) - Thymoma (3)
Riverside (Riverside County Medical Center) - Thymoma
San Diego (Naval Medical Center) - (1) Thymoma, type B2 (1); Thymoma type B1
San Diego (Scripps Clinic) - Thymoma

Santa Barbara - Thymoma
Santa Rosa (Santa Rosa Memorial Hospital) - Thymoma, type B (2); Thymoma (2)
Woodland Hills (Kaiser Permanente) - Thymoma
Alabama (Baptist Medical Center) - Thymoma
Alabama, Mt. Olive - Lymphocyte rich thymoma
Colorado (McKee Medical Center) - Thymoma
Florida (Baptist Hospital) - Lymphoblastic lymphoma (1); Lymphocytic predominant thymoma (2)
Georgia, Decatur - Atypical thymoma
Illinois, Burr Ridge - Langerhan's cell histiocytosis
Illinois (Heartland Regional Medical Center) - Thymoma, lymphocyte rich
Indiana (St. Joseph Hospital) - Lymphocyte predominant thymoma (1); Thymoma (1)
Iowa (Winneshek Medical Center) - Malignant lymphoma
Louisiana (Orleans Coroners Office) - Thymoma
Maryland (National Naval Medical Center) - Atypical thymoma
Massachusetts (Tufts-New England Medical Center) - Thymoma
Minnesota (Fairview Ridges Hospital) - Thymoma
Missouri (Missouri Delta Center) - Thymoma
Nevada (Sunrise Hospital) - Thymoma B1
New York, Buffalo - Invasive thymoma
New York (Long Island Jewish Medical Center) - Thymoma, AB type
New York (Stony Brook University) - Thymoma, lymphocyte predominant
Nevada (Sunrise Hospital) -
Pennsylvania (Conemaugh Memorial Hospital) - Thymoma
Pennsylvania (Lehigh Valley Hospital) - Thymoma
Pennsylvania (Magee Women's Hospital) - Thymoma
Pennsylvania (St. Elizabeth Health Center) - Thymoma
Texas (Crystal Beach) - Thymoma primarily lymphocytic
Texas, Lubbock - Thymoma
Texas (St. Lukes Hospital) - Thymoma
Washington (Seattle VA Medical Center) - Thymoma
West Virginia (Greenbrier Valley Medical Center) - Thymoma, mixed lymphocytic epithelial
Australia (Royal Hobart Hospital) - Thymoma (WHO type B2)
Brazil, Sao Paulo - Thymoma (B2 type)
Canada (Pasqua Hospital) - Thymoma
Canada (Sherbrooke University Hospital) - Thymoma
Hong Kong (Kwong Wah Hospital) - Thymoma, WHO type B1
Ireland (Kerry General Hospital) - Thymoma, type B2
Ireland (University College Hospital) - Thymic carcinoma
Japan (Asashi General Hospital) - Thymoma, type AB
Japan (Kyoto University Hospital) - Thymoma, invasive, WHO B1
United Kingdom (Oxford Study Group) - Thymoma B1

Case 3 - Diagnosis:

Thymoma, type B
 T-Y2300, M-85800

Case 3 - References:

Strobel P, Marino M, Feuchtenberger M, et al. Micronodular Thymoma. An Epithelial Tumour with Abnormal Chemokine Expression Setting the Stage for Lymphoma Development. *J Pathol* 2005; 207(1):72-82.
 Wakely PE. Cytopathology of Thymic Epithelial Neoplasms. *Semin Diagn Pathol* 2005; 22(3):213-222.
 Inoue M, Starostik P, Zettl A, et al. Correlating Genetic Aberrations with World Health Organization-Defined Histology and Stage Across the Spectrum of Thymomas. *Cancer Res* 2003; 63(13):3708-3715.
 Chalabreysse L, Roy P, Cordier JF, et al. Correlation of the WHO Schema for the Classification of thymic Epithelial Neoplasms with Prognosis. A retrospective Study of 90 Tumors. *Am J Surg Pathol* 2002; 26(12):1605-1611.
 Chen G, Marx A, Wen-Hu C, et al. New WHO Histologic Classification Predicts Prognosis of Thymic Epithelial Tumors. A Clinicopathologic Study of 200 Thymoma Cases from China. *Cancer* 2002; 95(2):420-429.

