



CALIFORNIA
TUMOR TISSUE REGISTRY

BONE PATHOLOGY

Minutes – Subscription B

January, 2010



SUGGESTED READING (General Topics from Recent Literature):

AbdullGaffar B, Kamal MO, et al. Atypical Bare Nuclei in Liquid-Based Cervical Cytology and Their Significance. *Acta Cytologica* 2009; 53:637-643.

Shah RB. Current Perspective on the Gleason Grading of Prostate Cancer. *Arch Pathol Lab Med* 2009; 133:1810-1816.

Bolster MJ, Bult P, et al. More Tumor-Affected Lymph Nodes Because of the Sentinel Lymph Node Procedure But No Stage Migration, Because the 2002 TNM Classifies Small Tumor Deposits as Pathologic NO Breast Cancer. *Cancer* 2009; 115:5589-5595.

Weinreb I, Shaw AJ, et al. Nodular Fasciitis of the Head and Neck Region: A Clinicopathologic Description in a Series of 30 Cases. *J Cutan Pathol* 2009; 36:1168-1173.

Lee CH, Turbin DA, et al. A Panel of Antibodies to Determine Site of Origin and Malignancy in Smooth Muscle Tumors. *Mod Pathol* 2009; 22:1519-1531.

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FILE DIAGNOSES

CTTR Subscription B

January 2010

Case 1:

Intraosseous hemangioma, parietal bone
T-10101, M-91200

Case 2:

Desmoplastic fibroma, rib
T-10361, M-88231

Case 3:

Central giant cell granuloma, maxilla
T-51100, M-44110

Case 4:

Giant cell tumor, fibula
T-11700, M-69210

Case 5:

Giant cell tumor, patella (some slides also showed ABC formation)
T-11720, M-92501

Case 6:

Osteochondroma, tibia
T-11730, M-92100

Case 7:

Chondromyxoid fibroma, femur
T-11710, M-92410

Case 8:

Ameloblastoma, mandible
T-10180, M-93100

Case 9:

Telangiectatic osteosarcoma, pelvis
T-10800, M-91833

Case 10:

Osteosarcoma with chemotherapy effects (30% viable cells), femur
T-11710, M-91803

Chico - Hemangioma (cavernous/sinusoidal)
Duarte (City of Hope) - Hamangioma
Glendale - Hemangioma
Loma Linda - Cavernous hemangioma, parietal bone
Woodland Hills - Hemangioma
Alabama (Cunningham Pathology, LLC) - Cavernous hemangioma
Florida (Naples Pathology Associates) - Hemangioma of bone
Georgia, Dunwoody - Hemangioma
Illinois (Heartland Regional Medical Center) - Hemangioma
Illinois (Loyola University Medical Center) - Hemangioma
Indiana, Indianapolis - Interosseous cavernous hemangioma
Kansas (Coffeyville Regional Medical Center) - Cavernous hemangioma of bone marrow
Kansas, Manhattan - Hemangioma
Michigan (Henry Ford Hospital Residents) - Hemangioma, cavernous type
Michigan (Pinkus Dermatopathology Laboratory) - Intraosseous hemangioma
New York (Albany Medical Center) - Intraosseous hemangioma
New York (St. Luke's-Roosevelt Hospital Center) - Hemangioma (3)
New York (SUNY Downstate Medical Center) - Intraosseous hemangioma of the skull (1); Cavernous hemangioma (1)
New York (Westchester Medical Center) - Hemangioma
Ohio, Columbus - Hemangioma
Ohio (University of Toledo) - Hemangioma of bone
Pennsylvania (Connaugh Memorial Medical Center) - Hemangioma
Pennsylvania (Drexel University College of Medical Residents) - Cavernous hemangioma
Pennsylvania (Magee Women's Hospital) - Hemangioma
Tennessee, Knoxville - Cavernous hemangioma
Texas, Crystal Beach - Intraosseous hemangioma
Texas, Lubbock - Hemangioma
Texas (Scott & White Hospital) - Cavernous hemangioma
Texas (University of Texas Health Science Center Residents) - Hemangioma of bone
Washington (University of Washington Medical Center) - Hemangioma
Wisconsin (St. Mary's Hospital) - Hemangioma
Australia (Royal Prince Alfred Hospital) - Cavernous hemangioma of bone
Canada (University of Sherbrooke) - Intraosseous hemangioma
Japan (Asahi General Hospital) - Cavernous hemangioma
Japan (Shizuoka Tokushu-kai Hospital) - Hemangioma
Netherlands, Amstelveen - Hemangioma
Puerto Rico (University of Puerto Rico) - Intraosseous hemangioma
Singapore (Freelance/Locum Practice) - Fibrous dysplasia
Spain (Provisa Medical Center) - Cavernous hemangioma
United Kingdom (John Radcliffe Hospital) - Intraosseous hemangioma (1); Hemangioma (1)

Case 1 - Diagnosis:

Intraosseous hemangioma, parietal bone
T-10101, M-91200

Case 1 - References:

Intraosseous Hemangioma In Parietal Bone. Paradowski B, Zub W, et al *Neurology* 2007; 68(1):44.
Cavernous Hemangioma of the Skull: Three Case Reports. Naama O, Gazzaz M, et al. *Surg Neurol* 2008; 70(6):654-659.
Cavernous Hemangioma of the Parietal Bone. A Case Report. Ajja A and Oukacha N. *J Neurosurg Sci* 2005 49(4):159-162.
De Novo Development of Intraosseous Cavernous Hemangioma. Buhl R, Barth H, et al. *J Clin Neurosci* 2007; 14(3): 289-292.

