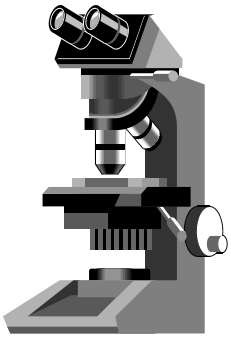
CALIFORNIA
TUMOR TISSUE REGISTRY

BONE AND CARTILAGE PATHOLOGY

Minutes – Subscription B

February, 2015



SUGGESTED READING (General Topics from Recent Literature):

van den Brand M, Hoevenaars BM, et al. Sequential Immunohistochemistry. A Promising New Tool for the Pathology Laboratory. *Histopath* 2014; 65:651-657.

Lew M, Foo WC, Roh MH. Diagnosis of Metastatic Renal Cell carcinoma on Fine-Needle Aspiration Cytology. *Arch Pathol Lab Med* 2014; 138:1278-1285.

Cavazza A, Muratore F, et al. Inflammed Temporal Artery: Histologic Findings in 354 Biopsies, with Clinical Correlations. *Am J Surg Pathol* 2014; 38:1360-1370.

Pozdnayakova O, Wu K, et al. High Concordance in Grading Reticulin Fibrosis and Cellularity in Patients with Myeloproliferative Neoplasms. *Mod Pathol* 2014; 27:1447-1454.

Guo J, Tretiakova MS, et al. Tberous Sclerosis-Associated Renal Cell Carcinoma. A Clinicopathologic Study of 57 Separate Carcinomas in 18 Patients. *Am J Surg Pathol* 2014; 38:1457-1467.

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FILE DIAGNOSES

CTTR Subscription B February 2015

Case 1:
Non-ossifying fibroma/metaphyseal fibrous defect/Fibrous cortical defect, femur

Case 2:
Extranodal Rosai-Dorfman disease, femoral neck

Case 3:
Paget disease/Pagets disease, femur

Case 4:
Osteochondroma, knee

Case 5:
Ameloblastoma, mandibular

Case 6:
Low grade chondrosarcoma, humerus

Case 7:
Chondrosarcomas grade 1, pelvis

Case 8:
Chondrosarcoma, grade 2, rib

Case 9:
Chondroblastic osteosarcoma

Case 10:
Clear cell renal cell carcinoma, metastatic, femur

Case No. 1, Accession No. 31861 **February 2015**

Glendale - Metaphyseal fibrous defect
San Jose - Metaphyseal fibrous defect/non-ossifying fibroma
San Francisco (UCSF) - Non-ossifying fibroma
Torrence (Harbor-UCLA Medical Center) - Non-ossifying fibroma
Alabama (Cunningham Pathology) - Fibrous histiocytoma
Connecticut (Danbury Hospital) - Non-ossifying fibroma. Benign fibrous histiocytoma of bone
Delaware (Armed Forces Medical Examiner System) - Non-ossifying fibroma
Georgia, Atlanta - Non-ossifying fibroma
Illinois (Heartland Regional Medical Center) - Fibrous histiocytoma with giant cells (vs. giant cell tumor)
Maryland (University of Maryland Medical Center) - Non-ossifying fibroma
Mississippi (University of Mississippi Medical Center) - Giant cell tumor
New York (University of Rochester Medical Center Residents) - Non-ossifying fibroma
North Carolina, Clemmons - Giant cell tumor
Ohio (University of Toledo Medical Center Residents) - Non-ossifying fibroma
Oregon (Oregon Health and Science University Residents) - Benign fibrous histiocytoma
Pennsylvania (Drexel University College of Medicine Residents) - Non-ossifying fibroma
Puerto Rico (University of Puerto Rico) - Benign fibrous histiocytoma of bone/Non-ossifying fibroma
Texas, Crystal Beach - Non-ossifying fibroma
Tennessee, Knoxville - Metaphyseal fibrous defect
Texas, Lubbock - Giant cell tumor
Australia (Royal Prince Alfred Hospital) - Non-ossifying fibroma
Australia (St. Vincents Hospital) - Benign fibrous histiocytoma
Canada (Pasqua Hospital) - Giant cell tumor
Canada (Royal Alexandra Hospital) - Giant cell tumor of bone
Japan (Asahi General Hospital) - Metaphyseal fibrous defect
Japan (Lions Mansion Nijyo) - Giant cell tumor of the bone
Japan, Setagaya-Ku - Giant cell tumor

