



CALIFORNIA
TUMOR TISSUE REGISTRY

HEMATOLYMPHOID NEOPLASMS

Minutes – Subscription B

September 2009



SUGGESTED READING (General Topics from Recent Literature):

Morphologic Features of 115 Lymphomas of the Orbit and Ocular Adnexa Categorized According to the World Health Organization Classification: Are Marginal Zone Lymphomas in the Orbit Mucosa-Associated Lymphoid Tissue-Type Lymphomas? Lagoo AS, Haggerty C, et al. *Arch Pathol Lab Med* 2008; 132:1405-1416.

Renal Angiomyolipoma: Clinicopathologic Study of 194 Cases With Emphasis on the Epithelioid Histology and Tuberous Sclerosis Association. Aydin H, Magi-Galluzzi C, et al. *Am J Surg Pathol* 2009; 33:289-297.

Personalized Medicine in the Era of Genomics. Burke W and Psaty BM. *JAMA* 2007; 298:1682-1684.

Utility of High Molecular Weight Cytokeratins, But Not p63, in the Differential Diagnosis of Neuroendocrine and Basaloid Carcinomas of the Head and Neck. Serrano MF, El-Mofty SK, et al. *Hum Pathol* 2008; 39:591-598.

Effectiveness of the Thin Prep® Imaging System in the Detection of Adenocarcinoma of the Gynecologic System. Friedlander MA, Rudomina D and Lin O. *Cancer* 2008; 114:7-12.

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FILE DIAGNOSES

CTTR Subscription B

September 2009

Case 1:

Eteropathy associated T-cell lymphoma, small intestine
T-50500, M-95903

Case 2:

Splenic B-cell lymphoma, likely marginal zone, spleen
T-07000, M-95903

Case 3:

Extranodal marginal zone B-cell lymphoma, submandibular gland
T-55300, M-95903

Case 4:

Ectopic thymoma, stenoclavicular
T-12610, M-85800

Case 5:

Encapsulated thymoma, type AB
T-29310, M-85803

Case 6:

Malignant thymoma
T-Y2300, M-85800

Case 7:

Anaplastic large cell lymphoma, T-cell type, cecum
T-67100, T-64000, M-95903

Case 8:

Anaplastic Ki-1 positive T-cell lymphoma, chest wall
T-Y2150, M-95903

Case 9:

MALT lymphoma, stomach
T-63000, M-95903

Case 10:

Classic Hodgkin lymphoma, axillary lymph node
T-08000, M-96503

Canoga Park - Intestinal T-cell lymphoma, high grade
Chico - Intestinal T-cell lymphoma, NOS
Costa Mesa (College Hospital) - T-cell lymphocytic lymphoma
Duarte (City of Hope National Medical Center) - Enteropathy associated T-cell lymphoma
Glendale - High grade T-cell lymphoma
Orinda (Kaiser Permanente) - T-cell lymphoma
San Diego (Naval Medical Center) - Peripheral T-cell, NOS
Georgia, Dunwoody - Enteropathy associated T-cell lymphoma
Illinois (Heartland Regional Medical Center) - Peripheral T-cell lymphoma, large cell
Illinois (Loyola University Medical Center) - Enteropathy associated T-cell lymphoma (EATL type 1-classical)
 associated with intestinal villous atrophy most in keeping with an associated celiac disease
Kansas (Peterson Laboratory Services) - Enteropathy associated T-cell lymphoma
Louisiana (LSU-HSU Pathology) - Peripheral T-cell lymphoma
Maryland (University of Maryland Medical Center) - Peripheral T-cell lymphoma, not otherwise specified
New York (Albany Medical Center) - Diffuse large cell lymphoma
New York (Stony Brook University Hospital) - Enteropathy associated T-cell lymphoma
New York (SUNY Downstate Medical Center) - High grade T-cell lymphoma
New York (Westchester Medical Center) - Peripheral T-cell lymphoma, NOS
Ohio, (Ohio State) - Peripheral T-cell lymphoma (1); Malignant melanoma (1)
Ohio, (University of Toledo Medical Center) - Enteropathy-associated T-cell lymphoma
Pennsylvania (Drexel University College) - Enteropathy associated T-cell lymphoma
Philadelphia (Fox Chase Cancer Center) - Malignant high grade plasmacytoid lymphoma
Pennsylvania (Megee Women's Hospital) - Enteropathic T-cell lymphoma
Puerto Rico (University of Puerto Rico) - Peripheral T-cell lymphoma, NOS
Tennessee, Knoxville - Enteropathy associated T-cell lymphoma
Texas, Crystal Beach - Large cell lymphoma (non-Hodgkins) T-cell
Texas, Lubbock - Anaplastic lymphoma
Texas (San Antonio Hospital) - Anaplastic large cell lymphoma
Texas (Scott & White Hospital) - Enteropathy type intestinal T-cell lymphoma
Texas (University of Texas Health Science Center) - Anaplastic large cell lymphoma
Washington, Bothell - Lymphoplasmacytoid lymphoma
Washington (University of Washington Medical Center) - Enteropathy associated T-cell lymphoma
Wisconsin (St. Mary's Hospital) - Diffuse large cell lymphoma
Canada (University of Sherbrooke) - T-cell lymphoma, enteric type
Japan (Asashi General Hospital) - Enteropathy-associated T-cell lymphoma
Japan (Shizuoka Tokushu-ka Hospital) - Anaplastic large cell lymphoma
Spain (Provisa Medical Center) - Enteropathy type T-cell lymphoma
United Kingdom (John Radcliffe Hospital) - Enteropathy associated T-cell lymphoma