Intraosseous Cavernous Hemangioma of the Frontal Bone. Nasser K, Hayashi N, et al. *Neurol Med Chir* 47(11):506-508.

Case No. 2, Accession No. 30822

January 2010 B

Chico - Fibrous dysplasia
Duarte (City of Hope) - Non-ossifying fibroma
Glendale - Fibrous dysplasia
Loma Linda - Hemangioma of rib
Woodland Hills - Fracture callus
Alabama (Cunningham Pathology, LLC) - Fracture callus
Florida (Naples Pathology Associates) - Fibrous dysplasia
Georgia, Dunwoody - Fracture callus; rule out Langerhans cell histiocytosis
Illinois (Heartland Regional Medical Center) - Desmoplastic fibroma, cannot rule out Grade 1, fibrosarcoma
Illinois (Loyola University Medical Center) - Fracture callus (reactive)
Indiana, Indianapolis - Osteoid osteoma
Kansas (Coffeyville Regional Medical Center) - Fibrous dysplasia
Kansas, Manhattan - Fracture callus
Michigan (Henry Ford Hospital Residents) - Chondrosarcoma, low grade
Michigan (Pinkus Dermatopathology Laboratory) - Fibrous dysplasia
New York (Albany Medical Center) - Fibro-osseous dysplasia
New York (St. Luke's-Roosevelt Hospital Center) - Ossifying fibroma (2); Fibrous dysplasia (1)
New York (SUNY Downstate Medical Center) - Fibrous dysplasia of bone (1); Fibrous cortical defect (1)
New York (Westchester Medical Center) - Fracture callus
Ohio, Columbus - Giant cell tumor of bone
Ohio (University of Toledo) - Mono-osteotic fibrous dysplasia
Pennsylvania (Connaught Memorial Medical Center) - Chondrosarcoma
Pennsylvania (Drexel University College of Medical Residents) - Osteofibrous dysplasia
Pennsylvania (Magee Women's Hospital) - Fibrous dysplasia
Tennessee, Knoxville - Fibrous dysplasia
Texas, Crystal Beach - Monostotic fibrous dysplasia
Texas, Lubbock - Chondrosarcoma
Texas (Scott & White Hospital) - Fibrous dysplasia
Texas (University of Texas Health Science Center Residents) - Non-ossifying fibroma
Washington (University of Washington Medical Center) - Post traumatic fibro-osseous lesion of rib
Wisconsin (St. Mary's Hospital) - Fracture with callus formation
Australia (Royal Prince Alfred Hospital) - Fibrous dysplasia and post traumatic cyst
Canada (University of Sherbrooke) - Fibroma (non-ossifying)
Japan (Asahi General Hospital) - Chondromyxoid fibroma
Japan (Shizuoka Tokushu-kai Hospital) - Fibrous dysplasia
Netherlands, Amstelveen - Hyperplastic callus
Puerto Rico (University of Puerto Rico) - Chronic non-union fracture/myositis ossificans
Singapore (Freelance/Locum Practice) - Fibrous dysplasia
Spain (Provisa Medical Center) - Desmoplastic fibroma
United Kingdom (John Radcliffe Hospital) - Solitary fibrous tumor with malignant features (1); Desmoplastic fibroma (1)

Outside Consultation: Stacey E. Mills, M.D. University of Virginia Health System, Charlottesville, VA, "Desmoplastic fibroma".

Case 2 - Diagnosis:

Desmoplastic fibroma, rib
T-10361, M-88231

Case 2 - References:

Desmoplastic Fibroma of Bone with Extensive Cartilaginous Metaplasia. Callahan KS, Eberhardt SC and Fetcher RE. *Ann Diagn Pathol* 2006; 10(6):343-346.

Desmoplastic Fibroma of the Rib: Two Case Reports. Ayadi-Kaddour A and Ben Slama S. *Ann Pathol* 2005; 36(9):1025-1030.

Desmoplastic Fibroma of Bone. An Immunohistochemical Study Including Beta-Catenin Expression and Mutational Analysis for Beta-Catenin. Hauben EI, Jundt G, et al. *Hum Pathol* 2005; 36(9):1025-1030.

Imaging Findings in Desmoplastic Fibroma of Bone. Distinctive T2 Characteristics. Frick MA, Sundaram M, Unni K, et al. *AJR Am J Roentgenol* 2005; 184(6):1762-1767.