Case 1 - Diagnosis:

Non-ossifying fibroma/Metaphyseal fibrous defect/Fibrous cortical defect, femur

Case 1 - References:

Metaphyseal fibrous defects. *J Am Acad Orthop Surg* 2004; 12:89-95.Betsy M, Kupersmith LM, et al.
Cortical lesions of the tibia: Characteristic appearances at conventional radiography. *Radiographics* 2003; 23:157-177. Levine Sm, Lambiase Re. Petchprapa CN.
Disseminated non-ossifying fibromas in association with café-au-lait spots (Jaffe-Campanacci syndrome). *Clin Orthop* 1982; 168:192-205. Mirra JM, Gold RH, Rand F.
On fibrous defects in cortical walls of growing tubular boner: their radiologic appearance, structure, prevalence, natural course and diagnostic significance. *Adv Pediatr* 7:13-51, 1955. Caffey J.
Polymorphic fibro-osseous lesions of bone: an almost site-specific diagnostic problem of the proximal femur, *Hum Pathol* 24:505-512, 1993. Ragsdale BD.
The non-ossifying fibroma: a case report and review of the literature. *Head Neck Pathol* 2013; Jun;7(2): p203-10. Bowers LM; Cohen DM; Bhattacharyya I; Pettigrew JC; Stavropoulos MF.
Nonossifying fibroma developed in metaphysis and epiphysis--a case report. *Ann Diagn Pathol* 2013; Apr;17(2): p207-9. Noh JH; Ryu KN; Bae JY; Roh YH; Choi IS.

Case No. 2, Accession No. 32002 **February 2015**

Glendale - Rosai-Dorfman disease
San Jose - Rosai-Dorfman disease
San Francisco (UCSF) - Rosai-Dorfman histiocytosis
Torrence (HarbonUCLA Medican Center) - Plasma cell neoplasm
Alabama (Cunningham Pathology) - Atypical fibrous histiocytoma

Connecticut (Danbury Hospital) - Rosai-Dorfman disease
Delaware (Armed Forces Medical Examiner System) - Rosai-Dorfman disease
Georgia, Atlanta - Rosai-Dorfman disease
Illinois (Heartland Regional Medical Center) - Rosai-Dorfman disease
Maryland (University of Maryland Medical Center) - Rosai-Dorfman
Mississippi (University of Mississippi Medical Center) - Rosai-Dorfman disease
New York (University of Rochester Medical Center Residents) - Rosai-Dorfman
North Carolina, Clemmons - Rosai-Dorfman disease
Ohio (University of Toledo Medical Center Residents) - Rosai-Dorfman disease
Oregon (Oregon Health and Science University Residents) - Rosai-Dorfman disease
Pennsylvania (Drexel University College of Medicine Residents) - Rosai-Dorfman disease
Puerto Rico (University of Puerto Rico) - Rosai Dorfman disease
Texas, Crystal Beach - Plasma cell myeloma
Tennessee, Knoxville - Rosai Dorfman disease
Texas, Lubbock - Chondroblastoma
Australia (Royal Prince Alfred Hospital) - Rosai Dorfman disease
Australia (St. Vincents Hospital) - Rosai Dorfman disease
Canada (Pasqua Hospital) - Rosai-Dorfman disease
Canada (Royal Alexandra Hospital) - Rosai-Dorfman
Japan (Asahi General Hospital) - Plasma cell osteomyelitis
Japan (Lions Mansion Nijyo) - Rosai-Dorfman disease
Japan, Setagaya-Ku - Plasmacytoma, post-radiation

Case 2 - Diagnosis:

Extranodal Rosai-Dorfman disease, femoral neck

Case 2 - References:

Extranodal rosai-dorfman disease presenting as a solitary mass with human herpesvirus 6 detection in a pediatric patient. *Pediatr Dev Pathol* 2012; Jul-Aug;15(4): p324-8. Arakaki N; Gallo G; Majluf R; Diez B; Arias E; Riudavets MA; Sevlever G.

Multicentric extranodal Rosai Dorfman disease--a cytological diagnosis, with histological corroboration. *Acta Cytol* 2012;56(2): p214-8. Majumdar K; Tyagi I; Saran RK; Kumar S; Gondal R.

