



CALIFORNIA
TUMOR TISSUE REGISTRY

“Lymph & Spleen”

Minutes – Subscription B

April, 2006



SUGGESTED READING (General Topics from Recent Literature):

Initial Staging Of Lymphoma With Positron Emission Tomography And Computed Tomography. Hicks RJ, Mac Manus MP, Seymour JF. *Sem Nucl Med*, 2005 Jul; 35(3):165-75. Review.

Injury to the Spleen. Peitzman AB, Ford HR, Harbrecht BG, et al. *Curr Probl Surg*, 2001 Dec; 38(12):932-1008.

Do Bone Marrow Micrometastases Correlate With Sentinel Lymph Node Metastases In Breast Cancer Patients? Trocciola SM, Hoda S, Osborne MP, et al. *J Am Coll Surg*, 2005 May; 200(5):720-6.

The Myelodysplastic Syndromes: Diagnosis And Treatment. Steensma DP, Bennett JM. *Mayo Clin Proc*, 2006 Jan; 81(1):104-30.

Axillary Lymph Node Metastasis In Stage T1a Breast Cancer: A Pathologic Review Of 82 Patients. Whitten TM, Fraser HR, Christensen WN, Turk PS. *The American Surgeon*, 1997 Feb; 63:144-9.

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FILE DIAGNOSES

(Preferably submitted on website at www.cttr.org. Click “subscriptions”, then “submit answers.”)

CTTR Subscription B

Case 1:

**Inflammatory pseudotumor (inflammatory myofibroblastic tumor), spleen
T-07000, M-76820**

Case 2:

**Lipid storage disease consistent with Niemann-Pick Disease, spleen
T-07000, D-1420**

Case 3:

**Hodgkin’s lymphoma, nodular sclerosis variant, cervical lymph nodes
T-08200, M-96503**

Case 4:

**Follicular lymphoma, Grade II (Follicular center cell lymphoma, cleaved cell predominant)
T-08810, M-96903**

Case 5:

**Marginal zone B-cell lymphoma, spleen
T-07000, M-9590/3**

Case 6:

**Diffuse large B-cell lymphoma, ovary
T-87000, M-9590/3**

Case 7:

**Splenic lipidosis with extramedullary hematopoiesis, likely secondary to high turnover
myelodysplastic syndrome
T-07000, M-73500, D-1400**

Case 8:

**Metastatic serous adenocarcinoma, likely of peritoneal surface origin, spleen
T-07000, M-8441/6**

Case 9:

**Increased blasts with early extramedullary transformation to acute myeloid leukemia.
Myeloid metaplasia in spleen/lymph nodes consistent with history of myelofibrosis, spleen
T-07000, M-9860/3**

Case 10:

**Co-existent Herpetic lymphadenitis and chronic B-cell lymphoma/leukemia, lymph node
T-08000, M-40000, M-9590/3**

Escondido - Amyloidosis
Glendale - ?Granuloma
Orange (UCI Medical Center Residents) - Splenic hamartoma
Palo Alto Pathology - Littoral cell angioma and Castleman's disease
San Francisco (San Francisco General Hospital) - Littoral cell angioma
Arkansas (University of Arkansas Medical Center) - Inflammatory myofibroblastic tumor, spleen
Florida (Munroe Regional Medical Center) - Inflammatory pseudotumor vs Gamma-Gandy body
Florida (Winter Haven Hospital) - Small lymphocytic lymphoma
Georgia, Decatur - Inflammatory myofibroblastic tumor
Illinois (Heartland Regional Medical Center) - Pancreatic and pancreatic fibrosis and chronic inflammation; spleen is non-diagnostic in available slide
Kansas (Coffeyville Regional Medical Center) - Splenic marginal zone cell hyperplasia vs lymphoma
Kansas (Peterson Laboratory Services) - Inflammatory myofibroblastic tumor
Kentucky (University of Louisville Residents) - Inflammatory pseudotumor vs multinodular hemangioma
Maryland (Johns Hopkins Medical Institute) - Inflammatory pseudotumor (inflammatory myofibroblastic tumor)
Michigan (Henry Ford Residents) - Splenic marginal zone lymphoma
New York (Nassau University Medical Center) - Inflammatory pseudotumor
New York (Stony Brook University Hospital Residents) - Inflammatory pseudotumor
New York (SUNY Downstate Residents) - Marginal zone lymphoma, chronic pancreatitis and retroperitoneal fibrosis
New York (Westchester Medical Center) - Inflammatory pseudotumor
North Carolina (Womack Army Medical Center) - Inflammatory pseudotumor (5)
Pennsylvania (Allegheny General Hospital) - Accessory pancreas
Pennsylvania (Conemaugh Memorial Medical Center) - Hamartoma and inflammatory pseudotumor
Pennsylvania (Drexel University College of Medicine) - Inflammatory pseudotumor
Texas (Baylor College of Medicine) - Langerhan's histiocytosis
Texas (Scott & White Hospital) - Inflammatory pseudotumor
Texas, Crystal Beach - Small lymphocytic lymphoma
Texas, Dallas - Inflammatory pseudotumor
Texas, Lubbock - Hodgkin's lymphoma, nodular sclerosis
West Virginia (Wetzel County Hospital) - Castleman's disease
Wisconsin, Marshfield - Hemangioma
Australia (Sullivan Nicolaides Pathology) - Inflammatory pseudotumor
Canada (Pasqua Hospital) - Inflammatory pseudotumor with prominent marginal zone
Japan (Hamamatsu University School of Medicine) - Inflammatory pseudotumor
Japan, Chiba - Inflammatory pseudotumor
Oman (Khoula Hospital) - Inflammatory pseudotumor-like foci with adherent pancreas showing chronic pancreatitis
Puerto Rico (University of Puerto Rico) - Inflammatory pseudotumor/infarct/marginal zone hyperplasia
Qatar, Doha - Inflammatory myofibroblastic tumor
Saudi Arabia (King Fahad National Guard Hospital) - Inflammatory myofibroblastic tumor
Spain (Povisa) - Inflammatory pseudotumor

Case 1 - Diagnosis:

**Inflammatory pseudotumor (inflammatory myofibroblastic tumor), spleen
T-07000, M-76820**

Outside Consultation: Sharon Weiss, M.D., Emory University: "Inflammatory pseudotumor, spleen."

Case 1 - References:

Cotelingam JD, Jaffe ES: Inflammatory Pseudotumor Of The Spleen. *Am J Surg Pathol*, 1984 May; 8(5):375-80.
Thomas RM, Jaffe ES, Zarate-Osorno A, Medeiros LJ: Inflammatory Pseudotumor Of the Spleen. A Clinicopathologic And Immunophenotypic Study Of Eight Cases. *Arch Pathol Lab Med*, 1993 Sep; 117(9):921-6. Review.
Sheahan K, Wolf BC, Neiman RS: Inflammatory Pseudotumor Of The Spleen: A Clinicopathology Study Of Three Cases. *Hum Pathol*, 1988 Sep; 19(9):1024-9.

Escondido - Ceroid histiocytosis
Glendale - Storage disease
Orange (UCI Medical Center Residents) - Idiopathic thrombocytopenic purpura
Palo Alto Pathology - Storage disease
San Francisco (San Francisco General Hospital) - Langerhan's cell histiocytosis
Arkansas (University of Arkansas Medical Center) - Ceroid histiocytosis, spleen
Florida (Munroe Regional Medical Center) - Gaucher's Disease
Florida (Winter Haven Hospital) - R/O ITP
Georgia, Decatur - Gaucher's disease
Illinois (Heartland Regional Medical Center) - Reactive histiocytic infiltrate, rule/out lipid storage disease
Kansas (Coffeyville Regional Medical Center) - Adult Nieman-Pick Disease, Type C, spleen
Kansas (Peterson Laboratory Services) - Gaucher Disease
Kentucky (University of Louisville Residents) - Storage disease, favor Gaucher
Maryland (Johns Hopkins Medical Institute) - Ceroid histiocytosis
Michigan (Henry Ford Residents) - Niemann-Pick/Storage Disease
New York (Nassau University Medical Center) - Splenic histiocytosis, possible Niemann-Pick disease
New York (Stony Brook University Hospital Residents) - Niemann-Pick disease
New York (SUNY Downstate Residents) - Lipid storage disease
New York (Westchester Medical Center) - Storage disease
North Carolina (Womack Army Medical Center) - Ceroid histiocytosis (5)
Pennsylvania (Allegheny General Hospital) - Gaucher's Disease
Pennsylvania (Conemaugh Memorial Medical Center) - Sea blue histiocytosis
Pennsylvania (Drexel University College of Medicine) - Storage disease
Texas (Baylor College of Medicine) - Lipid storage disease
Texas (Scott & White Hospital) - Sinus histiocytosis (DDX: Gaucher's, etc.)
Texas, Crystal Beach - Histiocytosis (Whipple's disease?), probably not Langerhan's cell histiocytosis
Texas, Dallas - Histiocytosis, ? storage disease
Texas, Lubbock - Niemann-pick disease
West Virginia (Wetzel County Hospital) - Ceroid histiocytosis
Wisconsin, Marshfield - Gaucher disease
Australia (Sullivan Nicolaides Pathology) - "Sea Blue" histiocytosis
Canada (Pasqua Hospital) - Niemann-Pick disease
Japan (Hamamatsu University School of Medicine) - Sea-blue histiocyte syndrome
Japan, Chiba - Consistent with mineral oil lipidosis
Oman (Khoulia Hospital) - Sea blue histiocytic syndrome
Puerto Rico (University of Puerto Rico) - Histiocytosis, NOS
Qatar, Doha - Storage disease
Saudi Arabia (King Fahad National Guard Hospital) - Ceroid histiocytosis
Spain (Povisa) - Histiocytosis, lipid storage disease