Case No. 3, Accession No. 30850

January 2010 B

Chico - Giant cell reparative granuloma

Duarte (City of Hope) - Giant cell tumor

Glendale - Giant cell granuloma

Loma Linda - Giant cell tumor of maxilla

Woodland Hills - Giant cell tumor

Alabama (Cunningham Pathology, LLC) - Giant cell reparative granuloma

Florida (Naples Pathology Associates) - Central giant cell granuloma

Georgia, Dunwoody - Reparative giant cell granuloma, rule out ossifying fibroma

Illinois (Heartland Regional Medical Center) - Giant cell reparative granuloma

Illinois (Loyola University Medical Center) - Giant cell reparative granuloma

Indiana, Indianapolis - Giant cell tumor

Kansas (Coffeyville Regional Medical Center) - Giant cell reparative granuloma

Kansas, Manhattan - Giant cell reparative granuloma

Michigan (Henry Ford Hospital Residents) - Giant cell reparative granuloma

Michigan (Pinkus Dermatopathology Laboratory) - Giant cell reparative granuloma

New York (Albany Medical Center) - Giant cell reparative granuloma

New York (St. Luke's-Roosevelt Hospital Center) - Giant cell reparative granuloma (3)

New York (SUNY Downstate Medical Center) - Giant cell granuloma (1); Brown tumor of parathyroidism (1)

New York (Westchester Medical Center) - Giant cell reparative granuloma

Ohio, Columbus - Giant cell granuloma

Ohio (University of Toledo) - Giant cell reparative granuloma

Pennsylvania (Connaugh Memorial Medical Center) - Giant cell granuloma

Pennsylvania (Drexel University College of Medical Residents) - Giant cell reparative granuloma

Pennsylvania (Magee Women's Hospital) - Anaurysmal bone cyst

Tennessee, Knoxville - Giant cell reparative granuloma

Texas, Crystal Beach - Giant cell granuloma (reparative)

Texas, Lubbock - Giant cell reparative granuloma

Texas (Scott & White Hospital) - Central giant cell tumor

Texas (University of Texas Health Science Center Residents) - Giant cell tumor of bone

Washington (University of Washington Medical Center) - Giant cell reparative granuloma (vs. brown tumor)

Wisconsin (St. Mary's Hospital) - Reparative giant cell tumor

Australia (Royal Prince Alfred Hospital) - Giant cell reparative granuloma, hyperparathyroidism

Canada (University of Sherbrooke) - Giant cell tumor, aggressive

Japan (Asahi General Hospital) - Giant cell reparative granuloma

Japan (Shizuoka Tokushu-kai Hospital) - Giant cell tumor

Netherlands, Amstelveen - Hyperparathyroidism

Puerto Rico (University of Puerto Rico) - Giant cell reparative granuloma

Singapore (Freelance/Locum Practice) - Giant cell tumor

Spain (Provisa Medical Center) - Giant cell reparative granuloma

United Kingdom (John Radcliffe Hospital) - Central giant cell lesion (rule out hyperparathyroidism) (1); Giant cell granuloma (1)

Case 3 - Diagnosis:

Central giant cell granuloma, maxilla
T-51100, M-44110

Case 3 - References:

Central Giant Cell Granuloma in Palate Associated with Orthodontic Treatment. Wong YK and Cheng JC. *Prim Dent Care* 2008; 15(4):135-139.
Giant Cell Granuloma of the Maxilla. Uzbek UH and Mushtaq I. *J Ayub Med Coll Abbottabad* 2007; 19(3): 93-95.
A 10-Year Review of the Occurrence and Treatment of Central Giant Cell Granulomas, in a District General Hospital. *J Oral Pathol Med* 2006; 35(6):332-337.
Central Giant Cell Reparative Granuloma of the Mandible Caused By a Molar Tooth Extraction. Special Reference to the Maneuver of Drilling the Surgical Field. Unal M, Karabacak T, et al. *Int J Pediatr Otorhinolaryngol* 2006; 70(4):745-748.

Case No. 4, Accession No. 30653

January 2010 B

Chico - Giant cell tumor of bone (vs. chondroblastoma)
Duarte (City of Hope) - Giant cell tumor of bone
Glendale - Chondroblastoma
Loma Linda - Giant cell tumor of fibula
Woodland Hills - Osteosarcoma
Alabama (Cunningham Pathology, LLC) - Giant cell rich osteosarcoma
Florida (Naples Pathology Associates) - Giant cell tumor of bone
Georgia, Dunwoody - Giant cell tumor
Illinois (Heartland Regional Medical Center) - Giant cell tumor
Illinois (Loyola University Medical Center) - Giant cell tumor
Indiana, Indianapolis - Giant cell tumor
Kansas (Coffeyville Regional Medical Center) - Giant cell tumor of bone
Kansas, Manhattan - Giant cell tumor
Michigan (Henry Ford Hospital Residents) - Giant cell tumor
Michigan (Pinkus Dermatopathology Laboratory) - Giant cell tumor of bone
New York (Albany Medical Center) - Brown tumor of hyperparathyroidism
New York (St. Luke's-Roosevelt Hospital Center) - Giant cell tumor (3)
New York (SUNY Downstate Medical Center) - Giant cell tumor (2)
New York (Westchester Medical Center) - Giant cell tumor
Ohio, Columbus - Giant cell tumor
Ohio (University of Toledo) - Giant cell rich osteosarcoma
Pennsylvania (Connaugh Memorial Medical Center) - Giant cell tumor of bone
Pennsylvania (Drexel University College of Medical Residents) - Giant cell tumor
Pennsylvania (Magee Women's Hospital) - Giant cell tumor
Tennessee, Knoxville - Giant cell tumor
Texas, Crystal Beach - Giant cell tumor of bone
Texas, Lubbock - Giant cell tumor of bone
Texas (Scott & White Hospital) - Osteosarcoma with giant cells
Texas (University of Texas Health Science Center Residents) - Osteosarcoma, giant cell rich
Washington (University of Washington Medical Center) - Giant cell tumor (vs. chondroblastoma)
Wisconsin (St. Mary's Hospital) - Giant cell tumor of bone
Australia (Royal Prince Alfred Hospital) - Giant cell tumor of bone, chondroblastoma
Canada (University of Sherbrooke) - Giant cell tumor
Japan (Asahi General Hospital) - Giant cell tumor
Japan (Shizuoka Tokushu-kai Hospital) - Giant cell tumor
Netherlands, Amstelveen - Giant cell tumor
Puerto Rico (University of Puerto Rico) - Giant cell tumor of bone
Singapore (Freelance/Locum Practice) - Giant cell tumor
Spain (Provisa Medical Center) - Giant cell tumor