Relationship between Rosai-Dorfman disease and IgG4-related disease: study of 32 cases. *Am J Clin Pathol* 2013; Sep;140(3): p395-402 Liu L; Perry AM; Cao W; Smith LM; Hsi ED; Liu X; Mo JQ; Dotlic S; Mosunjac M; Talmon G; Weisenburger DD; Fu K.

Cytomorphological and morphometric analysis of 22 cases of Rosai-Dorfman disease: a large series from a tertiary care centre. *Acta Cytol* 2013;57(6): p625-32. Mallick S; Ghosh R; Iyer VK; Jain D; Mathur SR.

Fine-needle aspiration of primary Rosai-Dorfman disease of the bone without peripheral lymphadenopathy: a challenging diagnosis. *Diagn Cytopathol* 2013; Mar;41(3): p230-1. Schein C; Kluskens L; Gattuso P.

Rosai-Dorfman disease: a retrospective analysis of 13 cases. *Am J Med Sci* 2013; Mar;345(3): p200-10. Zhu F; Zhang JT; Xing XW; Wang DJ; Zhu RY; Zhang Q; Wang HT; Lang SY.

Case No. 3, Accession No. 31941 **February 2015**

Glendale - Bone infarct
San Jose - Paget's disease
San Francisco (UCSF) - Paget's disease
Torrence (Harbor-UCLA Medical Center) - Osteoid osteoma
Alabama (Cunningham Pathology) - Enostosis
Connecticut (Danbury Hospital) - Paget's
Delaware (Armed Forces Medical Examiner System) - Paget's disease of bone
Georgia, Atlanta - Paget's disease of bone
Illinois (Heartland Regional Medical Center) - Paget's disease
Maryland (University of Maryland Medical Center) - Paget's disease
Mississippi (University of Mississippi Medical Center) - Osteoma

New York (University of Rochester Medical Center Residents) - Paget's disease
North Carolina, Clemmons - Paget's disease
Ohio (University of Toledo Medical Center Residents) - Paget disease
Oregon (Oregon Health and Science University Residents) - Paget's disease
Pennsylvania (Drexel University College of Medicine Residents) - Paget's disease of the bone
Puerto Rico (University of Puerto Rico) - Paget disease of bone
Texas, Crystal Beach - Osteoma
Tennessee, Knoxville - Paget's disease of bone
Texas, Lubbock - Osteosclerosis
Australia (Royal Prince Alfred Hospital) - Paget's disease and osteoma, radiological correlation required
Australia (St. Vincents Hospital) - Paget's disease
Canada (Pasqua Hospital) - Paget's disease
Canada (Royal Alexandra Hospital) - Paget's disease
Japan (Asahi General Hospital) - Paget disease
Japan (Lions Mansion Nijyo) - Osteoma with osteonecrosis
Japan, Setagaya-Ku - Melorheostosis

Case 3 - Diagnosis:

Paget disease/Pagets disease, femur

> Director's note. The current trend in diagnoses is to remove the possessive "'". For example since Dr. Paget did not have the disease, and didn't own the disease, the apostrophe is inappropriate. It should be "Paget disease". The same applies for "Wilm's tumor" where the apostrophe should be dropped to become "Wilm tumor." The common usage, however, seems to list the "s" but without the apostrophe (i.e. Wilms tumor, Pagets disease, etc.). … drc

Case 3 - References:

Paget's disease of bone: clinical review and update. *J Clin Pathol* 2013; Nov;66(11): p924-7. Bolland MJ; Cundy T.
Prevalence of vitamin D deficiency is higher in patients with Paget's disease of bone compared with age-matched controls. *Arq Bras Endocrinol Metabol* 2013; Oct;57(7): p509-12. Griz L; Bandeira F; Diniz ET; Cabral M; Freese E.
Epidemiology of Paget's disease of bone: a systematic review and meta-analysis of secular changes. *Bone* 2013; Aug;55(2): p347-52. Corral-Gudino L; Borao-Cengotita-Bengoa M; Del Pino-Montes J; Ralston S.
Sir James Paget: Paget's disease of the nipple, Paget's disease of bone. *J Perioper Pract* 2013; Apr;23(4): p91-2. Ellis H.
Paget disease of bone. *J Clin Invest* 2005; Feb;115(2): p200-8. Roodman GD; Windle JJ.
Osteoclasts in Paget's disease of bone. *Br J Haematol* 2001; May;113(2): p259. Ganly P; Beard M.
Genetics of Paget's disease of bone. *Clin Sci* (Lond 2005; Sep;109(3): p257-63. Daroszewska A; Ralston SH.