Case 2 - Diagnosis:

**Lipid storage disease, consistent with Niemann-Pick Disease, spleen
T-07000, D-1420**

Outside Consultation: Attilio Oraz, M.D., FRCPath, Indiana University Medical Center: "Storage Disease
Compatible With Niemann-Pick Disease, Spleen."

Case 2 - References:

Sonavane VS, Rane SR, Bapat VM, Deshmukh SD: Niemann Pick Disease - A Case Report. *Indian J Pathol Microbiol*, 2001 Jan; 44(1):67-8.
He X, Chen F, McGovern MM, Schuchman EH: A Fluorescence-Based, High-Throughput Sphingomyelin Assay For The Analysis Of Niemann-Pick Disease And Other Disorders Of Sphingomyelin Metabolism. *Anal Biochem*, 2002 Jul 1; 306(1):115-23.
Lozano J, Morales A, Cremesti A, et al: Niemann-Pick Disease Versus Acid Sphingomyelinase Deficiency. *Cell Death Differ*, 2001 Jan; 8(1):100-3.
Raddadi AA, Al Twaim AA: Type A Niemann-Pick Disease. *J Eur Acad Dermatol Venereol*, 2000 Jul; 14(4):301-3.
Hulkova H, Ledvinova J, Asfaw B, et al: Lactosylceramide In Lysosomal Storage Disorders: A Comparative Immunohistochemical And Biochemical Study. *Virchows Arch*, 2005 Jul; 447(1):31-44.