United Kingdom (John Radcliffe Hospital) - Giant cell tumor of the bone (2)

Case 4 - Diagnosis:

Giant cell tumor, fibula
T-11740, M-69210

Case 4 - References:

Multiple Skeletal Metastases From a Giant Cell Tumor of the Distal Fibula with Fatal Outcome. Leichtle CI, Leichtle UG, et al. *J Bone Joint Surg Br* 2006; 88(3):396-399.

Giant Cell Tumor of the Distal Fibula. Fifteen-Year Result After En Bloc Resection and Fibula Reconstruction. Eger W, Schorle C, and Zeiler G. *Arch Orthop Trauma Surg* 2004; 124(1):56-59.

Isolated Bone Lesion Secondary to Hyperparathyroidism. Diagnostic Considerations. Pezzillo F, Di Matteo R, et al. *Clin Ter* 2008; 159(4):265-268.

Multicentric, Synchronous Giant-Cell Tumor of Bone. Cavusoglu T, Senkoylu A, et al. *Saudi Med J* 2006; 27(4):542-543.

Pulmonary Metastases of Giant Cell Tumor of the Bone. Faisham WI, Zulmi W, et al. *Med J Malaysia* 2004; 59:78-81.

Case No. 5, Accession No. 30756

January 2010 B

Chico - GCT vs. osteoblastoma with 2° ABC component

Duarte (City of Hope) - Aneurysmal bone cyst with giant cell tumor

Glendale - Giant cell tumor

Loma Linda - Giant cell tumor of patella

Woodland Hills - Osteosarcoma

Alabama (Cunningham Pathology, LLC) - Aneurysmal bone cyst

Florida (Naples Pathology Associates) - Giant cell rich osteosarcoma

Georgia, Dunwoody - Aneurysmal bone cyst

Illinois (Heartland Regional Medical Center) - Giant cell tumor with secondary aneurysmal bone cyst

Illinois (Loyola University Medical Center) - Aneurysmal bone cyst

Indiana, Indianapolis - ABC (aneurysmal bone cyst)

Kansas (Coffeyville Regional Medical Center) - Osteosarcoma with prominent giant cells

Kansas, Manhattan - Aneurysmal bone cyst, solid variant

Michigan (Henry Ford Hospital Residents) - Osteoblastic osteosarcoma

Michigan (Pinkus Dermatopathology Laboratory) - Giant cell rich osteosarcoma

New York (Albany Medical Center) - Aneurysmal bone cyst

New York (St. Luke's-Roosevelt Hospital Center) - Aneurysmal bone cyst (3)

New York (SUNY Downstate Medical Center) - Giant cell tumor with secondary aneurysmal bone cysts (1); Giant cell rich osteosarcoma (1)

New York (Westchester Medical Center) - Osteosarcoma rich in giant cells

Ohio, Columbus - Giant cell tumor

Ohio (University of Toledo) - Aneurysmal bone cyst

Pennsylvania (Connaugh Memorial Medical Center) - Osteosarcoma

Pennsylvania (Drexel University College of Medical Residents) - Aneurysmal bone cyst

Pennsylvania (Magee Women's Hospital) - Osteoblastoma

Tennessee, Knoxville - Giant cell rich osteosarcoma

Texas, Crystal Beach - Osteosarcoma with giant cell tumor component

Texas, Lubbock - Aneurysmal bone cyst

Texas (Scott & White Hospital) - Giant cell tumor with aneurysmal bone cyst formation

Texas (University of Texas Health Science Center Residents) - Osteosarcoma

Washington (University of Washington Medical Center) - Giant cell tumor

Wisconsin (St. Mary's Hospital) - Giant cell tumor of bone

Australia (Royal Prince Alfred Hospital) - Giant cell osteosarcoma

Canada (University of Sherbrooke) - Osteosarcoma, giant cell type

Japan (Asahi General Hospital) - Aneurysmal bone cyst

Japan (Shizuoka Tokushu-kai Hospital) - Malignant giant cell tumor

Netherlands, Amstelveen - Chondroblastoma
Puerto Rico (University of Puerto Rico) - Solid aneurysmal bone cyst/giant cell tumor of bone
Singapore (Freelance/Locum Practice) - Osteosarcoma
Spain (Provisa Medical Center) - Osteosarcoma (giant cell rich)
United Kingdom (John Radcliffe Hospital) - Giant cell tumor of the bone (2)

Outside Consultation: Alberto Ayala, M.D., Methodist Hospital, Houston, TX, “Giant cell tumor of bone”.