Arcadia (ABC Laboratories) - Teratoma with rhabdomyosarcoma
Fontana (Kaiser Permanente) - Rhabdomyosarcoma rising in teratoma
Hayward/Fremont - Immature teratoma
Long Beach (Long Beach VA Hospital) - Malignant teratoma (6)
Oakland - Mature teratoma with rhabdomyosarcoma
Orange - Teratoma with sarcomatous ?
Oxnard (St. John's Regional Medical Center) - Teratoma, malignant (3)
Riverside (Riverside County Medical Center) - Rhabdomyosarcoma/teratoma
San Diego (Naval Medical Center) - Teratoma with somatic type malignancy (rhabdomyosarcoma and chondrosarcoma)
San Diego (Scripps Clinic) - Malignant teratoma with rhabdomyosarcoma
Santa Barbara - Malignant teratoma
Santa Rosa (Santa Rosa Memorial Hospital) - Teratoma with rhabdomyosarcoma (3); Teratoma with immaturity (1)
Woodland Hills (Kaiser Permanente) - Teratoma
Alabama (Baptist Medical Center) - Teratoma
Alabama, Mt. Olive - Mature cystic teratoma with sarcomatous transformation
Colorado (McKee Medical Center) - Immature teratoma with associated endodermal sinus tumor
Florida (Baptist Hospital) - Teratoma (1); Mixed germ cell tumor, teratoma and choriocarcinoma (1); Teratoma, malignant (1)
Georgia, Decatur - Teratoma with rhabdomyosarcoma
Illinois, Burr Ridge - Immature teratoma
Illinois (Heartland Regional Medical Center) - Rhabdomyosarcoma, arising in immature teratoma
Indiana (St. Joseph Hospital) - Immature teratoma with yolk sac tumor (2)
Iowa (Winneshiek Medical Center) - Rhabdomyoma
Louisiana (Orleans Coroners Office) - Immature teratoma
Maryland (National Naval Medical Center) - Malignant mixed germ cell tumor
Massachusetts (Tufts-New England Medical Center) - Malignant teratoma
Minnesota (Fairview Ridges Hospital) - Malignant teratoma, with rhabdomyosarcoma vs. component
Missouri (Missouri Delta Center) - Teratoma
Nevada (Sunrise Hospital) - Immature teratoma
New York, Buffalo - Teratoma, type IV (Moran and Suster)
New York (Long Island Jewish Medical Center) - Teratoma with sarcomatous component
New York (Stony Brook University) - Pleomorphic sarcoma rising in a mature teratoma
Pennsylvania (Conemaugh Memorial Hospital) - Immature teratoma
Pennsylvania (Lehigh Valley Hospital) - Teratoma with rhabdomyosarcoma
Pennsylvania (Magee Women's Hospital) - Malignant mixed germ cell tumor
Pennsylvania (St. Elizabeth Health Center) - Teratoma, malignant
Texas (Crystal Beach) - Malignant teratoma (primarily epithelial malignancy)
Texas, Lubbock - Teratoma with malignant transformation
Texas (St. Lukes Hospital) - Immature teratoma
Washington (Seattle VA Medical Center) - Thymic teratoma with sarcomatoid yolk sac component
West Virginia (Greenbrier Valley Medical Center) - Rhabdomyosarcoma
Australia (Royal Hobart Hospital) - Rhabdomyosarcoma arising in thymic mediastinal teratoma
Brazil, Sao Paulo - Mature teratoma with benign striated muscle differentiation
Canada (Pasqua Hospital) - Teratoma with rhabdomyosarcoma

Canada (Sherbrooke University Hospital) - Mixed germ cell tumor
Hong Kong (Kwong Wah Hospital) - Immature teratoma
Ireland (Kerry General Hospital) - Teratoma
Ireland (University College Hospital) - Immature teratoma
Japan (Asashi General Hospital) - Rhabdomyosarcoma arising in teratoma
Japan (Kyoto University Hospital) - Teratoma with rhabdomyosarcoma
United Kingdom (Oxford Study Group) - Mediastinal teratoma

Consultation submission: AFIP, Chandra A. Prabha, Col, MC: "Germ cell tumor with somatic type malignancy."

Case 4 - Diagnosis:

Mediastinal malignant teratoma with rhabdomyosarcoma and mixed germ cell components
T-Y2300, M-86310

Case 4 - References:

Wick MR. Cystic Lesions of the Mediastinum. *Semin Diagn Pathol* 2005; 22(3):241-253.
Cesario A, Galetta D, Margaritora S, Porziella V et al. Mediastinal Cystic Teratoma. *Ann Thorac Surg* 2004; 78(2):34.
Aguirre D, Nieto K, Lazos M, et al. Extragonadal Germ Cell Tumors Are Often Associated with Klinefelter Syndrome. *Hum Pathol* 2006; 37(4):477-480.
Chakraborty J, Paul PC, Chakrabarti S, et al. Immature Mediastinal Teratoma. A Rare Pathology. *Indian J Pathol Microbiol* 2006; 49(1):32-33.
Droz JP and Souquet PJ. Rhabdomyosarcoma Arising In Mediastinal Teratoma in An Adult Man. A Case Report. *Ann Oncol* 2002; 13(2):323-326.
Duve BV, Sterman DH and Musani AI. Tumors of Mediastinum. *Chest* 2005; 128(4):2893-2909.