Case 1 - Diagnosis:

Enteropathy associated T-cell lymphoma, small intestine
 T-50500, M-95903

Case 1 - References:

- Zettl A, de Leeuw R, et al. Enteropathy-Type T-Cell Lymphoma. *Am J Clin Pathol* 2007; 127(5):701-706.
 Silano M, Volta U, et al. Effect of a Gluten-Free Diet on the Risk of Enteropathy-Associated T-cell Lymphoma in Celiac Disease. *Dig Dis Sci* 2008; 53(4):972-976.
 Lee MY, Tsou MH, Tan TD, et al. Clinicopathological Analysis of T-cell Lymphoma in Taiwan According to WHO Classification. High Incidence of Enteropathy-Type Intestinal T-Cell Lymphoma. *Eur J Haematol* 2005; 75(3):221-226.
 Nava VE, Cohen P, et al. Enteropathy-Type T-Cell Lymphoma after Intestinal Diffuse Large B-Cell Lymphoma. *Am J Surg Pathol* 2007; 31(3):476-480.
 Al-Toma A, Verbeek WH, et al. Survival in Refractory Coeliac Disease and Enteropathy-Associated T-Cell Lymphoma: Retrospective Evaluation of Single-Centre Experience. *Gut* 2007; 56(10):1373-1378.

Canoga Park - Splenic marginal zone B-cell lymphoma
Chico - B-cell lymphoma, favor splenic marginal zone
Costa Mesa (College Hospital) - Nodular lymphocytic lymphoma, mantle zone
Duarte (City of Hope National Medical Center) - Mantle cell lymphoma
Glendale - B-cell lymphoma
Orinda (Kaiser Permanente) - Mantle cell lymphoma
San Diego (Naval Medical Center) - Mantle cell lymphoma
Georgia, Dunwoody - Splenic marginal zone lymphoma
Illinois (Heartland Regional Medical Center) - Splenic marginal zone lymphoma
Illinois (Loyola University Medical Center) - Mantle cell lymphoma
Kansas (Peterson Laboratory Services) - Mantle cell lymphoma
Louisiana (LSU-HSU Pathology) - Mantle cell lymphoma
Maryland (University of Maryland Medical Center) - Mantle cell lymphoma
New York (Albany Medical Center) - Splenic B-cell marginal zone lymphoma
New York (Stony Brook University Hospital) - Mantle cell lymphoma
New York (SUNY Downstate Medical Center) - Mantle cell lymphoma
New York (Westchester Medical Center) - Splenic lymphoma/leukemia, unclassifiable
Ohio, (Ohio State) - Mantle cell lymphoma (2)
Ohio, (University of Toledo Medical Center) - Splenic B-cell marginal zone lymphoma
Pennsylvania (Drexel University College) - Marginal zone lymphoma
Philadelphia (Fox Chase Cancer Center) - Mantle cell lymphoma (CD5 negative)
Pennsylvania (Megee Women's Hospital) - Extranodal marginal zone lymphoma
Puerto Rico (University of Puerto Rico) - Mantle cell lymphoma
Tennessee, Knoxville - CD5 negative mantle cell lymphoma
Texas, Crystal Beach - Lymphoma, follicular
Texas, Lubbock - Large B-cell lymphoma
Texas (San Antonio Hospital) - Splenic marginal zone lymphoma
Texas (Scott & White Hospital) - Mantle cell lymphoma
Texas (University of Texas Health Science Center) - Splenic marginal zone lymphoma
Washington, Bothell - Mantle cell lymphoma
Washington (University of Washington Medical Center) - Mantle cell lymphoma
Wisconsin (St. Mary's Hospital) - Low grade B-cell lymphoproliferative disorder, marginal zone lymphoma
Japan (Asashi General Hospital) - Splenic B-cell marginal zone lymphoma
Japan (Shizuoka Tokushu-ka Hospital) - Follicular lymphoma
Spain (Provisa Medical Center) - Splenic mantle cell lymphoma
United Kingdom (John Radcliffe Hospital) - Mantle cell lymphoma

Case 2 - Diagnosis:

Splenic B-cell lymphoma, likely marginal zone, spleen
 T-07000, M-95903

Outside Consultation: Jun Wang, M.D.: "Splenic B-cell lymphoma, likely marginal zone."

Case 2 - References:

Baro C, Salido M, et al. New Chromosomal Alterations in a Series of 23 Splenic Marginal Zone Lymphoma Patients Revealed By Spectral Karyotyping (SKY). *Leuk Res* 2008; 32(5):727-736.
 Lefebvre C, Fabre B, et al. Composite Splenic Marginal Zone Lymphoma and Mantle Cell Lymphoma Arising from 2 Independent B-Cell Clones. *Hum Pathol* 2007; 38(4):660-667.
 Wang SA, Olson N, Zukerberg L, et al. Splenic Marginal Zone Lymphoma with Micronodular T-Cell Rich B-Cell Lymphoma. *Am J Surg Pathol* 2006; 30(1):128-132.
 Arcaini L, Paulli M, et al. Splenic and Nodal Marginal Zone Lymphomas are Indolent Disorders at High Hepatitis C Virus Seroprevalence with Distinct Presenting Features but Similar Morphologic and Phenotypic Profiles. *Cancer* 2004; 100(1):107-115.

Thieblemont C, Nasser V, et al. Small Lymphocytic Lymphoma, Marginal Zone B-Cell Lymphoma, and Mantle Cell Lymphoma Exhibit Distinct Gene-Expression Profiles Allowing Molecular Diagnosis. *Blood* 2004; 103(7):2727-2737.