Case 5 - Diagnosis:

Giant cell tumor, patella (some slides also showed ABC formation)
T-11720, M-92501

Case 5 - References:

Aneurysmal Bone Cyst and Giant Cell Tumor of Bone of the Hand and Distal Radius. Athanasian EA. *Hand Clin* 2004; 20(3):269-281.
Novel Karyotypes in Giant Cell-Rich Lesions of Bone. Gleason BC, Kleinman PK, et al. *Am J Surg Pathol* 2007; 31(6):926-932.
Iatrogenic Seeding of a Giant Cell Tumor of the Patella to the Proximal Tibia. Ofluoglu O and Donthineni R. *Clin Orthop Relat Res* 2007; 465:260-264.
Tumors and Tumor-Like Lesions of the Patella: A Report of Eight Cases. Saglik Y and Yildiz Y, et al. *Acta Orthop Belg* 2008; 74(3):391-396.

Case No. 6, Accession No. 30955

January 2010 B

Chico - Osteochondroma
Duarte (City of Hope) - Osteochondroma
Glendale - Osteochondroma
Loma Linda - Osteochondroma
Woodland Hills - Ischemic chondroma
Alabama (Cunningham Pathology, LLC) - Osteochondroma
Florida (Naples Pathology Associates) - Osteochondroma
Georgia, Dunwoody - Osteochondroma
Illinois (Heartland Regional Medical Center) - Osteochondroma
Illinois (Loyola University Medical Center) - Osteochondroma
Indiana, Indianapolis - Osteochondroma
Kansas (Coffeyville Regional Medical Center) - Enchondroma
Kansas, Manhattan - Osteochondroma
Michigan (Henry Ford Hospital Residents) - Chondrosarcoma, low grade
Michigan (Pinkus Dermatopathology Laboratory) - Osteochondroma
New York (Albany Medical Center) - Osteochondroma
New York (St. Luke's-Roosevelt Hospital Center) - Osteochondroma (3)
New York (SUNY Downstate Medical Center) - Osteochondroma (1); Chondrosarcoma, clear cell (1)
New York (Westchester Medical Center) - Osteochondroma
Ohio, Columbus - Osteochondroma
Ohio (University of Toledo) - Osteochondroma
Pennsylvania (Connaugh Memorial Medical Center) - Osteochondroma
Pennsylvania (Drexel University College of Medical Residents) - Chondroma
Pennsylvania (Magee Women's Hospital) - Enchondroma
Tennessee, Knoxville - Osteochondroma
Texas, Crystal Beach - Chondroma
Texas, Lubbock - Enchondroma
Texas (Scott & White Hospital) - Osteochondroma
Texas (University of Texas Health Science Center Residents) - Osteochondroma
Washington (University of Washington Medical Center) - Osteochondroma
Wisconsin (St. Mary's Hospital) - Osteochondroma
Australia (Royal Prince Alfred Hospital) - Osteochondroma
Canada (University of Sherbrooke) - Osteochondroma

Japan (Asahi General Hospital) - Osteochondroma
Japan (Shizuoka Tokushu-kai Hospital) - Osteochondroma
Netherlands, Amstelveen - Osteochondroma
Puerto Rico (University of Puerto Rico) - Osteochondroma
Singapore (Freelance/Locum Practice) - Osteochondroma
Spain (Provisa Medical Center) - Osteochondroma
United Kingdom (John Radcliffe Hospital) - Enchondromas (1); Chondrosarcoma (1)

Case 6- Diagnosis:

Osteochondroma, tibia
 T-11730, M-92100

Case 6 - References:

Spontaneous Regression of Osteochondromas. Hoshi M, Takami M, et al. *Skeletal Radiol* 2007; 36(6):531-534.
 Solitary Osteochondroma Long-Term Follow-Up. Florez B, Monckeberg J, et al. *J Pediatr Orthop B* 2008; 17(2):91-94.
 Soft Tissue Osteochondroma. Case Report and Immunohistochemistry for Parathyroid Hormone-Related Protein. Ratcliff JR, Naqvi A, et al. *Ann Diagn Pathol* 2006; 10(4):222-229.
 Dedifferentiated Chondrosarcoma Arising in Preexisting Osteochondromas. Staals EL, Bacchini P, et al. *J Bone Surg Am* 2007; May 89(5):987-993.