Case No. 5, Accession No. 30390

January 2008 A

Arcadia (ABC Laboratories) - Atypical osteochondroma
Fontana (Kaiser Permanente) - Osteochondroma
Hayward/Fremont - Osteochondroma
Long Beach (Long Beach VA Hospital) - Osteochondroma (6)
Oakland - Osteochondroma
Orange - Osteochondroma
Oxnard (St. John's Regional Medical Center) - Osteochondroma vs. low grade chondrosarcoma (1); Osteochondroma (2)
Riverside (Riverside County Medical Center) - Osteochondroma
San Diego (Naval Medical Center) - Osteochondroma
San Diego (Scripps Clinic) - Myositis ossificans
Santa Barbara - Low grade chondrosarcoma
Santa Rosa (Santa Rosa Memorial Hospital) - Osteochondroma (4)
Woodland Hills (Kaiser Permanente) - Osteochondroma
Alabama (Baptist Medical Center) - Osteochondroma
Alabama, Mt. Olive - Osteochondroma
Colorado (McKee Medical Center) - Osteochondroma
Florida (Baptist Hospital) - Osteochondroma (3)
Georgia, Decatur - Synovial chondromatosis
Illinois, Burr Ridge - Chondrosarcoma
Illinois (Heartland Regional Medical Center) - Osteochondroma
Indiana (St. Joseph Hospital) - Osteochondroma (1); Well-differentiated chondrosarcoma (1)
Iowa (Winneshek Medical Center) - Chondroblastic osteosarcoma
Louisiana (Orleans Coroners Office) - Osteochondroma

Maryland (National Naval Medical Center) - Osteochondroma
Massachusetts (Tufts-New England Medical Center) - Osteochondroma
Minnesota (Fairview Ridges Hospital) - Osteochondroma
Missouri (Missouri Delta Center) - Chondroma
Nevada (Sunrise Hospital) - Osteochondroma
New York, Buffalo - Osteochondroma
New York (Long Island Jewish Medical Center) - Osteochondroma
New York (Stony Brook University) - Osteochondroma
Pennsylvania (Conemaugh Memorial Hospital) - Osteochondroma
Pennsylvania (Lehigh Valley Hospital) - Osteochondroma
Pennsylvania (Magee Women's Hospital) - Osteochondroma
Pennsylvania (St. Elizabeth Health Center) - Osteochondroma
Texas (Crystal Beach) - Osteochondroma
Texas, Lubbock - Osteochondroma
Texas (St. Lukes Hospital) - Osteochondroma
Washington (Seattle VA Medical Center) - Osteochondroma with features worrisome for low grade chondrosarcoma
West Virginia (Greenbrier Valley Medical Center) - Osteochondroma
Australia (Royal Hobart Hospital) - Osteochondroma
Brazil, Sao Paulo - Osteochondroma
Canada (Pasqua Hospital) - Osteochondroma
Canada (Sherbrooke University Hospital) - Osteochondroma
Hong Kong (Kwong Wah Hospital) - Osteochondroma
Ireland (Kerry General Hospital) - Osteochondroma
Ireland (University College Hospital) - Osteochondroma
Japan (Asashi General Hospital) - Osteochondroma
Japan (Kyoto University Hospital) - Exostosis (osteochondroma)
United Kingdom (Oxford Study Group) - Osteochondroma

Case 5 - Diagnosis:

Osteochondroma, hip
 T-Y1500, M-92100

Case 5 - References:

Ratcliff JR, Naqvi A, de la Roza G, et al. soft Tissue Osteochondroma. Case Report and Immunohistochemistry for Parathyroid Hormone-Related Protein. *Ann Diagn Pathol* 2006; 10(4):222-229.
 Ahmed AR, Tan TS, Unni KK, et al. Secondary Chondrosarcoma in Osteochondroma. Report of 107 Patients. *Clin Orthop Relat Res* 2003; 411:193-206.
 Sawyear JR, Thomas EL, Lukacs JL, et al. Recurring Breakpoints of 1p13 Approximately p33 in Osteochondroma. *Cancer Genet Cytogenet* 2002; 138(2):102-106.
 Siebenrock KA and Ganz R. Osteochondroma of the Femoral Neck. *Clin Orthop Relat Res* 2002; 394:211-218.

Case No. 6, Accession No. 30560

January 2008 A

Arcadia (ABC Laboratories) - Low grade gastrointestinal stromal tumor
Fontana (Kaiser Permanente) - Fibromatosis
Hayward/Fremont - Mesenteric fibromatosis
Long Beach (Long Beach VA Hospital) - Fibromatosis (6)
Oakland - GIST
Orange - GIST
Oxnard (St. John's Regional Medical Center) - Fibromatosis (2) GIST (1)
Riverside (Riverside County Medical Center) - GI stromal tumor