Case No. 4, Accession No. 28753 **February 2015**

Glendale - Osteochondroma
San Jose - Osteochondroma
San Francisco (UCSF) - Osteochondroma
Torrence (Harbor-UCLA Medical Center) - Chondroma
Alabama (Cunningham Pathology) - Enchondroma
Connecticut (Danbury Hospital) - Osteochondroma
Delaware (Armed Forces Medical Examiner System) - Osteochondroma
Georgia, Atlanta - Osteochondroma
Illinois (Heartland Regional Medical Center) - Osteochondroma
Maryland (University of Maryland Medical Center) - Osteochondroma
Mississippi (University of Mississippi Medical Center) - Osteochondroma
New York (University of Rochester Medical Center Residents) - Osteochondroma
North Carolina, Clemmons - Osteochondroma
Ohio (University of Toledo Medical Center Residents) - Osteochondroma
Oregon (Oregon Health and Science University Residents) - Osteochondroma

Pennsylvania (Drexel University College of Medicine Residents) - Osteochondroma
Puerto Rico (University of Puerto Rico) - Osteochondroma
Texas, Crystal Beach - Osteochondroma
Tennessee, Knoxville - Osteochondroma
Texas, Lubbock - Osteochondroma
Australia (Royal Prince Alfred Hospital) - Osteochondroma
Australia (St. Vincents Hospital) - Osteochondroma
Canada (Pasqua Hospital) - Osteochondroma
Canada (Royal Alexandra Hospital) - Osteochondroma
Japan (Asahi General Hospital) - Ameloblastic fibroma
Japan (Lions Mansion Nijyo) - Enchondroma
Japan, Setagaya-Ku - Periosteal chondroma

Case 4 - Diagnosis:
Osteochondroma, knee

Case 4 - References:

Intra-articular osteochondroma of the posterior cavity of the knee. *Arch Orthop Trauma Surg* 2002; Nov;122(8): p462-5. Dienst M; Schneider G; Pahl S; Ensslin S; Kohn D.
Surgical treatment of symptomatic osteochondroma. A three- to eight-year follow-up study. *J Bone Joint Surg Br* 2003; Nov;85(8): p1161-5. Bottner F; Rodl R, et al.
Para-articular osteochondroma of the infrapatellar fat pad. *J Knee Surg* 2011; Sep;24(3): p209-13. Ogura K; Goto T; Nemoto T; Imanishi J.
Large para-articular osteochondroma of the knee joint: a case report. *Acta Orthop Traumatol Turc* 2012;46(2): p139-43. Singh R; Jain M; Siwach R. et al.
Pathology in practice. Osteochondroma. *J Am Vet Med Assoc* 2010; Jul 1;237(1): p45-7. Koehler JW; Johnson CM; Beard DM; Green LN.
Radiology quiz case 2. Diagnosis: Osteochondroma arising from the lateral process of C4 and hereditary multiple exostoses (HME). *Arch Otolaryngol Head Neck Surg* 2010; Sep;136(9): p925, 927-8. Chandra J; Kirmi O; Woo EK

Case No. 5, Accession No. 31977 **February 2015**

Glendale - Ameloblastoma
San Francisco (UCSF) - Ameloblastic fibroma
Alabama (Cunningham Pathology) - Ameloblastoma
Torrence (Harbor-UCLA Medical Center) - Ameloblastoma
Connecticut (Danbury Hospital) - Ameloblastoma
Delaware (Armed Forces Medical Examiner System) - Ameloblastoma
Georgia, Atlanta - Ameloblastic fibroma
Illinois (Heartland Regional Medical Center) - Ameloblastic fibroma
Maryland (University of Maryland Medical Center) - Ameloblastoma
Mississippi (University of Mississippi Medical Center) - Ameloblastoma
New York (University of Rochester Medical Center Residents) - Ameloblastoma
North Carolina, Clemmons - Ameloblastic fibroma
Ohio (University of Toledo Medical Center Residents) - Ameloblastic fibroma
Oregon (Oregon Health and Science University Residents) - Ameloblastoma
Pennsylvania (Drexel University College of Medicine Residents) - Ameloblastoma
Puerto Rico (University of Puerto Rico) - Ameloblastoma
Texas, Crystal Beach - Ameloblastoma
Tennessee, Knoxville - Ameloblastoma
Texas, Lubbock - Ameloblastoma
Australia (Royal Prince Alfred Hospital) - Ameloblastic fibroma
Australia (St. Vincents Hospital) - Ameloblastoma
Canada (Pasqua Hospital) - Ameloblastic fibroma
Canada (Royal Alexandra Hospital) - Ameloblastoma