Escondido - Mixed cellularity Hodgkin's disease
Glendale - Hodgkin's disease
Orange (UCI Medical Center Residents) - Hodgkin's lymphoma
Palo Alto Pathology - Hodgkin's disease
San Francisco (San Francisco General Hospital) - Hodgkin's lymphoma, classic
Arkansas (University of Arkansas Medical Center) - Mixed cellularity Hodgkin lymphoma, lymph node
Florida (Munroe Regional Medical Center) - Hodgkin's Disease, nodular sclerosing
Florida (Winter Haven Hospital) - Hodgkin's disease
Georgia, Decatur - Hodgkin's lymphoma, classical type
Illinois (Heartland Regional Medical Center) - Hodgkin's lymphoma, nodular sclerosis type
Kansas (Coffeyville Regional Medical Center) - Hodgkin's disease, mixed cellularity
Kansas (Peterson Laboratory Services) - Classic Hodgkin's lymphoma, NS-type
Kentucky (University of Louisville Residents) - Classic Hodgkin's lymphoma, mixed cellularity
Maryland (Johns Hopkins Medical Institute) - Hodgkin lymphoma, nodular sclerosing type
Michigan (Henry Ford Residents) - Hodgkin Disease, mixed cellularity
New York (Nassau University Medical Center) - Hodgkin's lymphoma
New York (Stony Brook University Hospital Residents) - Classic Hodgkin's lymphoma
New York (SUNY Downstate Residents) - Classical Hodgkin lymphoma, nodular sclerosing type
New York (Westchester Medical Center) - Classic Hodgkin lymphoma
North Carolina (Womack Army Medical Center) - Classic Hodgkin lymphoma (5)
Pennsylvania (Allegheny General Hospital) - Hodgkin's lymphoma, mixed cellularity type
Pennsylvania (Conemaugh Memorial Medical Center) - Hodgkin's lymphoma, nodular sclerosis type
Pennsylvania (Drexel University College of Medicine) - Classical Hodgkin lymphoma, mixed cellularity
Texas (Baylor College of Medicine) - Anaplastic large cell lymphoma
Texas (Scott & White Hospital) - Hodgkin's lymphoma
Texas, Crystal Beach - Hodgkin's lymphoma
Texas, Dallas - NS Hodgkin
Texas, Lubbock - Hodgkin's lymphoma, mixed cellularity
West Virginia (Wetzel County Hospital) - Hodgkin's lymphoma (Hodgkin's disease)
Wisconsin, Marshfield - Hodgkin disease
Australia (Sullivan Nicolaides Pathology) - Hodgkin lymphoma, mixed cellularity
Canada (Pasqua Hospital) - Hodgkin's disease, nodular sclerosis
Japan (Hamamatsu University School of Medicine) - Classical Hodgkin lymphoma, nodular sclerosis
Japan, Chiba - Hodgkin's lymphoma, lymphocyte depleted type
Oman (Khoula Hospital) - Nodular sclerosis Hodgkin lymphoma (2); Mixed cellularity Hodgkin lymphoma
Puerto Rico (University of Puerto Rico) - Classical Hodgkin lymphoma, nodular sclerosis subtype, Grade II
Qatar, Doha - Hodgkin's Disease
Saudi Arabia (King Fahad National Guard Hospital) - Classical Hodgkin's lymphoma, nodular sclerosis variant
Spain (Povisa) - Hodgkin disease

CASE 3 - Diagnosis:

Hodgkin's lymphoma, nodular sclerosis variant, cervical lymph nodes
T-08200, M-96503

Outside Consultation: Paul J. Kurtin, M.D., Mayo Clinic: "Hodgkin Lymphoma, Nodular Sclerosing Type."

Case 3 - References:

- Von Wasielewski S, Franklin J, Fischer R, et al: Nodular Sclerosing Hodgkin Disease: New Grading Predicts Prognosis In Intermediate And Advanced Stages. *Blood*, 2003 May 15; 101(10):4063-9.
- Pileri SA, Ascani S, Leoncini L, et al: Hodgkin's Lymphoma: The Pathologist's Viewpoint. *J Clin Pathol*, 2002 Mar; 55(3):162-76. Review.
- Schroeder AA, Derkay CS, Warner AL: Pathology Quiz Case: Nodular Sclerosing Hodgkin Lymphoma. *Arch Otolaryngol Head Neck Surg*, 2001 Oct; 127(10):1281-2.
- Kandil A, Bazarbashi S, Mourad WA: The Correlation Of Epstein-Barr Virus Expression And Lymphocyte Subsets With The Clinical Presentation Of Nodular Sclerosing Hodgkin Disease. *Cancer*, 2001 Jun 1; 91(11):1957-63.
- Cionini L, Arganini L, Mungai V, et al: Prognostic Significance Of Histologic Subdivision Of Hodgkin's Disease Nodular Sclerosis. *Acta Radiol Oncol Radiat Phys Biol*, 1978; 17(1):65-73.