Sathanoori M, Shekhter-Levin S, Marks SM, et al. Derivative (14) t (11; 14) (q13; q32) t(11; 14) (p11.2; p211.2); A Novel Unbalanced Variant of the t (11; 14)(q13; q32) Translocation in Mantle Cell Lymphoma. *Cancer Genet Cytogenet* 2007; 15;172(2):158-164.

Case No. 3, Accession No. 31061

September 2009

Canoga Park - Mikulicz's disease

Chico - MALT lymphoma

Costa Mesa (College Hospital) - Malignant lymphoma, small lymphocytic, plasmacytoid

Duarte (City of Hope National Medical Center) - Marginal zone lymphoma

Glendale - Lymphoma

Orinda (Kaiser Permanente) - Hemophagocytic syndrome

San Diego (Naval Medical Center) - Extranodal marginal zone lymphoma

Georgia, Dunwoody - Extranodal marginal zone lymphoma

Illinois (Heartland Regional Medical Center) - MALT lymphoma, low grade

Illinois (Loyola University Medical Center) - Extra-nodal marginal zone lymphoma with plasmacytic differentiation (MALT type)

Kansas (Peterson Laboratory Services) - Marginal zone lymphoma

Louisiana (LSU-HSU Pathology) - Marginal zone lymphoma with hemophagocytic lymphohistiocytosis

Maryland (University of Maryland Medical Center) - MALT lymphoma

New York (Albany Medical Center) - MALT

New York (Stony Brook University Hospital) - Reactive lymph node with hemophagocytosis

New York (SUNY Downstate Medical Center) - Mikulicz's disease

New York (Westchester Medical Center) - Marginal zone B-cell lymphoma

Ohio, (Ohio State) - Lymphoplasmacytic lymphoma (2)

Ohio, (University of Toledo Medical Center) - Lymphoplasmacytic lymphoma

Pennsylvania (Drexel University College) - Marginal zone lymphoma, plasmacytic differentiation

Philadelphia (Fox Chase Cancer Center) - MALT lymphoma with plasma cell differentiation

Pennsylvania (Megee Women's Hospital) - MALT lymphoma

Puerto Rico (University of Puerto Rico) - Extranodal marginal zone lymphoma

Tennessee, Knoxville - MALT lymphoma vs. myoepithelial sialadenitis

Texas, Crystal Beach - Lymphoepithelial lesion

Texas, Lubbock - Small lymphocytic/plasmacytic lymphoma

Texas (San Antonio Hospital) - Lymphoepithelial sialadenitis

Texas (Scott & White Hospital) - Marginal zone lymphoma

Texas (University of Texas Health Science Center) - Lymphoepithelial sialadenitis

Washington, Bothell - PTGC vs. FL

Washington (University of Washington Medical Center) - Extranodal marginal zone lymphoma (MALT lymphoma)

Wisconsin (St. Mary's Hospital) - Low grade B-cell lymphoma of MALT

Canada (University of Sherbrooke) - MALT lymphoma

Japan (Asahi General Hospital) - Extranodal marginal zone B-cell lymphoma

Japan (Shizuoka Tokushu-ka Hospital) - Lymphoepithelial sialadenitis

Spain (Provisa Medical Center) - MALT lymphoma

United Kingdom (John Radcliffe Hospital) - Extranodal marginal zone B-cell lymphoma

Case 3 - Diagnosis:

Extranodal marginal zone B-cell lymphoma, submandibular gland
T-55300, M-95903

Case 3 - References:

Vega F, Lin P and Medeiros LJ. Extranodal Lymphomas of the Head and Neck. *Ann Diagn Pathol* 2005; 9(6):340-350.

Zucca E, Bertoni F, et al. Marginal Zone Lymphomas. *Hematol Oncol Clin North Am* 2008; 22(5):883-901 VIII.

Inamdar KV, Medeiros LJ, et al. Bone Marrow Involvement by Marginal Zone B-Cell Lymphomas of Different Types. *Am J Clin Pathol* 2008; 129(5):714-722.

Kojima M, Nakamura S, et al. Kuttner's Tumor of Salivary Glands Resembling Marginal Zone B-Cell Lymphoma of the MALT Type: A Histopathologic and Immunohistochemical Study of 7 Cases. *Int J Surg Pathol* 2004; 12(4):389-393.

Fairweather PM, Williamson R and Tsiklas G. Pulmonary Extranodal Marginal Zone Lymphoma with Massive Crystal Storing Histiocytosis. *Am J Surg Pathol* 2006; 30(2):262-267.