Japan (Asahi General Hospital) - Chondrosarcoma
Japan (Lions Mansion Nijyo) - Ameloblastoma
Japan, Setagaya-Ku - Ameloblastic fibroma

Case 5 - Diagnosis:
Ameloblastoma, mandibular

Case 5 - References:

Fine-needle aspiration cytology of ameloblastoma and malignant ameloblastoma: a study of 12 cases. *Diagn Cytopathol* 2013; Mar;41(3): p206-11. Klapsinou E; Stavros A, et al.
Ameloblastoma of the jaws: a retrospective analysis of 340 cases in a Malaysian population. *J Oral Maxillofac Surg* 2012; Mar;70(3): p608-15. Siar CH; Lau SH; Ng KH.
Benign metastasizing ameloblastoma or malignant ameloblastoma? *J Craniofac Surg* 2011; May;22(3): p995-7. Lai H; Wang J.
Metastasizing (malignant) ameloblastoma: review of a unique histopathologic entity and report of Mayo Clinic experience. *J Oral Maxillofac Surg* 2010; Dec;68(12): p2962-74. Van Dam SD; Unni KK; Keller EE.
Are we on the brink of nonsurgical treatment for ameloblastoma? *Oral Surg Oral Med Oral Pathol Oral Radiol Endod* 2010; Jul;110(1): p68-78. Sauk JJ; Nikitakis NG; Scheper MA.
A clinical, radiographic, and histologic review of 73 cases of ameloblastoma in an Indian population. *Quintessence Int* 2010; May;41(5): pe90-100. Krishnapillai R; Angadi PV.

Case No. 6, Accession No. 31942 **February 2015**

Glendale - Low grade chondrosarcoma
San Jose - Low grade chondrosarcoma
San Francisco (UCSF) - Chondrosarcoma
Torrence (Harbor-UCLA Medical Center) - Chondrosarcoma, grade 1
Alabama (Cunningham Pathology) - Chondrosarcoma
Connecticut (Danbury Hospital) - Enchondroma
Delaware (Armed Forces Medical Examiner System) - Low grade chondrosarcoma
Georgia, Atlanta - Chondrosarcoma, myxohyaline type, grade 1
Illinois (Heartland Regional Medical Center) - Enchondroma (vs. chondrosarcoma, grade 1)
Maryland (University of Maryland Medical Center) - Enchondroma
Mississippi (University of Mississippi Medical Center) - Enchondroma
New York (University of Rochester Medical Center Residents) - Chondrosarcoma, grade 1
North Carolina, Clemmons - Low grade chondrosarcoma
Ohio (University of Toledo Medical Center Residents) - Enchondroma
Oregon (Oregon Health and Science University Residents) - Low grade chondroid neoplasm, favoring enchondroma
Pennsylvania (Drexel University College of Medicine Residents) - Chondrosarcoma, grade 1
Puerto Rico (University of Puerto Rico) - Enchondroma
Texas, Crystal Beach - Enchondroma
Tennessee, Knoxville - Chondrosarcoma
Texas, Lubbock - Chondroblastoma
Australia (Royal Prince Alfred Hospital) - Low grade chondrosarcoma
Australia (St. Vincents Hospital) - Chondrosarcoma, grade 1
Canada (Pasqua Hospital) - Chondrosarcoma
Canada (Royal Alexandra Hospital) - Enchondroma
Japan (Asahi General Hospital) - Chondrosarcoma
Japan (Lions Mansion Nijyo) - Enchondroma
Japan, Setagaya-Ku - Enchondroma

Case 6 - Diagnosis:
Low grade chondrosarcoma, humerus

Case 6 - References:

Recurrence analysis in 66 cases with grade I and grade II chondrosarcomas in the extremities. *Orthop Surg* 2009; May;1(2): p132-6. Ma XJ; Dong Y; Zhang CL; Zeng BF

Chondrosarcoma of the bone with nodal metastasis: the first case report with review of literature. *Indian J Med Sci* 2011; Aug;65(8): p360-4. Gulia A; Puri A; Jain S; Dhanda S; Gujral S.