San Diego (Naval Medical Center) - Fibromatosis
San Diego (Scripps Clinic) - Gastrointestinal stromal tumor
Santa Barbara - GIST
Santa Rosa (Santa Rosa Memorial Hospital) - Gastrointestinal stromal tumor
Woodland Hills (Kaiser Permanente) - Gastrointestinal stromal tumor
Alabama (Baptist Medical Center) - Gastrointestinal stromal tumor
Alabama, Mt. Olive - Gastrointestinal stromal tumor, intermediate risk
Colorado (McKee Medical Center) - Desmoid tumor
Florida (Baptist Hospital) - GIST (3)
Georgia, Decatur - Fibromatosis
Illinois, Burr Ridge - GIST
Illinois (Heartland Regional Medical Center) - Fibromatosis
Indiana (St. Joseph Hospital) - Gastrointestinal stromal tumor (GIST) (1); Fibromatosis (1)
Iowa (Winneshiek Medical Center) - Fibromatosis
Louisiana (Orleans Coroners Office) - Gastrointestinal stromal tumor
Maryland (National Naval Medical Center) - Intra-abdominal fibromatosis
Massachusetts (Tufts-New England Medical Center) - Gastrointestinal stromal tumor
Minnesota (Fairview Ridges Hospital) - Mesenteric fibromatosis
Missouri (Missouri Delta Center) - Fibromatosis
Nevada (Sunrise Hospital) - Gastrointestinal stromal tumor
New York, Buffalo - GIST
New York (Long Island Jewish Medical Center) - GIST
New York (Stony Brook University) - GIST
Pennsylvania (Conemaugh Memorial Hospital) - Gastrointestinal stromal tumor (GIST)
Pennsylvania (Lehigh Valley Hospital) - GIST
Pennsylvania (Magee Women's Hospital) - Fibromatosis
Pennsylvania (St. Elizabeth Health Center) - Gastrointestinal stromal tumor
Texas (Crystal Beach) - Gastrointestinal stromal tumor
Texas, Lubbock - Gastrointestinal stromal tumor
Texas (St. Lukes Hospital) - Fibromatosis
Washington (Seattle VA Medical Center) - Gastrointestinal stromal tumor
West Virginia (Greenbrier Valley Medical Center) - Gastrointestinal stromal tumor
Australia (Royal Hobart Hospital) - Mesenteric fibromatosis
Brazil, Sao Paulo - GIST (4) vs. fibromatosis (2)
Canada (Pasqua Hospital) - Fibromatosis
Canada (Sherbrooke University Hospital) - GIST
Hong Kong (Kwong Wah Hospital) - GIST
Ireland (Kerry General Hospital) - GIST
Ireland (University College Hospital) - Gastrointestinal stromal tumor
Japan (Asahi General Hospital) - Gastrointestinal stromal tumor/low grade
Japan (Kyoto University Hospital) - Gastrointestinal stromal tumor
United Kingdom (Oxford Study Group) - Mesenteric fibromatosis

Case 6- Diagnosis:

Mesenteric fibromatosis
 T-50500, M-76100

Directors Note: Note the keloidal-type fibrosis, a common feature in mesenteric fibromatosis (drc)

Case 6 - References:

- Holobar S, Dwivedi AJ and O'Connor J. Giant Mesenteric Fibromatosis Presenting as Small Bowel Obstruction. *Am Surg* 2006; 72(5):427-429.
 Jalini L, Hemming D and Bhattacharya V. Intraabdominal Desmoid Tumour Presenting with Perforation. *Surgeon* 2006; 4(2):114-116.
 Colombo P, Rahal D, Grizzi F, et al. Localized Intra-Abdominal Fibromatosis of the Small Bowel Mimicking a Gastrointestinal Stromal Tumor. A Case Report. *World J Gastroenterol* 2005; 11(33):5226-5228.
 Rodriguez JA, Guarda LA and Rosai J. Mesenteric Fibromatosis with Involvement of the Gastrointestinal Tract. A GIST Simulator. A Study of 25 Cases. *Am J Clin Pathol* 2004; 121(1):93-98.