Case No. 7, Accession No. 29044

January 2010 B

Chico - Chondromyxoid fibroma
Duarte (City of Hope) - High grade chondrosarcoma
Glendale - Chondromyxofibroma
Loma Linda - Lipoma of femur
Woodland Hills - Myxoid chondrosarcoma
Alabama (Cunningham Pathology, LLC) - Chondrosarcoma
Florida (Naples Pathology Associates) - Chondromyxoid fibroma
Georgia, Dunwoody - Chondromyxoid fibroma
Illinois (Heartland Regional Medical Center) - Chondromyxoid fibroma
Illinois (Loyola University Medical Center) - Chondromyxoid fibroma
Indiana, Indianapolis - Desmoplastic fibroma
Kansas (Coffeyville Regional Medical Center) - Chondromyxoid fibroma
Kansas, Manhattan - Chondromyxoid fibroma
Michigan (Henry Ford Hospital Residents) - Chondromyxoid fibroma
Michigan (Pinkus Dermatopathology Laboratory) - Chondromyxoid fibroma
New York (Albany Medical Center) - Chondromyxoid fibroma
New York (St. Luke's-Roosevelt Hospital Center) - Chondromyxoid fibroma (3)
New York (SUNY Downstate Medical Center) - Chondromyxoid fibroma (2)
New York (Westchester Medical Center) - Chondrosarcoma, grade 2
Ohio, Columbus - Ossifying fibrous tumor
Ohio (University of Toledo) - Chondrosarcoma, grade II vs. mesenchymal chondrosarcoma
Pennsylvania (Connaugh Memorial Medical Center) - Chondromyxoid fibroma
Pennsylvania (Drexel University College of Medical Residents) - Chondromyxoid fibroma
Pennsylvania (Magee Women's Hospital) - Myxoid chondrosarcoma
Tennessee, Knoxville - Chondromyxoid fibroma
Texas, Crystal Beach - Fibromyxoma
Texas, Lubbock - Chondromyxoid fibroma
Texas (Scott & White Hospital) - Extraskeletal myxoid chondrosarcoma
Texas (University of Texas Health Science Center Residents) - Myxoid chondrosarcoma
Washington (University of Washington Medical Center) - Chondromyxoid fibroma
Wisconsin (St. Mary's Hospital) - Chondromyxoid fibroma
Australia (Royal Prince Alfred Hospital) - Chondromyxoid fibroma
Canada (University of Sherbrooke) - Chondromyxoid fibroma
Japan (Asahi General Hospital) - Chondromyxoid fibroma

Japan (Shizuoka Tokushu-kai Hospital) - Chondromyxoid fibroma
Netherlands, Amstelveen - Chondromyxoid fibroma
Puerto Rico (University of Puerto Rico) - Chondromyxoid fibroma
Singapore (Freelance/Locum Practice) - Chondromyxoid fibroma
Spain (Provisa Medical Center) - Dedifferentiated chondrosarcoma
United Kingdom (John Radcliffe Hospital) - Chondromyxoid fibroma (2)

Case 7 - Diagnosis:

Chondromyxoid fibroma, femur
T-11710, M-92410

Case 7 - References:

Juxtacortical Chondromyxoid Fibroma of Bone: A Unique Variant: A Case Study of 20 Patients. Baker AC, Rezeanu L, et al. *Am J Surg Pathol* 2007; (11):1662-1668.
Chondroblastomas But Not Chondromyxoid Fibromas Express Cytokeratins: An Unusual Presentation of a Chondroblastoma in the Metaphyseal Cortex of the Tibia. Bousdras K, O'Donnell P, et al. *Histopathol* 2007; 51(3):414-416.
Chondromyxoid Fibromas: A Study of 10 Cases. Desai SS, Jambhekar NE, et al. *J Surg Oncol* 2005; 89(1):28-31.
Chondromyxoid Fibroma: A Rare Tumor with an Unusual Location. Fotiadis E, Akritopoulos P, et al. *Arch Orthop Trauma Surg* 2008; 128(4):371-375.
Chondromyxoid Fibroma Resembles in Vitro Chondrogenesis, But Differs in Expression of Signaling Molecules. Romeo S, Bovee JV, et al. *J Pathol* 2005; 206(2):135-142.

Case No. 8, Accession No. 30900

January 2010 B

Chico - Ameloblastoma
Duarte (City of Hope) - Ameloblastoma
Glendale - Ameloblastoma
Loma Linda - Ameloblastoma of maxilla
Woodland Hills - Ameloblastoma
Alabama (Cunningham Pathology, LLC) - Ameloblastoma
Florida (Naples Pathology Associates) - Adenomatoid odontogenic tumor
Georgia, Dunwoody - Ameloblastoma
Illinois (Heartland Regional Medical Center) - Ameloblastoma
Illinois (Loyola University Medical Center) - Ameloblastoma
Indiana, Indianapolis - Ameloblastoma
Kansas (Coffeyville Regional Medical Center) - Ameloblastoma
Kansas, Manhattan - Ameloblastoma
Michigan (Henry Ford Hospital Residents) - Adamantinoma
Michigan (Pinkus Dermatopathology Laboratory) - Adamantinoma
New York (Albany Medical Center) - Ameloblastoma
New York (St. Luke's-Roosevelt Hospital Center) - Ameloblastoma (2); Adamantinoma (1)
New York (SUNY Downstate Medical Center) - Cystic ameloblastoma (1); Adamantinoma (1)
New York (Westchester Medical Center) - Ameloblastoma
Ohio, Columbus - Ameloblastoma
Ohio (University of Toledo) - Peripheral (extraosseous) ameloblastoma
Pennsylvania (Connaugh Memorial Medical Center) - Ameloblastoma
Pennsylvania (Drexel University College of Medical Residents) - Ameloblastoma
Pennsylvania (Magee Women's Hospital) - Ameloblastoma
Tennessee, Knoxville - Ameloblastoma
Texas, Crystal Beach - Ameloblastoma
Texas, Lubbock - Ameloblastoma
Texas (Scott & White Hospital) - Adenomatoid tumor
Texas (University of Texas Health Science Center Residents) - Ameloblastoma
Washington (University of Washington Medical Center) - Telangiectatic osteosarcoma
Wisconsin (St. Mary's Hospital) - Ameloblastoma
Australia (Royal Prince Alfred Hospital) - Cystic ameloblastoma