Humeral chondrosarcoma in a Hokkaido brown bear (Ursus arctos yesoensis). *J Vet Med Sci* 2012; Sep;74(9): p1195-7. Murakami T; Kobayashi Y, et al.

Chondrosarcoma in the humerus of a goat. *Vet Comp Orthop Traumatol* 2010; 23(4): p273-6. Schmid T; Hilbe M; Ohlert S; Nuss K.

No recurrences in selected patients after curettage with cryotherapy for grade I chondrosarcomas. *Clin Orthop Relat Res* 2010; Jul;468(7): p1956-62. Souna BS; Belot N; Duval H; Langlais F; Thomazeau H.

Case No. 7, Accession No. 31917 **February 2015**

Glendale - Secondary chondrosarcoma
San Jose - Enchondroma
San Francisco (UCSF) - Chondrosarcoma arising in an osteochondroma
Torrence (Harbor-UCLA Medical Center) - Chondroma
Alabama (Cunningham Pathology) - Chondrosarcoma arising in osteochondroma
Connecticut (Danbury Hospital) - Low grade chondrosarcoma
Delaware (Armed Forces Medical Examiner System) - Chondrosarcoma
Georgia, Atlanta - Chondrosarcoma, hyaline type, grade 1-2
Illinois (Heartland Regional Medical Center) - Secondary chondrosarcoma, grade 1
Maryland (University of Maryland Medical Center) - Surface chondrosarcoma
Mississippi (University of Mississippi Medical Center) - Chondrosarcoma, well-differentiated
New York (University of Rochester Medical Center Residents) - Low grade chondrosarcoma, probably arising from osteochondroma
North Carolina, Clemmons - Chondrosarcoma, grade 1
Ohio (University of Toledo Medical Center Residents) - Chondrosarcoma
Oregon (Oregon Health and Science University Residents) - Low grade chondrosarcoma
Pennsylvania (Drexel University College of Medicine Residents) - Enchondroma
Puerto Rico (University of Puerto Rico) - Chondrosarcoma grade 1, secondary
Texas, Crystal Beach - Endochondromatosis
Tennessee, Knoxville - Chondrosarcoma
Texas, Lubbock - Chondrosarcoma
Australia (Royal Prince Alfred Hospital) - Secondary low grade chondrosarcoma arising from osteochondroma
Australia (St. Vincents Hospital) - Chondroma
Canada (Pasqua Hospital) - Chondrosarcoma
Canada (Royal Alexandra Hospital) - Low grade chondrosarcoma
Japan (Asahi General Hospital) - Chondrosarcoma
Japan (Lions Mansion Nijyo) - Enchondromatosis
Japan, Setagaya-Ku - Chondrosarcoma

Case 7 - Diagnosis:

Chondrosarcomas grade 1, pelvis

Case 7 - References:

Pelvic bone sarcomas: controversies and treatment options. *J Natl Compr Canc Netw* 2010; Jun;8(6): p731-7. Morris CD.

Diagnosis of a dedifferentiated chondrosarcoma of the pelvis by fine needle aspiration. A case report. *Acta Cytol* 2010; Mar-Apr;54(2): p217-20. Estrada-Villasenor E; Rico-Martinez G; Linares-Gonzalez LM.

Malignant sarcoma of the pelvic bones: treatment outcomes and prognostic factors vary by histopathology. *Cancer* 2011 Apr 1;117(7): p1529-41. Jawad MU; Haleem AA; Scully SP.

Grade I chondrosarcoma of bone: the Munster experience. *J Cancer Res Clin Oncol* 2009; Apr;135(4): p543-50. Streitburger A; Ahrens H, et al.
Pelvic chondrosarcomas: surgical treatment options. *Orthop Traumatol Surg Res* 2009; Oct;95(6): p393-401. Deloin X; Dumaine V, et al.