Arcadia (ABC Laboratories) - High grade sarcoma, NOS
Fontana (Kaiser Permanente) - PNET (Askin tumor)
Hayward/Fremont - PNET (primitive neuroectodermal tumor)
Long Beach (Long Beach VA Hospital) - Malignant neoplasm, NOS (6)
Oakland - Lymphoma
Orange - MPNST
Oxnard (St. John's Regional Medical Center) - Small round cell tumor (2); Lymphoproliferative (1);
Riverside (Riverside County Medical Center) - Ewing's sarcoma
San Diego (Naval Medical Center) - Small round blue cell tumor (1); Favor solid variant alveolar rhabdomyosarcoma (2)
San Diego (Scripps Clinic) - Malignant peripheral nerve sheath tumor
Santa Barbara - PNET
Santa Rosa (Santa Rosa Memorial Hospital) - Synovial sarcoma vs. primitive neuroectodermal tumor (PNET) (2); Primitive neuroectodermal tumor (PNET) (1); Ewing sarcoma/primitive neuroectodermal tumor (Askin tumor) vs. neuroblastoma (1)
Woodland Hills (Kaiser Permanente) - Alveolar rhabdomyosarcoma
Alabama (Baptist Medical Center) - Ewing's PNET
Alabama, Mt. Olive - High grade sarcoma, favor epithelioid malignant peripheral nerve sheath tumor
Colorado (McKee Medical Center) - Rhabdoid tumor
Florida (Baptist Hospital) - PNET (1); Small round blue cell tumor, favor PNET (1); Primitive neuro ectodermal tumor (1)
Georgia, Decatur - Small round blue cell tumor, favor Ewing's sarcoma/PNET, rule out lymphoma
Illinois, Burr Ridge - Ewing's/PNET
Illinois (Heartland Regional Medical Center) - Small round cell malignant neoplasm, histiogenesis undetermined
Indiana (St. Joseph Hospital) - Poorly differentiated synovial sarcoma (1); Synovial sarcoma (1)
Iowa (Winneshiek Medical Center) - Small blue cell tumor
Louisiana (Orleans Coroners Office) - Embryonal rhabdomyosarcoma
Maryland (National Naval Medical Center) - Primitive neuroectodermal tumor (PNET)
Massachusetts (Tufts-New England Medical Center) - Sarcoma, NOS
Minnesota (Fairview Ridges Hospital) - Ewing's sarcoma/primitive neuroectodermal tumor
Missouri (Missouri Delta Center) - Extraskelatal Ewing's
Nevada (Sunrise Hospital) - Large cell lymphoma
New York, Buffalo - Lymphoblastic lymphoma vs. high grade sarcoma
New York (Long Island Jewish Medical Center) - Rhabdomyosarcoma
New York (Stony Brook University) - Epithelioid malignant peripheral nerve sheath tumor
Pennsylvania (Conemaugh Memorial Hospital) - Malignant peripheral nerve sheath tumor (MPNST)
Pennsylvania (Lehigh Valley Hospital) - PNET
Pennsylvania (Magee Women's Hospital) - MPNST
Pennsylvania (St. Elizabeth Health Center) - Primitive neuroectodermal tumor (PNET)
Texas (Crystal Beach) - Peripheral primitive neuroectodermal tumor
Texas, Lubbock - Peripheral neuroectodermal tumor
Texas (St. Lukes Hospital) - Malignant epithelioid peripheral nerve sheath tumor
Washington (Seattle VA Medical Center) - Malignant neoplasm, high grade
West Virginia (Greenbrier Valley Medical Center) - PPNET/Ewing's sarcoma
Australia (Royal Hobart Hospital) - Small cell osteosarcoma is the preferred diagnosis
Brazil, Sao Paulo - MPNST (2); Sarcoma (2); Synovial sarcoma (1); Ewing
Canada (Pasqua Hospital) - Neuroblastoma
Canada (Sherbrooke University Hospital) - Large cell lymphoma
Hong Kong (Kwong Wah Hospital) - PNET
Ireland (Kerry General Hospital) - Malignant tumor , rhabdomyosarcoma
Ireland (University College Hospital) - Thoracblastoma/extrapulmonary blastoma
Japan (Asashi General Hospital) - Epithelioid sarcoma

Japan (Kyoto University Hospital) - Malignant small round blue cell tumor (rhabdomyosarcoma, alveolar ?)
United Kingdom (Oxford Study Group) - Undifferentiated sarcoma/PNET

Case 7 - Diagnosis:

High grade sarcoma (nos), branchial plexus
T-Y2100, M-80413

Case 7 - References:

Mertens F, Stromberg U, Rydholm A, et al. Prognostic Significance of Chromosome Aberrations in High Grade Soft Tissue Sarcomas. *J Clin Oncol* 2006; 24(2):315-320.
Chiappa A, Zbar AP, Bertani E, et al. Primary and Recurrent Retroperitoneal Soft Tissue Sarcoma. Prognostic Factors Affecting Survival. *J Surg Oncol* 2006; 93(6):456-463.
Kaytan E, Yaman F, Cosar R, et al. Prognostic Factors in Localized Soft-Tissue Sarcomas. *Am J Clin Oncol* 2003; 26(4):411-415.
Eilber FC, Rosen G, Nelson SD, et al. High-Grade Extremity Soft Tissue Sarcomas. Factors Predictive of Local Recurrence and Its Effect on Morbidity and Mortality. *Ann Surg* 2003; 237(2):218-226.
Alektiar KM, Leung D, Zelefsky MJ, et al. Adjuvant Brachytherapy for Primary High-Grade Soft Tissue Sarcoma of the Extremity. *Ann Surg Oncol* 2002; 9(1):48-56.