Case No. 4, Accession No. 31010

September 2009

Canoga Park - Fibroblastic dendritic cell tumor
Chico - SETTLE, SFT, thymoma, monophasic synovial sarcoma
Costa Mesa (College Hospital) - Type A (spindle medullary) thymoma
Duarte (City of Hope National Medical Center) - Synovial sarcoma
Glendale - Spindled thymoma/SETTLE
Orinda (Kaiser Permanente) - Thymoma, Type A
San Diego (Naval Medical Center) - Thymoma, type A
Georgia, Dunwoody - Type A, thymoma
Illinois (Heartland Regional Medical Center) - Thymoma
Illinois (Loyola University Medical Center) - Thymoma (type A)
Kansas (Peterson Laboratory Services) - Thymoma
Louisiana (LSU-HSU Pathology) - Type A, thymoma
Maryland (University of Maryland Medical Center) - Spindle cell type thymoma
New York (Albany Medical Center) - Synovial sarcoma
New York (Stony Brook University Hospital) - Synovial sarcoma
New York (SUNY Downstate Medical Center) - Thymoma, type A
New York (Westchester Medical Center) - Thymoma, type A
Ohio, (Ohio State) - Solitary fibrous tumor (1); thymoma, type A (1)
Ohio, (University of Toledo Medical Center) - Synovial sarcoma
Pennsylvania (Drexel University College) - Epithelial thymoma, type A
Philadelphia (Fox Chase Cancer Center) - Solitary fibrous tumor
Pennsylvania (Megee Women's Hospital) - Spindle cell thymoma
Puerto Rico (University of Puerto Rico) - Type A, thymoma
Tennessee, Knoxville - Type A, thymoma
Texas, Crystal Beach - Metastatic carcinoma
Texas, Lubbock - Metastatic lung carcinoma
Texas (San Antonio Hospital) - Synovial sarcoma
Texas (Scott & White Hospital) - Spindle cell thymoma
Texas (University of Texas Health Science Center) - Synovial sarcoma
Washington, Bothell - Spindle cell carcinoma
Washington (University of Washington Medical Center) - Solitary fibrous tumor/hemangiopericytoma
Wisconsin (St. Mary's Hospital) - Synovial sarcoma
Canada (University of Sherbrooke) - Thymoma
Japan (Asahi General Hospital) - Synovial sarcoma
Spain (Provisa Medical Center) - Synovial sarcoma
United Kingdom (John Radcliffe Hospital) - Spindle cell thymoma

Case 4 - Diagnosis:

Ectopic thymoma, sternoclavicular
 T-12610, M-85800

Consultation: Sharon Weiss, M.D.; Emory University School of Medicine: "Sternoclavicular joint area, excision: Ectopic hamatomatous thymoma with atypical features."

Case 4 - References:

- Choi JH, Shim YR and Song SY. Fine Needle Aspiration Cytology of Ectopic Hamartomatous Thymoma. *Acta Cytol* 2007; 51(4):672-675.
- Weinreb I, O'Malley F and Ghazarian D. Ectopic Hamartomatous Thymoma. A Case Demonstrating Skin Adnexal Differentiation with Positivity for Epithelial Membrane Antigen, Androgen Receptors, and BRST-2 by Immunohistochemistry. *Hum Pathol* 2007; 38(7):1092-1095.
- Kushida Y, Haba R, Kobayashi S, Ishikawa M, et al. Ectopic Hamartomatous Thymoma. A Case Report with Immunohistochemical Study and Review of the Literature. *J Cutan Pathol* 2006; 33(5):369-372.
- Lida E, Okazaki M, Sarukawa S, et al. Ectopic Hamartomatous Thymoma Growing in the Sternocleidomastoid Muscle Masquerading as Sarcoma. *Scand J Plast Reconstr Surg Hand Surg* 2006; 40(4):249-252.
- Fetsch JF, Laskin WB, Michal M, et al. Ectopic Hamartomatous Thymoma. A Clinicopathologic and Immunohistochemical Analysis of 21 Cases with Data Supporting Reclassification as a Branchial Anlage Mixed Tumor. *Am J Surg* 2004; 28(10):1360-1370.
- Henderson CJ and Gupta L. Ectopic Hamartomatous Thymoma. A Case Study and Review of the Literature. *Pathol* 2000; 32(2):142-146.

Case No. 5, Accession No. 30845

September 2009

Canoga Park - Lymphocyte predominant thymoma
Chico - Thymoma
Costa Mesa (College Hospital) - Burkitt's lymphoma
Duarte (City of Hope National Medical Center) - Thymoma
Glendale - Thymoma
Orinda (Kaiser Permanente) - Thymoma, Type AB
San Diego (Naval Medical Center) - Thymoma
Georgia, Dunwoody - Type B2, thymoma
Illinois (Heartland Regional Medical Center) - Thymoma
Illinois (Loyola University Medical Center) - Thymoma (Type B1)
Kansas (Peterson Laboratory Services) - Thymoma, lymphocyte predominant
Louisiana (LSU-HSU Pathology) - Type B1, thymoma
Maryland (University of Maryland Medical Center) - Mixed lymphoepithelial type thymoma
New York (Albany Medical Center) - Thymoma
New York (Stony Brook University Hospital) - Thymoma, B1
New York (SUNY Downstate Medical Center) - Thymoma, type AB
New York (Westchester Medical Center) - Thymoma, type AB
Ohio, (Ohio State) - Thymoma (1); Thymoma, type B1 (1)
Ohio, (University of Toledo Medical Center) - Lymphocyte-predominant thymoma
Pennsylvania (Drexel University College) - Thymoma, type B
Philadelphia (Fox Chase Cancer Center) - Encapsulated thymoma (WHO type AB)
Pennsylvania (Megee Women's Hospital) - Thymoma
Puerto Rico (University of Puerto Rico) - Type B, thymoma
Tennessee, Knoxville - Type AB, thymoma
Texas, Crystal Beach - Thymic lymphoma
Texas, Lubbock - Thymoma
Texas (San Antonio Hospital) - Thymoma, type B1
Texas (Scott & White Hospital) - Predominantly lymphocytic thymoma
Texas (University of Texas Health Science Center) - Thymoma, type B1
Washington, Bothell - Thymoma
Washington (University of Washington Medical Center) - Thymoma (WHO B1)
Wisconsin (St. Mary's Hospital) - Thymoma
Canada (University of Sherbrooke) - Thymoma
Japan (Asahi General Hospital) - Thymoma, type B1
Japan (Shizuoka Tokushu-ka Hospital) - Thymoma, B1
Spain (Provisa Medical Center) - Thymoma, B2
United Kingdom (John Radcliffe Hospital) - Thymoma, type AB

Case 5 - Diagnosis:

Encapsulated thymoma, type AB
T-29310, M-85803

Case 5 - References:

Kondo K, Yoshizawa K, et al. WHO Histologic Classification is a Prognostic Indicator in Thymoma. *Ann Thorac Surg* 2004; 77(4):1183-1188.
Shiraishi J, Tsugata M, et al. Type AB Thymoma Accompanied by Pure Red Cell Aplasia and Good Syndrome with CMV Infection of Tumor Cells. *Pathol Int* 2008; 58(8):489-493.
Nonaka D, Henley JD, et al. Diagnostic Utility of Thymic Epithelial Markers CD205 (DEC205) and Foxn1 in Thymic Epithelial Neoplasms. *Am J Surg Pathol* 2007; 31(7):1038-1044.
Dotto J, Pelosi G and Rosai J. Expression of p63 in Thymomas and Normal Thymus. *Am J Clin Pathol* 2007; 127(3):415-420.
Marchevsky AM, Gupta R, et al. Evidence-Based Pathology and the Pathologic Evaluation of Thymomas. The World Health Organization Classification Can Be Simplified Into Only 3 Categories Other Than Thymic Carcinoma. *Cancer* 2008; 112(12):2780-2788.

Case No. 6, Accession No. 30650

September 2009

Canoga Park - Thymic carcinoma
Chico - Invasive thymoma
Costa Mesa (College Hospital) - B2, thymoma
Duarte (City of Hope National Medical Center) - Thymoma
Glendale - Invasive thymoma
Orinda (Kaiser Permanente) - Thymoma, type AB
San Diego (Naval Medical Center) - Thymoma
Georgia, Dunwoody - Type B3 thymoma/well-differentiated thymic carcinoma
Illinois (Heartland Regional Medical Center) - Invasive thymoma
Illinois (Loyola University Medical Center) - Thymoma (type B2), stage T3 with associated thymic lymphoid (follicular) hyperplasia
Kansas (Peterson Laboratory Services) - Thymic large cell lymphoma
Louisiana (LSU-HSU Pathology) - Type B3, thymoma
Maryland (University of Maryland Medical Center) - Epithelial type thymoma
New York (Albany Medical Center) - T-cell histiocytic large B-cell lymphoma
New York (Stony Brook University Hospital) - Thymoma, B3
New York (SUNY Downstate Medical Center) - Thymoma, type B3
New York (Westchester Medical Center) - Thymoma, type B2
Ohio, (Ohio State) - Primary mediastinal B-cell lymphoma (1); Thymoma, type B2 (1)
Ohio, (University of Toledo Medical Center) - Malignant thymoma
Pennsylvania (Drexel University College) - Thymic carcinoma
Philadelphia (Fox Chase Cancer Center) - Thymic (WHO, type B)
Pennsylvania (Megee Women's Hospital) - Thymoma
Puerto Rico (University of Puerto Rico) - Type AB thymoma/R/O primary mediastinal large B-cell lymphoma
Tennessee, Knoxville - Combined type B2 and B3 thymoma
Texas, Crystal Beach - Malignant thymoma
Texas, Lubbock - Thymoma
Texas (San Antonio Hospital) - Thymoma, type AB
Texas (Scott & White Hospital) - Predominantly mixed thymoma
Texas (University of Texas Health Science Center) - Thymoma, type AB
Washington, Bothell - Thymoma
Washington (University of Washington Medical Center) - Thymoma (WHO B2)
Wisconsin (St. Mary's Hospital) - Thymoma
Canada (University of Sherbrooke) - Thymoma
Japan (Asashi General Hospital) - Micronodular thymoma with lymphoid stroma
Japan (Shizuoka Tokushu-ka Hospital) - Thymoma, B3
Spain (Provisa Medical Center) - Thymoma, B3

United Kingdom (John Radcliffe Hospital) - Invasive thymoma, type B2

Case 6 - Diagnosis:

Malignant thymoma
T-Y2300, M-85800

Case 6 - References:

- Riedel RF and Burfeind WR. Thymoma: Benign Appearance, Malignant Potential. *Oncologist* 2006; 11(8):887-894.
- Sajwani RA, Gowani SA, et al. Extensive Primary Malignant Thymoma Involving Pericardium, Pleura, Diaphragm and Lungs. A Case Report. *J Pak Med Assoc* 2008; 58(5):287-288.
- Okumura M, Shiono H, et al. Clinical and Pathological Aspects of Thymic Epithelial Tumors. *Gen Thorac Cardiovasc Surg* 2008; 10-16.
- Bavi P, Shet T and Gujral S. Malignant Melanoma of Mediastinum Misdiagnosed as a Spindle Cell Thymoma in a Fine Needle Aspirate. A Case Report. *Acta Cytol* 2005; 49(4):424-426.
- Pantidou A, Kiziridou A, et al. Mediastinum Thymoma Diagnosed by FNA and ThinPrep Technique. A Case Report. *Diagn Cytopathol* 2006; 34(1):37-40.