Case No. 8, Accession No. 12643 **February 2015**

Glendale - Low-grade chondrosarcoma
San Jose - Low-grade chondrosarcoma
San Francisco (UCSF) - Chondrosarcoma
Torrence (Harbor-UCLA Medical Center) - Chondrosarcoma
Alabama (Cunningham Pathology) - Osteosarcoma
Connecticut (Danbury Hospital) - Chondrosarcoma
Delaware (Armed Forces Medical Examiner System) - Chondrosarcoma
Georgia, Atlanta - Chondrosarcoma, hyaline type, grade 2
Illinois (Heartland Regional Medical Center) - Chondrosarcoma, grade 1
Maryland (University of Maryland Medical Center) - Chondrosarcoma
Mississippi (University of Mississippi Medical Center) - Chondrosarcoma
New York (University of Rochester Medical Center Residents) - Chondrosarcoma, grade 2
North Carolina, Clemmons - Chondrosarcoma, grade 2
Ohio (University of Toledo Medical Center Residents) - Chondrosarcoma
Oregon (Oregon Health and Science University Residents) - Chondrosarcoma, grade 1-2
Pennsylvania (Drexel University College of Medicine Residents) - Chondrosarcoma, grade 2
Puerto Rico (University of Puerto Rico) - Chondrosarcoma, grade 2-3/cannot rule out chondroblastic osteosarcoma
Texas, Crystal Beach - Chondrosarcoma, well-differentiated
Tennessee, Knoxville - Chondrosarcoma
Texas, Lubbock - Chondrosarcoma
Australia (Royal Prince Alfred Hospital) - Low grade chondrosarcoma
Australia (St. Vincents Hospital) - Chondrosarcoma, grade 2
Canada (Pasqua Hospital) - Chondrosarcoma
Canada (Royal Alexandra Hospital) - Chondrosarcoma
Japan (Asahi General Hospital) - Chondrosarcoma
Japan (Lions Mansion Nijyo) - Chondrosarcoma, grade 2
Japan, Setagaya-Ku - Chondrosarcoma

Case 8 - Diagnosis:
Chondrosarcoma, grade 2, rib

Case 8 - References:

Rib chondrosarcoma with intramedullary progression completely resected by magnetic resonance imaging: useful short inversion time inversion recovery sequence. *Interact Cardiovasc Thorac Surg* 2011; May;12(5): p853-4. Ohata K; Chen F; Date H.
[Chondrosarcoma of the rib with pleural dissemination] *Kyobu Geka* 2009; May;62(5): p399-403. Demura Y; Saito H; Yashiki N.
Lung images: chondrosarcoma on the chest wall. *Lung* 2009; Mar-Apr;187(2): p141-2. Karapolat S.
Chondrosarcoma arising within a radiation-induced osteochondroma several years following childhood total body irradiation: case report. *Skeletal Radiol* 2013; Aug;42(8): p1173-7. Nagata S; Shen RK, et al.
Bone scintigraphic and CT evaluation of chondrosarcoma of the rib: correlation with histological grade in 6 cases. Ann *Nucl Med* 2004; Oct;18(7): p633-6. Ehara S; Nakayama T, et al.
Chondrosarcoma of the chest wall: a clinical analysis. *Surg Today* 2002;32(4): p291-6. Briccoli A; De Paolis M, et al.
Chest wall and liver resection for chondrosarcoma. *Ann Thorac Surg* 2002; Aug;74(2): p598. Noiseux N; Ferraro P, et al.
Primary malignant bone neoplasm: a case report of dedifferentiated chondrosarcoma in the rib and review of the literature. *Chin J Cancer* 2010; Nov;29(11): p964-8. Lin JR; Zhang WM; Wang ZC.

Fine-needle aspiration biopsy diagnosis of costal juxtacortical chondrosarcoma presenting as an abdominal mass. *Diagn Cytopathol* 2010; Nov;38(11): p837-40. Rosa M; Bajestani S, et al.
Costal chondrosarcoma. Report of five cases. NLM General Note:Original Date Completed: 2008.08.001. *Orthop Traumatol Surg Res* 2009; Apr;95(2): p164-9. Bacha D; Ayadi-Kaddour A, et al.