Case No. 8, Accession No. 30647

January 2008 A

Arcadia (ABC Laboratories) - Malignant melanoma
Fontana (Kaiser Permanente) - Malignant melanoma
Hayward/Fremont - Amelanotic melanoma
Long Beach (Long Beach VA Hospital) - Malignant melanoma (6)
Oakland - Acral lentiginous melanoma
Orange - Invasive melanoma
Oxnard (St. John's Regional Medical Center) - Malignant melanoma, spindle cell type
Riverside (Riverside County Medical Center) - Malignant melanoma
San Diego (Naval Medical Center) - Malignant melanoma
San Diego (Scripps Clinic) - Spindle cell (sarcomatoid) malignant melanoma
Santa Barbara - Spindle cell melanoma
Santa Rosa (Santa Rosa Memorial Hospital) - Melanoma (4)
Woodland Hills (Kaiser Permanente) - Malignant melanoma
Alabama (Baptist Medical Center) - Spindle cell melanoma
Alabama, Mt. Olive - Acral lentiginous melanoma
Colorado (McKee Medical Center) - Malignant melanoma
Florida (Baptist Hospital) - Monophasic synovial sarcoma (1); High grade malignancy, favor melanoma (1); Malignant melanoma with spindle cells (1)
Georgia, Decatur - Nodular melanoma
Illinois, Burr Ridge - Merkel cell carcinoma
Illinois (Heartland Regional Medical Center) - Malignant melanoma, spindle cell type
Indiana (St. Joseph Hospital) - Nodular spindle cell malignant melanoma (1); Malignant melanoma (1)
Iowa (Winneshek Medical Center) - Merkel cell tumor
Louisiana (Orleans Coroners Office) - Malignant melanoma
Maryland (National Naval Medical Center) - Melanoma
Massachusetts (Tufts-New England Medical Center) - Melanoma
Minnesota (Fairview Ridges Hospital) - Malignant melanoma
Missouri (Missouri Delta Center) - Spindle cell melanoma
Nevada (Sunrise Hospital) - Malignant melanoma, acral type
New York, Buffalo - Malignant melanoma
New York (Long Island Jewish Medical Center) - Melanoma
New York (Stony Brook University) - Malignant spitzoid melanoma
Pennsylvania (Conemaugh Memorial Hospital) - Melanoma
Pennsylvania (Lehigh Valley Hospital) - Melanoma
Pennsylvania (Magee Women's Hospital) - Acral lentiginous melanoma
Pennsylvania (St. Elizabeth Health Center) - Malignant melanoma

Texas (Crystal Beach) - Melanoma
Texas, Lubbock - Spindle cell melanoma
Texas (St. Lukes Hospital) - Malignant melanoma
Washington (Seattle VA Medical Center) - Malignant neoplasm, prob melanoma
West Virginia (Greenbrier Valley Medical Center) - Malignant melanoma of acral skin
Australia (Royal Hobart Hospital) - Malignant melanoma of acral skin (acral lentiginous melanoma)
Brazil, Sao Paulo - Nodular melanoma
Canada (Pasqua Hospital) - Melanoma
Canada (Sherbrooke University Hospital) - Spindle cell carcinoma
Hong Kong (Kwong Wah Hospital) - Malignant melanoma
Ireland (Kerry General Hospital) - Malignant melanoma
Ireland (University College Hospital) - Ulcerating spindle cell malignant melanoma
Japan (Asashi General Hospital) - Nodular melanoma
Japan (Kyoto University Hospital) - Malignant melanoma
United Kingdom (Oxford Study Group) - Melanoma

Case 8 - Diagnosis:

Melanoma, heel
 T-Y9600, M-87203

Case 8 – References:

Kato T, Suetake T, Tabata N, et al. Epidemiology and Prognosis of Plantar Melanoma in 62 Japanese Patients Over a 28-Year Period. *Int J Dermatol* 1999; 38(7):515-519.
 Hughes LE, Horgan K, Taylor BA, et al. Malignant Melanoma of the Hand and Foot. Diagnosis and Management. *Br J Surg* 1985; 72(10):811-815.
 Feibelman CE, Stoll H and Maize JC. Melanomas of the Palm, Sole, and Nailbed. A Clinicopathologic Study. *Cancer* 1980; 46(11):2492-2504.