Escondido - B-cell lymphoma, follicular and diffuse
Glendale - B-cell lymphoma
Orange (UCI Medical Center Residents) - Follicular lymphoma
Palo Alto Pathology - Follicular cell lymphoma
San Francisco (San Francisco General Hospital) - Follicular lymphoma
Arkansas (University of Arkansas Medical Center) - Follicle center B-cell lymphoma, follicular, lymph node
Florida (Munroe Regional Medical Center) - Follicular center lymphoma, mixed
Florida (Winter Haven Hospital) - Small cleaved cell lymphoma
Georgia, Decatur - Follicular lymphoma
Illinois (Heartland Regional Medical Center) - Follicular lymphoma, diffuse, Grade II
Kansas (Coffeyville Regional Medical Center) - Malignant lymphoma, follicular center cell (small cleaved “B” cell)
Kansas (Peterson Laboratory Services) - Marginal zone lymphoma
Kentucky (University of Louisville Residents) - Follicular lymphoma, Grade I
Maryland (Johns Hopkins Medical Institute) - Follicular lymphoma, Grade I-II
Michigan (Henry Ford Residents) - Follicular lymphoma, Grade I
New York (Nassau University Medical Center) - Follicular lymphoma, Grade II
New York (Stony Brook University Hospital Residents) - Grade I follicular lymphoma
New York (SUNY Downstate Residents) - Follicular lymphoma
New York (Westchester Medical Center) - Follicular lymphoma, Grade I
North Carolina (Womack Army Medical Center) - Follicle center lymphoma (5)
Pennsylvania (Allegheny General Hospital) - Follicular lymphoma, Grade I
Pennsylvania (Conemaugh Memorial Medical Center) - Follicular lymphoma, Grade II
Pennsylvania (Drexel University College of Medicine) - Follicular lymphoma, Grade I
Texas (Baylor College of Medicine) - Follicular lymphoma
Texas (Scott & White Hospital) - Follicular lymphoma, Grade I
Texas, Crystal Beach - Monocytoid B-cell lymphoma (marginal zone lymphoma)
Texas, Dallas - Follicular lymphoma, Grade I
Texas, Lubbock - Diffuse large cell lymphoma
West Virginia (Wetzel County Hospital) - Follicular lymphoma
Wisconsin, Marshfield - Follicular lymphoma
Australia (Sullivan Nicolaides Pathology) - B-cell follicular lymphoma
Canada (Pasqua Hospital) - Marginal zone lymphoma
Japan (Hamamatsu University School of Medicine) - Follicular lymphoma, follicular and diffuse
Japan, Chiba - Nodal marginal zone lymphoma
Oman (Khoulia Hospital) - Low-grade non-Hodgkin lymphoma, Follicular lymphoma
Puerto Rico (University of Puerto Rico) - Follicular lymphoma, Grade II
Qatar, Doha - Follicular lymphoma
Saudi Arabia (King Fahad National Guard Hospital) - Follicular lymphoma
Spain (Povisa) - Follicular lymphoma

Case 4 - Diagnosis:

Follicular lymphoma, Grade II (Follicular center cell lymphoma, cleaved cell predominant)
T-08810, M-96903

Outside Consultation: Thomas Sebo, M.D., Mayo Clinic: “Follicular Lymphoma, Grade II (Follicular Center Cell Lymphoma, Cleaved cell Predominant).”

Case 4 - References:

- Vakiani E, Cattoretti G, Colovai AI, et al: CD117 Expression In Diffuse Large B-Cell Lymphomas: Fact Or Fiction? *Pathol Int*, 2005 Nov; 55(11):716-23.
 Staudt LM, Dave S: The Biology Of Human Lymphoid Malignancies Revealed By Gene Expression Profiling. *Adv Immunol*, 2005; 87:163-208. Review.
 Goy A, Stewart J, Barkoh BA, et al: The Feasibility Of Gene Expression Profiling Generated In Fine-Needle Aspiration Specimens From Patients With Follicular Lymphoma And Diffuse Large B-Cell Lymphoma. *Cancer*, 2006 Feb; 25:108(1):10-20.
 Kanungo A, Medeiros LJ, Abruzzo LV, Lin P: Lymphoid Neoplasms Associated With Concurrent t(14;18) and 8q24/c-MYC Translocation Generally Have A Poor Prognosis. *Mod Pathol*, 2006 Jan; 19(1):25-33.
 Shia AK, Gan GG, Jairaman S, Peh SC: High Frequency Of Germinal Centre Derivation In Diffuse Large B-Cell Lymphoma From Asian Patients. *J Clin Pathol*, 2005 Sep; 58(9):962-7.