Case No. 9, Accession No. 31685 **February 2015**

Glendale - Chondroblastic osteosarcoma
San Jose - Chondroblastic osteosarcoma
San Francisco (UCSF) - Chondroblastic osteosarcoma
Torrence (Harbor-UCLA Medical Center) - Osteosarcoma
Alabama (Cunningham Pathology) - Periosteal osteosarcoma
Connecticut (Danbury Hospital) - Osteosarcoma, chondroblastic-type
Delaware (Armed Forces Medical Examiner System) - Chondroblastic osteosarcoma
Georgia, Atlanta - Osteosarcoma with focal chondroblastic differentiation
Illinois (Heartland Regional Medical Center) - Osteosarcoma, chondroblastic type
Maryland (University of Maryland Medical Center) - Chondroblastic osteosarcoma
Mississippi (University of Mississippi Medical Center) - Osteosarcoma
New York (University of Rochester Medical Center Residents) - Chondroblastic osteosarcoma
North Carolina, Clemmons - High grade chondroblastic osteosarcoma
Ohio (University of Toledo Medical Center Residents) - Osteosarcoma
Oregon (Oregon Health and Science University Residents) - Osteosarcoma, chondroblastic type
Pennsylvania (Drexel University College of Medicine Residents) - Peristeal osteosarcoma
Puerto Rico (University of Puerto Rico) - Chondroblastic osteosarcoma
Texas, Crystal Beach - Osteosarcoma
Tennessee, Knoxville - Chondroblastic osteosarcoma
Texas, Lubbock - Chondroblastic sarcoma
Australia (Royal Prince Alfred Hospital) - Chondroblastic osteosarcoma
Australia (St. Vincents Hospital) - Chondroblastic osteosarcoma
Canada (Pasqua Hospital) - Chondroblastic osteosarcoma
Canada (Royal Alexandra Hospital) - Osteosarcoma
Japan (Asahi General Hospital) - Chondrosarcoma
Japan (Lions Mansion Nijyo) - Osteosarcoma, chondroblastic
Japan, Setagaya-Ku - Chondrosarcoma

Case 9 - Diagnosis:
Chondroblastic osteosarcoma

Case 9 - References:
Molecular distinction of chondrosarcoma from chondroblastic osteosarcoma through IDH1/2 mutations. *Am J Surg Pathol* 2013; Jun;37(6): p787-95. Kerr DA; Lopez HU, et al.
Urinary bladder radiotherapy-related chondroblastic osteosarcoma: Rare case report and review of literature. *Urol Ann* 2014; Jul;6(3): p247-50. Almadani N; Alsaad KO, et al.
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Case No. 10, Accession No. 32006 **February 2015**

Glendale - Metastatic renal cell carcinoma
San Jose - Metastatic renal cell carcinoma
San Francisco (UCSF) - Metastatic renal cell carcinoma

Torrence (Harbor-UCLA Medical Center) - Metastatic renal cell carcinoma
Alabama (Cunningham Pathology) - Renal cell carcinoma, metastatic
Connecticut (Danbury Hospital) - Metastatic renal cell carcinoma
Delaware (Armed Forces Medical Examiner System) - Metastatic clear cell, renal cell carcinoma
Georgia, Atlanta - Sarcomatoid renal cell carcinoma
Illinois (Heartland Regional Medical Center) - Metastatic renal cell carcinoma, clear cell type
Maryland (University of Maryland Medical Center) - Metastatic clear cell renal cell carcinoma
Mississippi (University of Mississippi Medical Center) - Metastatic renal cell carcinoma
New York (University of Rochester Medical Center Residents) - Metastatic renal cell carcinoma vs. vascular tumor
North Carolina, Clemmons - Metastatic renal cell carcinoma with sarcomatous features
Ohio (University of Toledo Medical Center Residents) - Metastatic renal cell carcinoma
Oregon (Oregon Health and Science University Residents) - Metastatic renal cell carcinoma
Pennsylvania (Drexel University College of Medicine Residents) - Metastatic renal cell carcinoma
Puerto Rico (University of Puerto Rico) - Metastatic clear cell, renal cell carcinoma
Texas, Crystal Beach - Carcinoma metastatic (probably renal with clear cell features)
Tennessee, Knoxville - Metastatic clear cell, renal cell carcinoma
Texas, Lubbock - Metastatic renal cell carcinoma
Australia (Royal Prince Alfred Hospital) - Metastatic clear cell, renal cell carcinoma
Australia (St. Vincents Hospital) - Metastatic renal, clear cell carcinoma
Canada (Pasqua Hospital) - Renal cell carcinoma
Canada (Royal Alexandra Hospital) - Metastatic renal cell carcinoma
Japan (Asahi General Hospital) - Metastatic renal cell carcinoma from kidney
Japan (Lions Mansion Nijyo) - Clear cell, renal cell carcinoma, metastatic
Japan, Setagaya-Ku - Metastasis of clear cell carcinoma

Case 10 - Diagnosis:

Clear cell renal cell carcinoma, metastatic, femur

Case 10 - References:

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