Case No. 9, Accession No. 29870

January 2008 A

Arcadia (ABC Laboratories) - Hodgkin's lymphoma, mixed cellularity type
Fontana (Kaiser Permanente) - Hodgkin lymphoma
Hayward/Fremont - Lymphocyte rich classic hodgkin disease
Long Beach (Long Beach VA Hospital) - Hodgkin's disease (classic type) (1); Hodgkin's lymphoma (1)
Oakland - Mixed cellularity Hodgkin's
Orange - Classical Hodgkin's disease
Oxnard (St. John's Regional Medical Center) - Hodgkin's lymphoma (3)
Riverside (Riverside County Medical Center) - Hodgkin's lymphoma
San Diego (Naval Medical Center) - Classical Hodgkin's lymphoma
San Diego (Scripps Clinic) - Nodular sclerosis Hodgkin lymphoma
Santa Barbara - NS Hodgkin's
Santa Rosa (Santa Rosa Memorial Hospital) - Hodgkin's disease (3); Classical Hodgkin's lymphoma, mixed cellularity subtype (1)
Woodland Hills (Kaiser Permanente) - Hodgkin lymphoma
Alabama (Baptist Medical Center) - Hodgkin lymphoma
Alabama, Mt. Olive - Hodgkin lymphoma, classical type
Colorado (McKee Medical Center) - Nodular sclerosis Hodgkin lymphoma
Florida (Baptist Hospital) - Hodgkin's, cellular phase NS (1); Classical Hodgkin's (2)
Georgia, Decatur - Mixed cellularity classical Hodgkins lymphoma
Illinois, Burr Ridge - Hodgkin lymphoma
Illinois (Heartland Regional Medical Center) - Hodgkin's lymphoma, mixed cellularity
Indiana (St. Joseph Hospital) - Lymphocyte predom (1); Hodgkin's disease (1)
Iowa (Winneshek Medical Center) - Hodgkin's disease
Louisiana (Orleans Coroners Office) - Hodgkin's disease, nodular lymphocytic type
Maryland (National Naval Medical Center) - Hodgkin lymphoma
Massachusetts (Tufts-New England Medical Center) - Classical Hodgkin's lymphoma

Minnesota (Fairview Ridges Hospital) - Classical Hodgkin lymphoma
Missouri (Missouri Delta Center) - Hodgkin's lymphoma, lymphocyte predominant
Nevada (Sunrise Hospital) - Hodgkin's lymphoma, nodular sclerosis type
New York, Buffalo - Hodgkin lymphoma, mixed cellularity
New York (Long Island Jewish Medical Center) - Classic Hodgkin's disease, mixed cellularity;
New York (Stony Brook University) - Classical Hodgkin's lymphoma
Pennsylvania (Conemaugh Memorial Hospital) - Hodgkin lymphoma, classic-mixed cellularity
Pennsylvania (Lehigh Valley Hospital) - Hodgkin's disease
Pennsylvania (Magee Women's Hospital) - Hodgkin's lymphoma
Pennsylvania (St. Elizabeth Health Center) - Hodgkin lymphoma, classical type, mixed cellularity
Texas (Crystal Beach) - Lymphoma Hodgkin's type
Texas, Lubbock - Anaplastic large cell lymphoma
Texas (St. Lukes Hospital) - Nodular sclerosing Hodgkin lymphoma
Washington (Seattle VA Medical Center) - Hodgkin's disease, mixed cellularity
West Virginia (Greenbrier Valley Medical Center) - Hodgkin's lymphoma
Australia (Royal Hobart Hospital) - Hodgkin disease
Brazil, Sao Paulo - Hodgkin lymphoma, mixed cellularity
Canada (Pasqua Hospital) - Classical Hodgkin's disease
Canada (Sherbrooke University Hospital) - Hodgkin lymphoma (nodular sclerosis)
Hong Kong (Kwong Wah Hospital) - Hodgkin's lymphoma, nodular sclerosis
Ireland (Kerry General Hospital) - Classical Hodgkin lymphoma
Ireland (University College Hospital) - Mixed cellularity Hodgkin's lymphoma
Japan (Asahi General Hospital) - Hodgkin lymphoma, mixed cellularity
Japan (Kyoto University Hospital) - Hodgkin's lymphoma, classical
United Kingdom (Oxford Study Group) - Nodular sclerosing Hodgkin lymphoma

Case 9 - Diagnosis:

Nodular sclerosing Hodgkin lymphoma, cervical lymph node
 T-08200, M-95903

Consultation: Thomas Sebo, M.D., Mayo Clinic: "Nodular sclerosing Hodgkin lymphoma."

Case 9 - References:

Jagai S, Dey P, Al Jassar A, et al. Role of Fine Needle Aspiration Cytology in Nodular Sclerosis Variant of Hodgkin's Lymphoma. *Acta Cytol* 2006; 50(5):507-512.
 Ansell SM and Armitage JO. Management of Hodgkin Lymphoma. *Mayo Clin Proc* 2006; 81(3):419-426.
 Vassallo J, Lamant L, Brugieres L, et al. ALK-Positive Anaplastic Large Cell Lymphoma Mimicking Nodular Sclerosis Hodgkin's Lymphoma. Report of 10 Cases. *Am J Surg Pathol* 2006; 30(2):223-229.
 von Wasielewski S, Franklin J, Fischer R, et al. Nodular Sclerosing Hodgkin Disease. New Grading Predicts Prognosis in Intermediate and Advanced Stages. *Blood* 2003; 101(10):4063-4069.
 Thompson LD, Fisher SI, Chu WS, et al. HIV-Associated Hodgkin Lymphoma. A Clinicopathologic and Immunophenotypic Study of 45 Cases. *Am J Clin Pathol* 2004; 121(5):727-738.