Escondido - Large B-cell lymphoma
Glendale - High-grade B-cell lymphoma
Orange (UCI Medical Center Residents) - Splenic marginal zone lymphoma
Palo Alto Pathology - B-cell prolymphocytic leukemia
San Francisco (San Francisco General Hospital) - Low-grade lymphoma, Maltoma
Arkansas (University of Arkansas Medical Center) - Splenic marginal zone B-cell lymphoma, spleen
Florida (Munroe Regional Medical Center) - Diffuse large B-cell lymphoma
Florida (Winter Haven Hospital) - Marginal zone B-cell lymphoma
Georgia, Decatur - Hairy cell leukemia
Illinois (Heartland Regional Medical Center) - Malignant lymphoma, lymphoplasmacytic
Kansas (Coffeyville Regional Medical Center) - Hairy cell leukemia, spleen
Kansas (Peterson Laboratory Services) - Splenic marginal zone lymphoma
Kentucky (University of Louisville Residents) - Splenic marginal zone lymphoma
Maryland (Johns Hopkins Medical Institute) - Splenic marginal zone lymphoma
Michigan (Henry Ford Residents) - Hairy cell leukemia
New York (Nassau University Medical Center) - Splenic marginal zone lymphoma
New York (Stony Brook University Hospital Residents) - Hairy cell leukemia
New York (SUNY Downstate Residents) - B-cell lymphoma, favoring marginal zone lymphoma
New York (Westchester Medical Center) - Diffuse large B-cell lymphoma, spleen
North Carolina (Womack Army Medical Center) - Splenic marginal zone lymphoma (5)
Pennsylvania (Allegheny General Hospital) - Diffuse large B-cell lymphoma
Pennsylvania (Conemaugh Memorial Medical Center) - Splenic marginal zone lymphoma
Pennsylvania (Drexel University College of Medicine) - Splenic marginal zone lymphoma
Texas (Baylor College of Medicine) - Splenic marginal zone B-cell lymphoma
Texas (Scott & White Hospital) - Diffuse large cell lymphoma
Texas, Crystal Beach - Hairy cell leukemia (hepatosplenic T-cell lymphoma less likely)
Texas, Dallas - Splenic marginal zone lymphoma
Texas, Lubbock - Large B-cell lymphoma
West Virginia (Wetzel County Hospital) - Hairy cell leukemia
Wisconsin, Marshfield - B-cell lymphoma, probably splenic marginal zone lymphoma
Australia (Sullivan Nicolaides Pathology) - B-cell diffuse lymphoma
Canada (Pasqua Hospital) - Lymphoplasmacytic lymphoma
Japan (Hamamatsu University School of Medicine) - Lymphoplasmacytic lymphoma
Japan, Chiba - Plasmacytoma
Oman (Khoulia Hospital) - Hairy cell leukemia
Puerto Rico (University of Puerto Rico) - Diffuse large B-cell lymphoma
Qatar, Doha - Marginal zone lymphoma
Saudi Arabia (King Fahad National Guard Hospital) - Splenic marginal zone lymphoma
Spain (Povisa) - Diffuse large B-cell lymphoma

Case 5 - Diagnosis:**Marginal zone B-cell lymphoma, spleen****T-07000, M-9590/3****Outside Consultation:** Lynn C. Moscinski, M.D., H. Lee Moffitt Cancer Center and Research Institute:

“Splénomegaly With Infiltration By Marginal Zone B-Cell Lymphoma, Spleen.”

Case 5 - References:

- Thieblemont C, Felman P, Callet-Bauchu E, et al: Splenic Marginal Zone Lymphoma: A Distinct Clinical And Pathological Entity. *Lancet Oncol*, 2003 Feb; 4(2):95-103. Review.
- Hunt JP, Chan JA, Samoszuk M, et al: Hyperplasia Of Mantle/Marginal Zone B-Cells With Clear Cytoplasm In Peripheral Lymph Nodes. A Clinicopathologic Study Of 35 Cases. *Am J Clin Pathol*, 2001 Oct; 116(4):550-9.
- Cuneo A, Bardi A, Wlodarska I, et al: A Novel Recurrent Translocation t(11;14)(p11;q32) In Splenic Marginal Zone B-Cell Lymphoma. *Leukemia*, 2001 Aug; 15(8):1262-7.
- Catovsky D, Matutes E: Splenic Lymphoma With Circulating Villous Lymphocytes/Splenic Marginal-Zone Lymphoma. *Semin Hematol*, 1999 Apr; 36(2):148-54. Review.
- Campo E, Miquel R, Krenacs L, et al: Primary Nodal Marginal Zone Lymphomas Of Splenic And MALT Type. *Am J Surg Pathol*, 1999 Jan; 23(1):59-68.