Case No. 7, Accession No. 28487

September 2009

Canoga Park - Anaplastic large cell lymphoma
Chico - Anaplastic large cell lymphoma
Costa Mesa (College Hospital) - Nodular sclerosis Hodgkins disease
Duarte (City of Hope National Medical Center) - Anaplastic large cell lymphoma
Glendale - High grade B-cell lymphoma
Orinda (Kaiser Permanente) - Anaplastic large cell lymphoma
San Diego (Naval Medical Center) - Malignant lymphoma, NOS
Georgia, Dunwoody - Anaplastic large cell lymphoma
Illinois (Heartland Regional Medical Center) - Non-Hodgkins large cell lymphoma, diffuse
Illinois (Loyola University Medical Center) - Anaplastic diffuse large B-cell lymphoma (DLBCL)
Kansas (Peterson Laboratory Services) - Anaplastic large cell lymphoma
Louisiana (LSU-HSU Pathology) - Anaplastic large cell lymphoma
Maryland (University of Maryland Medical Center) - Anaplastic large cell T-cell lymphoma
New York (Albany Medical Center) - Anaplastic large cell lymphoma
New York (Stony Brook University Hospital) - Anaplastic large cell lymphoma
New York (SUNY Downstate Medical Center) - Anaplastic large cell lymphoma
New York (Westchester Medical Center) - Anaplastic large cell lymphoma
Ohio, (Ohio State) - Anaplastic large cell lymphoma (2)
Ohio, (University of Toledo Medical Center) - Anaplastic large cell lymphoma
Pennsylvania (Drexel University College) - Anaplastic large cell lymphoma
Philadelphia (Fox Chase Cancer Center) - Anaplastic large cell lymphoma
Pennsylvania (Megee Women's Hospital) - Anaplastic B-cell lymphoma
Puerto Rico (University of Puerto Rico) - Anaplastic large cell lymphoma
Tennessee, Knoxville - Anaplastic large cell lymphoma
Texas, Crystal Beach - Large cell lymphoma
Texas, Lubbock - Large cell lymphoma
Texas (San Antonio Hospital) - Anaplastic large cell lymphoma (null type)
Texas (Scott & White Hospital) - Anaplastic large cell lymphoma
Texas (University of Texas Health Science Center) - Anaplastic large cell lymphoma (null type)
Washington, Bothell - ALCL
Washington (University of Washington Medical Center) - Anaplastic large cell lymphoma
Wisconsin (St. Mary's Hospital) - Malignant lymphoma, favor Hodgkins lymphoma
Canada (University of Sherbrooke) - Anaplastic lymphoma
Japan (Asashi General Hospital) - Anaplastic large cell lymphoma
Japan (Shizuoka Tokushu-ka Hospital) - Hodgkins lymphoma, lymphocyte depletion
Spain (Provisa Medical Center) - Anaplastic large B-cell diffuse lymphoma
United Kingdom (John Radcliffe Hospital) - Anaplastic large cell lymphoma

Case 7 - Diagnosis:

Anaplastic large cell lymphoma, T-cell type, cecum
T-67100, T-64000, M-95903

Consultation: Milton Drachenberg, M.D., Ph.D. (LLUMC), “Anaplastic large cell lymphoma, T-cell type.”

Case 7 - References:

- Aragon Sanchez FJ, Garcia Molina FJ, Rodriguez Fernandez A, et al. Primary Colorectal Lymphoma. *Rev Esp Enferm Dig* 1997; 89(12):903-918.
- Kohn S, Ohshima K, Yoneda S, et al. Clinicopathological Analysis of 143 Primary Malignant Lymphomas in the Small and Large Intestines Based on the New WHO Classification. *Histopathol* 2003; 43(2):135-143.
- Carey MJ, Medeiros LJ, Roepke JE, et al. Primary Anaplastic Large Cell Lymphoma of the Small Intestine. *Am J Clin Pathol* 1999; 112(5):696-701.
- Schmitt-Graff A, Hummel M, et al. Intestinal T-Cell Lymphoma: A Reassessment of Cytomorphological and Phenotypic Features in Relation to Patterns of Small Bowel Remodeling. *Virchows Arch* 1996; 429(1):27-36.

Case No. 8, Accession No. 27850**September 2009**

Canoga Park - Germinoma of mediastinum

Chico - ALCL

Costa Mesa (College Hospital) - Anaplastic large cell lymphoma

Duarte (City of Hope National Medical Center) - Anaplastic large cell lymphoma

Glendale - Anaplastic large cell lymphoma

Orinda (Kaiser Permanente) - Anaplastic large cell lymphoma

San Diego (Naval Medical Center) - Anaplastic large cell lymphoma

Georgia, Dunwoody - Anaplastic large cell lymphoma

Illinois (Heartland Regional Medical Center) - Peripheral T-cell lymphoma, large cell

Illinois (Loyola University Medical Center) - Anaplastic large cell lymphoma (ALCL)

Kansas (Peterson Laboratory Services) - Anaplastic large cell lymphoma

Louisiana (LSU-HSU Pathology) - Primary effusion lymphoma

Maryland (University of Maryland Medical Center) - Anaplastic large cell T-cell lymphoma

New York (Albany Medical Center) - Pyothorax-associated lymphoma

New York (Stony Brook University Hospital) - T-cell lymphoma favor anaplastic large cell

New York (SUNY Downstate Medical Center) - Anaplastic large cell lymphoma

New York (Westchester Medical Center) - Anaplastic large cell lymphoma

Ohio, (Ohio State) - Peripheral T-cell lymphoma (2)

Ohio, (University of Toledo Medical Center) - Anaplastic large cell lymphoma

Pennsylvania (Drexel University College) - Anaplastic large cell lymphoma

Philadelphia (Fox Chase Cancer Center) - Anaplastic large cell lymphoma

Pennsylvania (Megee Women's Hospital) - Anaplastic lymphoma, T-cell phenotype

Puerto Rico (University of Puerto Rico) - Anaplastic large cell lymphoma

Tennessee, Knoxville - Anaplastic large cell lymphoma

Texas, Crystal Beach - Anaplastic (large cell) lymphoma

Texas, Lubbock - Mantle lymphoma, blastic

Texas (San Antonio Hospital) - Peripheral T-cell lymphoma

Texas (Scott & White Hospital) - Large cell lymphoma

Texas (University of Texas Health Science Center) - Peripheral T-cell lymphoma

Washington, Bothell - Lymphocyte deplete Hodgkins

Washington (University of Washington Medical Center) - Anaplastic large cell lymphoma