Case No. 10, Accession No. 30472

January 2008 A

Arcadia (ABC Laboratories) - Osteosarcoma
Fontana (Kaiser Permanente) - Osteosarcoma
Hayward/Fremont - Osteoblastic osteosarcoma
Long Beach (Long Beach VA Hospital) - Osteosarcoma (6)
Oakland - Osteosarcoma
Orange - Osteosarcoma
Oxnard (St. John's Regional Medical Center) - Osteosarcoma (3)
Riverside (Riverside County Medical Center) - Osteosarcoma
San Diego (Naval Medical Center) - Osteosarcoma
San Diego (Scripps Clinic) - Osteosarcoma

Santa Barbara - Osteosarcoma
Santa Rosa (Santa Rosa Memorial Hospital) - Osteosarcoma (4)
Woodland Hills (Kaiser Permanente) - Osteosarcoma
Alabama (Baptist Medical Center) - Osteosarcoma
Alabama, Mt. Olive - Osteosarcoma, osteoblastic type
Colorado (McKee Medical Center) - Osteoid osteoma
Florida (Baptist Hospital) - Osteosarcoma (3)
Georgia, Decatur - Osteosarcoma
Illinois, Burr Ridge - Osteosarcoma
Illinois (Heartland Regional Medical Center) - Osteosarcoma, medullary
Indiana (St. Joseph Hospital) - Osteosarcoma (2)
Iowa (Winneshiek Medical Center) - Parosteal osteosarcoma
Louisiana (Orleans Coroners Office) - Osteosarcoma
Maryland (National Naval Medical Center) - Conventional osteosarcoma
Massachusetts (Tufts-New England Medical Center) - Osteoblastic osteosarcoma
Minnesota (Fairview Ridges Hospital) - Osteoblastic osteosarcoma
Missouri (Missouri Delta Center) - Osteoblastoma
Nevada (Sunrise Hospital) - Osteosarcoma, osteoblastic type
New York, Buffalo - Aggressive osteoblastoma
New York (Long Island Jewish Medical Center) - Osteosarcoma
New York (Stony Brook University) - Sclerotic osteosarcoma
Pennsylvania (Conemaugh Memorial Hospital) - Osteoblastic osteosarcoma, high grade
Pennsylvania (Lehigh Valley Hospital) - Osteosarcoma
Pennsylvania (Magee Women's Hospital) - Osteoblastoma
Pennsylvania (St. Elizabeth Health Center) - Osteosarcoma
Texas (Crystal Beach) - Osteoblastoma
Texas, Lubbock - Osteosarcoma
Texas (St. Lukes Hospital) - Osteosarcoma
Washington (Seattle VA Medical Center) - Osteosarcoma
West Virginia (Greenbrier Valley Medical Center) - Osteosarcoma
Australia (Royal Hobart Hospital) - Osteosarcoma (probably post therapy)
Brazil, Sao Paulo - Osteosarcoma, osteoblastic
Canada (Pasqua Hospital) - Osteosarcoma
Canada (Sherbrooke University Hospital) - Osteogenic osteosarcoma
Hong Kong (Kwong Wah Hospital) - Osteoblastic osteosarcoma
Ireland (Kerry General Hospital) - Osteosarcoma
Ireland (University College Hospital) - Osteosarcoma
Japan (Asahi General Hospital) - Osteoid osteoma
Japan (Kyoto University Hospital) - Osteosarcoma
United Kingdom (Oxford Study Group) - Osteosarcoma

Case 10 - Diagnosis:

Osteoblastic osteosarcoma, distal femur
 T-11710, M-91803

Case 10 - References:

- Zwaga T, Bovee JV and Kroon HM. Osteosarcoma of the Femur with Skip, Lymph Node, and Lung Metastases. *Radiographics* 2008; 28(1):277-283.
- Bacci G, Bertoni F, Longhi A, et al. Neoadjuvant Chemotherapy for High-Grade Central Osteosarcoma of the Extremity. Histologic Response to Preoperative Chemotherapy Correlated with Histologic Subtype of the Tumor. *Cancer* 2003; 97(12):3068-3075.
- Bacci G, Merceri M, Longhi A, et al. Grade of Chemotherapy-Induced Necrosis as a Predictor of Local and Systemic Control in 881 Patients with Non-Metastatic Osteosarcoma of the Extremities Treated with Neoadjuvant Chemotherapy in a Single Institution. *Eur J Cancer* 2005; 41(14): 2079-2085.
- Hauben EI, weeden S, Pringle J, et al. Does the Histological Subtype of High Grade Central Osteosarcoma Influence the Response to Treatment with Chemotherapy and Does It Affect Overall Survival? A Study On 570 Patients of Two Consecutive Trials of the European Osteosarcoma Intergroup. *Eur J Cancer* 2002; 38(9):1218-1225.