Escondido - Diffuse large B-cell lymphoma
Glendale - High-grade B-cell lymphoma
Orange (UCI Medical Center Residents) - Diffuse large B-cell lymphoma
Palo Alto Pathology - Diffuse large B-cell lymphoma
San Francisco (San Francisco General Hospital) - Large cell lymphoma
Arkansas (University of Arkansas Medical Center) - Burkitt lymphoma, ovary
Florida (Munroe Regional Medical Center) - Diffuse large B-cell lymphoma
Florida (Winter Haven Hospital) - B-cell lymphoma
Georgia, Decatur - Burkitt lymphoma
Illinois (Heartland Regional Medical Center) - Malignant lymphoma, diffuse, large B-cell
Kansas (Coffeyville Regional Medical Center) - Malignant lymphoma, diffuse, follicular center cell, ovary
Kansas (Peterson Laboratory Services) - Diffuse large B-cell lymphoma
Kentucky (University of Louisville Residents) - High-grade lymphoma, consistent with atypical Burkitt lymphoma
Maryland (Johns Hopkins Medical Institute) - Diffuse large B-cell lymphoma
Michigan (Henry Ford Residents) - Diffuse large B-cell lymphoma vs. Burkitt's
New York (Nassau University Medical Center) - High-grade B-cell lymphoma
New York (Stony Brook University Hospital Residents) - Burkitt's lymphoma
New York (SUNY Downstate Residents) - Diffuse large B-cell lymphoma
New York (Westchester Medical Center) - Diffuse large B-cell lymphoma, ovary
North Carolina (Womack Army Medical Center) - Adenoid cystic carcinoma, basaloid pattern (1); Diffuse large B-cell lymphoma
 (4)
Pennsylvania (Allegheny General Hospital) - Burkitt's-like lymphoma
Pennsylvania (Conemaugh Memorial Medical Center) - Burkitt's lymphoma
Pennsylvania (Drexel University College of Medicine) - Diffuse large B-cell lymphoma
Texas (Baylor College of Medicine) - Diffuse large cell lymphoma
Texas (Scott & White Hospital) - Burkitt's lymphoma
Texas, Crystal Beach - Burkitt-like lymphoma
Texas, Dallas - DLBCL
Texas, Lubbock - Burkitt lymphoma
West Virginia (Wetzel County Hospital) - Burkitt's lymphoma
Wisconsin, Marshfield - Diffuse large B-cell lymphoma
Australia (Sullivan Nicolaides Pathology) - Diffuse B-cell lymphoma, right ovary
Canada (Pasqua Hospital) - Large B-cell lymphoma
Japan (Hamamatsu University School of Medicine) - Malignant lymphoma, diffuse large B-cell type
Japan, Chiba - Diffuse large B-cell lymphoma
Oman (Khoulia Hospital) - Burkitt's like lymphoma
Puerto Rico (University of Puerto Rico) - Diffuse large B-cell lymphoma
Qatar, Doha - NHL – Diffuse large B-cell
Saudi Arabia (King Fahad National Guard Hospital) - Burkitt's lymphoma
Spain (Povisa) - Diffuse large B-cell lymphoma

Case 6 - Diagnosis:

**Diffuse large B-cell lymphoma, ovary
 T-87000, M-9590/3**

Outside Consultation: Jun Wang, M.D., Hematopathologist, Loma Linda University Medical Center: "Aggressive Diffuse Large B-Cell Lymphoma (WHO Classification), Right Ovary."

Case 6 - References:

- Tomita N, Kodama F, Motomura S, et al: Prognostic Factors In Diffuse Large B-Cell Lymphoma Treated By Risk-Adopted Therapy. *Intern Med*, 2006 May; 45(5):247-52.
- Yang W, Listinsky CM: Aggressive B-Cell Lymphomas. *Adv Exp Med Biol*, 2005; 563:125-34.
- Ueno S, Yamaguchi M, Kimura M, et al: Expression Of CD29 On Lymphoma Cells And/Or CD36 On Microvascular Endothels Correlates With High Serum LDH Level In Diffuse Large B-Cell Lymphomas (DLBCLs) And Is Frequent In De Novo CD5-positive DLBCLs. *Int J Oncol*, 2005 Nov; 27(5):1241-6.
- Manazza AD, Bonello L, Pagano M, et al: Follicular Origin Of A Subset Of CD5+ Diffuse Large B-Cell Lymphomas. *Am J Clin Pathol*, 2005 Aug; 124(2):182-90.