Canada (University of Sherbrooke) - Adamantinoma (ameloblastoma)
Japan (Asahi General Hospital) - Ameloblastoma
Japan (Shizuoka Tokushu-kai Hospital) - Ameloblastoma
Netherlands, Amstelveen - Ameloblastoma
Puerto Rico (University of Puerto Rico) - Ameloblastoma
Singapore (Freelance/Locum Practice) - Ameloblastoma
Spain (Provisa Medical Center) - Ameloblastoma
United Kingdom (John Radcliffe Hospital) - Ameloblastoma (2)

Case 8 - Diagnosis:

Ameloblastoma, mandible
 T-10180, M-93100

Case 8 - References:

Large Ameloblastoma of the Mandible with Hypoproteinemia. Hata H, Abihara M, et al. *Int J Oral Maxillofac Surg* 2008; 37(9):866-869.
 Unicystic Ameloblastoma of the Mandible Masquerading as Carcinoma of the Oral Cavity in a 10-Year-Old Girl. Qureshi SS, et al. *Am J Surg* 2008; 196(3):7-9.
 CD10 Expression in Stromal Cells of Ameloblastoma Variants. Iezzi G, Piattelli A, et al. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod* 2008; 105(2):206-209.
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 Malignant Ameloblastoma of the Mandible. A Review of Definitions and Report of a Case. Milles M, Mirani N, Alltucker E, *J N J Dent Assoc* 2005; 76(4):36-39.

Case No. 9, Accession No. 30192

January 2010 B

Chico - Aneurysmal bone cyst (ABC)
Duarte (City of Hope) - Telangiectatic osteosarcoma
Glendale - Telangiectatic osteosarcoma
Loma Linda - Cavernous hemangioma of iliac and sacrum
Woodland Hills - Aneurysmal bone cyst
Alabama (Cunningham Pathology, LLC) - Telangiectatic low grade osteosarcoma
Florida (Naples Pathology Associates) - Aneurysmal bone cyst
Georgia, Dunwoody - Simple bone cyst
Illinois (Heartland Regional Medical Center) - Telangiectatic osteosarcoma
Illinois (Loyola University Medical Center) - Osteosarcoma
Indiana, Indianapolis - Telangiectatic osteosarcoma
Kansas (Coffeyville Regional Medical Center) - Aneurysmal bone cyst
Kansas, Manhattan - Telangiectatic osteosarcoma
Michigan (Henry Ford Hospital Residents) - Aneurysmal bone cyst
Michigan (Pinkus Dermatopathology Laboratory) - Telangiectatic osteosarcoma
New York (Albany Medical Center) - Telangiectatic osteosarcoma
New York (St. Luke's-Roosevelt Hospital Center) - Telangiectatic osteosarcoma (3)
New York (SUNY Downstate Medical Center) - Telangiectatic osteosarcoma (2)
New York (Westchester Medical Center) - Telangiectatic osteosarcoma
Ohio, Columbus - Telangiectatic osteosarcoma
Ohio (University of Toledo) - Telangiectatic osteosarcoma
Pennsylvania (Connaugh Memorial Medical Center) - Aneurysmal bone cyst
Pennsylvania (Drexel University College of Medical Residents) - Telangiectatic osteosarcoma
Pennsylvania (Magee Women's Hospital) - Telangiectatic osteosarcoma
Tennessee, Knoxville - Telangiectatic osteosarcoma
Texas, Crystal Beach - Angiosarcoma
Texas, Lubbock - Angiosarcoma
Texas (Scott & White Hospital) - Aneurysmal bone cyst
Texas (University of Texas Health Science Center Residents) - Telangiectatic osteosarcoma

Washington (University of Washington Medical Center) - Osteosarcoma
Wisconsin (St. Mary's Hospital) - Aneurysmal bone cyst
Australia (Royal Prince Alfred Hospital) - Telangiectatic osteosarcoma
Canada (University of Sherbrooke) - Aneurysmal bone cyst
Japan (Asahi General Hospital) - Simple cyst
Japan (Shizuoka Tokushu-kai Hospital) - Aneurysmal bone cyst
Netherlands, Amstelveen - Aneurysmal bone cyst
Puerto Rico (University of Puerto Rico) - Telangiectatic osteosarcoma
Singapore (Freelance/Locum Practice) - Aneurysmal bone cyst
Spain (Provisa Medical Center) - Aneurysmal bone cyst
United Kingdom (John Radcliffe Hospital) - Telangiectatic osteosarcoma (2)