Wisconsin (St. Mary's Hospital) - Anaplastic large cell lymphoma

Canada (University of Sherbrooke) - Anaplastic lymphoma, large cell

Japan (Asashi General Hospital) - Anaplastic large cell lymphoma

Japan (Shizuoka Tokushu-ka Hospital) - Anaplastic large cell lymphoma

Spain (Provisa Medical Center) - Anaplastic large T-cell lymphoma

United Kingdom (John Radcliffe Hospital) - Peripheral T-cell lymphoma, unspecified

Case 8 - Diagnosis:

Anaplastic Ki-1 positive large T-cell lymphoma, chest wall
T-Y2150, M-95903

Case 8 - References:

- Savage KJ, Harris NL, et al. ALK-Anaplastic Large-Cell Lymphoma is Clinically and Immunophenotypically Different From Both ALK+ ALCL and Peripheral T-Cell Lymphoma, Not Otherwise Specified. Report From the International Peripheral T-Cell Lymphoma Project. *Blood* 2008; 111(12):5496-54504.
- Parlette EC and Tabor CA. CD30+, Large T-Cell Lymphoma. Diagnostic Distinction and Management. *Dermatol Online J* 2006; 12(6):8.
- Coyne JD, Banerjee SS, et al. Post-Transplant T-Cell Lymphoproliferative Disorder/T-Cell Lymphoma. A Report of Three Cases of T-Anaplastic Large-Cell Lymphoma with Cutaneous Presentation and a Review of the Literature. *Histopathol* 2004; 44(4):387-393.
- Massone C, El-Shabrawi-Caelen L, et al. The Morphologic Spectrum of Primary Cutaneous Anaplastic Large T-Cell Lymphoma. A Histopathologic Study on 66 Biopsy Specimens From 47 Patients with Report of Rare Variants. *J Cutan Pathol* 2008; 35(1):46-53.

Case No. 9, Accession No. 30724

September 2009

Canoga Park - Small cell lymphocytic lymphoma
Chico - Lymphoma morphologically low grade? MALT
Costa Mesa (College Hospital) - MALT lymphoma
Duarte (City of Hope National Medical Center) - Low grade B-cell lymphoma
Glendale - Lymphoma
Orinda (Kaiser Permanente) - Low grade B-cell lymphoma, favor MALT
San Diego (Naval Medical Center) - Mantle cell lymphoma
Georgia, Dunwoody - Small cell lymphoma, rule out mantle cell lymphoma
Illinois (Heartland Regional Medical Center) - Non-Hodgkin lymphoma, diffuse, low grade, favor MALT
Illinois (Loyola University Medical Center) - Small B-cell non-Hodgkins lymphoma, most consistent with extra-nodal marginal zone lymphoma
Kansas (Peterson Laboratory Services) - Mantle cell lymphoma
Louisiana (LSU-HSU Pathology) - Small lymphocytic lymphoma
Maryland (University of Maryland Medical Center) - MALT lymphoma
New York (Albany Medical Center) - MALT
New York (Stony Brook University Hospital) - Mantle cell lymphoma
New York (SUNY Downstate Medical Center) - Lymphoma composed of small lymphocytes, more IHC needed for further classification
New York (Westchester Medical Center) - Mantle cell lymphoma
Ohio, (Ohio State) - MALT lymphoma (1); Extranodal marginal zone lymphoma (MALT lymphoma) (1)
Ohio, (University of Toledo Medical Center) - Extranodal marginal zone lymphoma of mucosa-associated lymphoid tissue
Pennsylvania (Drexel University College) - Marginal zone lymphoma
Philadelphia (Fox Chase Cancer Center) - Lymphoma (lymphosarcoma)
Pennsylvania (Megee Women's Hospital) - Small lymphocytic leukemia
Puerto Rico (University of Puerto Rico) - Small cell lymphoma, rule out extranodal marginal zone lymphoma
Tennessee, Knoxville - Low grade lymphoma (probably B cell) need stains
Texas, Crystal Beach - Diffuse small cell lymphoma
Texas, Lubbock - Large cell lymphoma
Texas (San Antonio Hospital) - MALT lymphoma
Texas (Scott & White Hospital) - Low grade lymphoma
Texas (University of Texas Health Science Center) - MALT lymphoma
Washington, Bothell - MALT lymphoma
Washington (University of Washington Medical Center) - Favor extranodal marginal zone (MALT) lymphoma due to location (would like cyclin D1 to rule out mantle cell lymphoma)
Wisconsin (St. Mary's Hospital) - Low grade lymphoma, probably MALToma

Canada (University of Sherbrooke) - Small cell lymphoma
Japan (Asashi General Hospital) - Small lymphocytic lymphoma
Japan (Shizuoka Tokushu-ka Hospital) - Mantle cell lymphoma
Spain (Provisa Medical Center) - MALT lymphoma
United Kingdom (John Radcliffe Hospital) - Extranodal marginal zone B-cell lymphoma

Case 9 - Diagnosis:

MALT lymphoma, stomach
T-63000, M-95903

Case 9 - References:

Holanda D, Zhao MY, Rapoport AP, et al. Primary Gastric T-Cell Lymphoma Mimicking Marginal Zone B-Cell Lymphoma of Mucosa-Associated Lymphoid Tissue. *J Hematop* 2008; 1(1):29-35.
Zullo A, Hassan C, Cristofari F, et al. Effects of Helicobacter Pylori Eradication on Early Stage Gastric Mucosa-Associated Lymphoid Tissue Lymphoma. *Clin Gastroenterol Hepatol* 2009.
Zullo A, Hassan C Andriani A, et al. Eradication Therapy for Helicobacter Pylori in Patients with Gastric MALT Lymphoma. A Pooled Data Analysis. *Am J Gastroenterol* 2009; 104(8):1932-1937.
Iwai H, Nakamichi N, Nakae K, et al. Parotid Mucosa-Associated Lymphoid Tissue Lymphoma Regression After Helicobacter Pylori Eradication. *Laryngoscope* 2009; 119(8):1491-1494.
Vento S and Tanko MN. The Bacterium That Could Cause Cancer. *Lancet Oncol* 2009; 10(5):528.

Case No. 10, Accession No. 31108

September 2009

Canoga Park - Classical Hodgkins lymphoma
Chico - N.S. Hodgkin lymphoma
Costa Mesa (College Hospital) - Nodular sclerosis Hodgkin disease
Duarte (City of Hope National Medical Center) - Classical Hodgkin lymphoma
Glendale - Hodgkin's disease
Orinda (Kaiser Permanente) - PAX-5-negative Hodgkin lymphoma vs. peripheral T-cell lymphoma, NOS
San Diego (Naval Medical Center) - Nodular sclerosis classical Hodgkin lymphoma
Georgia, Dunwoody - Classical Hodgkin lymphoma, nodular sclerosis subtype
Illinois (Heartland Regional Medical Center) - Hodgkin lymphoma, classical, nodular sclerosis
Illinois (Loyola University Medical Center) - Classical Hodgkin's lymphoma, nodular sclerosis type
Kansas (Peterson Laboratory Services) - Classic Hodgkin's lymphoma, nodular sclerosing
Louisiana (LSU-HSU Pathology) - Nodular sclerosis Hodgkin lymphoma
Maryland (University of Maryland Medical Center) - Classical Hodgkin's, nodular sclerosing variant
New York (Albany Medical Center) - Hodgkin lymphoma mixed cellularity
New York (Stony Brook University Hospital) - Hodgkin's lymphoma, nodular sclerosing
New York (SUNY Downstate Medical Center) - Classical Hodgkin lymphoma
New York (Westchester Medical Center) - Classical Hodgkin lymphoma, nodular sclerotic type
Ohio, (Ohio State) - Nodular sclerosing Hodgkin lymphoma (2)
Ohio, (University of Toledo Medical Center) - Nodular sclerosis classical Hodgkin lymphoma
Pennsylvania (Drexel University College) - Hodgkin's lymphoma, nodular sclerosis
Philadelphia (Fox Chase Cancer Center) - Classical Hodgkin lymphoma, nodular sclerosis
Pennsylvania (Megee Women's Hospital) - Nodular sclerosing Hodgkin lymphoma
Puerto Rico (University of Puerto Rico) - Nodular sclerosis classical Hodgkin lymphoma
Tennessee, Knoxville - Classical Hodgkin lymphoma, nodular sclerosis subtype
Texas, Crystal Beach - Hodgkin's lymphoma
Texas, Lubbock - Hodgkin's lymphoma
Texas (San Antonio Hospital) - Classical Hodgkin lymphoma, favor mixed cellularity over NS
Texas (Scott & White Hospital) - Nodular sclerosing Hodgkin's lymphoma
Texas (University of Texas Health Science Center) - Classical Hodgkin lymphoma, favor mixed cellularity over NS
Washington, Bothell - NS Hodgkins
Washington (University of Washington Medical Center) - Classical Hodgkin lymphoma
Wisconsin (St. Mary's Hospital) - Hodgkin's lymphoma, nodular sclerosis type

Canada (University of Sherbrooke) - Hodgkin lymphoma

Japan (Asahi General Hospital) - Hodgkin lymphoma, nodular sclerosis type

Japan (Shizuoka Tokushu-ka Hospital) - Hodgkin's lymphoma, mixed cellularity

Spain (Provisa Medical Center) - Hodgkin sclerosis nodular

United Kingdom (John Radcliffe Hospital) - Classical Hodgkin's lymphoma, nodular sclerosing type

Case 10 - Diagnosis:

Classic Hodgkin lymphoma, axillary lymph node
T-08000, M-96503

Director's Note: The correct spelling of this tumor lacks an apostrophe (i.e. "Hodgkin lymphoma" is favored over "Hodgkin's lymphoma")

Case 10 - References:

Felberbaum RS. The Molecular Mechanisms of Classic Hodgkin's Lymphoma. *Yale J Biol Med* 2005; 78(4):203-210.

Fraga M and Forteza J. Diagnosis of Hodgkin's Disease. An Update on Histopathological and Immunophenotypic Features. *Histol Histopathol* 2007; 22(8):923-935.

Ansell SM and Armitage JO. Management of Hodgkin Lymphoma. *Mayo Clin Proc* 2006; 81(3):419-426.

Aldred V, Vassallo J, et al. CK20 Expression by Hodgkin-Reed-Sternberg Cells in Classical Hodgkin Lymphoma is Related to Reduced Overall Survival in Young Adult Patients. *Leuk Lymphoma* 2008; 49(11):2198-2202.

Tamaru J, Tokuhira M, et al. Hodgkin-Like Anaplastic Large Cell Lymphoma (Previously Designated in the REAL Classification) Has Same Immunophenotypic Features to Classical Hodgkin Lymphoma. *Leuk Lymphoma* 2007; 48(6):1127-1138.