Case 9 - Diagnosis:

Telangiectatic osteosarcoma, pelvis
 T-10800, M-91833

Case 9 - References:

Telangiectatic Osteosarcoma: The St. Jude Children's Research Hospital's Experience. Weiss A, Khoury JD, et al. *Cancer* 2007; 109(3):1627-1637.
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 Telangiectatic Osteosarcoma: Radiologic-Pathologic Comparison. Murphey MD, wan Jaovisidha S, et al. *Radiol* 2003; 229(2):545-553.
 Multicentric Telangiectatic Osteosarcoma. Park YK and Joo M. *Pathol Int* 2001; 51(3):200-203.

Case No. 10, Accession No. 30585

January 2010 B

Chico - Osteosarcoma
Duarte (City of Hope) - High grade osteosarcoma
Glendale - Chondroblastic osteosarcoma
Loma Linda - Malignant giant cell tumor vs. osteosarcoma
Woodland Hills - Osteosarcoma
Alabama (Cunningham Pathology, LLC) - Osteosarcoma, chondroblastic type
Florida (Naples Pathology Associates) - Osteosarcoma
Georgia, Dunwoody - Chondroblastic osteosarcoma
Illinois (Heartland Regional Medical Center) - Osteosarcoma
Illinois (Loyola University Medical Center) - Osteosarcoma
Indiana, Indianapolis - Chondrosarcoma
Kansas (Coffeyville Regional Medical Center) - Osteosarcoma
Kansas, Manhattan - High grade periosteal osteosarcoma
Michigan (Henry Ford Hospital Residents) - Osteoblastic osteosarcoma
Michigan (Pinkus Dermatopathology Laboratory) - Chondroblastic osteosarcoma
New York (Albany Medical Center) - Chondroblastic osteosarcoma
New York (St. Luke's-Roosevelt Hospital Center) - Periosteal osteosarcoma (3)
New York (SUNY Downstate Medical Center) - Osteosarcoma
New York (Westchester Medical Center) - Osteosarcoma, chondroblastic
Ohio, Columbus - Osteosarcoma
Ohio (University of Toledo) - Chondrosarcoma, grade III vs. chondroblastic
Pennsylvania (Connaugh Memorial Medical Center) - Osteosarcoma
Pennsylvania (Drexel University College of Medical Residents) - Chondroblastic osteosarcoma
Pennsylvania (Magee Women's Hospital) - Osteosarcoma
Tennessee, Knoxville - Chondroblastic osteosarcoma
Texas, Crystal Beach - Chondrosarcoma

Texas, Lubbock - Osteosarcoma
Texas (Scott & White Hospital) - Osteogenic sarcoma
Texas (University of Texas Health Science Center Residents) - Osteosarcoma
Washington (University of Washington Medical Center) - Osteosarcoma
Wisconsin (St. Mary's Hospital) - Osteosarcoma
Australia (Royal Prince Alfred Hospital) - Chondroblastic osteosarcoma, chemotherapy effect
Canada (University of Sherbrooke) - Osteosarcoma, chondrogenic type
Japan (Asahi General Hospital) - Chondroblastic osteosarcoma
Japan (Shizuoka Tokushu-kai Hospital) - Osteosarcoma
Netherlands, Amstelveen - Chondrosarcoma
Puerto Rico (University of Puerto Rico) - High grade conventional osteosarcoma, osteoblastic type
Singapore (Freelance/Locum Practice) - Osteosarcoma
Spain (Provisa Medical Center) - Chondroblastic osteosarcoma
United Kingdom (John Radcliffe Hospital) - Osteosarcoma (1); Chondroblastic osteosarcoma (1)

Case 10 - Diagnosis:

Osteosarcoma with chemotherapy effects (30% viable cells), femur
 T-11710, M-91803

Case 10 - References:

Adjuvant Chemotherapy for Osteosarcoma May Not Increase Survival After Neoadjuvant Chemotherapy and Surgical Resection. Berend KR, Pietrobon R, et al. *J Surg Oncol* 2001; 78(3): 162-170.
 Current Treatment of Osteosarcoma. Ferguson WS and Goorin AM. *Cancer Invest* 2001; 19(3):292-315.
 Gene Expression Array Profile of Human Osteosarcoma. Leonard P, Sharp T, et al. *Br J Cancer* 2003; 89(12): 2284-2288.
 Appearance of Lung Metastasis From Osteosarcoma 21 Years After Initial Treatment. Maeda R, Isowa N, et al. *Gen Thorac Cardiovasc Surg* 2008; 56(12): 613-615.
 Osteosarcoma Developed in the Period of Maximal Growth Rate Have Inferior Prognosis. Lee JA, Kim MS, et al. *J Pediatr Hematol Oncol* 2008; 30(6):419-424.
 Prognostic Value of Bax, BCL-2 and p53 Staining in Primary Osteosarcoma. Kaseta MK, Khaldi L, et al. *J Surg Oncol* 2008; 97(3):259-266.