Escondido - Idiopathic thrombocytopenia purpura
Glendale - ITP
Orange (UCI Medical Center Residents) - Hemangioma and idiopathic thrombocytopenic purpura
Palo Alto Pathology - Benign changes associated with ITP (foamy histiocytes)
San Francisco (San Francisco General Hospital) - Chronic granulocytic leukemia
Arkansas (University of Arkansas Medical Center) - Hemangioma + ceroid histiocytosis, spleen
Florida (Munroe Regional Medical Center) - Ceroid histiocytosis
Florida (Winter Haven Hospital) - Littoral cell angioma
Georgia, Decatur - Littoral cell angioma and extramedullary hematopoiesis
Illinois (Heartland Regional Medical Center) - Peliosis, and diffuse splenitis
Kansas (Coffeyville Regional Medical Center) - Cavernous hemangioma and lipid-laden macrophages
Kansas (Peterson Laboratory Services) - Peliosis with extramedullary hematopoiesis
Kentucky (University of Louisville Residents) - Chronic ITP, cannot rule-out involvement by blasts
Maryland (Johns Hopkins Medical Institute) - Splenomegaly with lipid histiocytosis, EMH and peliosis (unifying diagnosis?)
Michigan (Henry Ford Residents) - Idiopathic thrombocytopenic purpura and extramedullary hematopoiesis
New York (Nassau University Medical Center) - MDS, likely agnogenic myeloid metaplasia with pseudo-Gaucher cell infiltrate
New York (Stony Brook University Hospital Residents) - Peliosis
New York (SUNY Downstate Residents) - ITP, MDS, and hemangioma/hamartoma
New York (Westchester Medical Center) - ITP with myeloid hyperplasia
North Carolina (Womack Army Medical Center) - Extramedullary hematopoiesis (5)
Pennsylvania (Allegheny General Hospital) - Extramedullary hematopoiesis with pseudo-Gaucher cells
Pennsylvania (Conemaugh Memorial Medical Center) - Hemangioma with extramedullary hematopoiesis
Pennsylvania (Drexel University College of Medicine) - Splenic changes consistent with idiopathic thrombocytopenic purpura
Texas (Baylor College of Medicine) - Littoral cell angioma, extramedullary hematopoiesis
Texas (Scott & White Hospital) - Hemangioma with extramedullary hematopoiesis
Texas, Crystal Beach - Rosai-Dorfman possible
Texas, Dallas - Extramedullary hematopoiesis
Texas, Lubbock - Hairy cell leukemia
West Virginia (Wetzel County Hospital) - Lipid histiocytosis
Wisconsin, Marshfield - ITP
Australia (Sullivan Nicolaides Pathology) - Acute inflammation and features of ITP
Canada (Pasqua Hospital) - Peliosis. emh, previous ITP
Japan (Hamamatsu University School of Medicine) - Histiocytosis with idiopathic thrombocytopenia
Japan, Chiba - Consistent with idiopathic thrombocytopenic purpura
Oman (Khoulia Hospital) - Splenic hemangioma with extramedullary hematopoiesis
Puerto Rico (University of Puerto Rico) - Peliosis/Hemangioma/Histiocytosis
Qatar, Doha - Hemophagocytic syndrome and hemangioma
Saudi Arabia (King Fahad National Guard Hospital) - Idiopathic thrombocytopenic purpura
Spain (Povisa) - Idiopathic thrombocytopenic purpura and splenitis

Case 7 - Diagnosis:

Splenic lipidosis with extramedullary hematopoiesis, likely secondary to high turnover myelodysplastic syndrome

T-07000, M-73500, D-1400

Outside Consultation: Patrick Treseler, M.D., University of California San Francisco: "Extramedullary hematopoiesis (myeloid metaplasia), with focal associated hemorrhage. Frequent lipid-containing histiocytes, scattered throughout splenic parenchyma."

Case 7 - References:

- Saif MW, Hopkins JL, Gore SD: Autoimmune Phenomena In Patients With Myelodysplastic Syndromes And Chronic Myelomonocytic Leukemia. *Leuk Lymphoma*, 2002 Nov; 43(11):2083-92. Review.
 Enright H, Jacob HS, Vercellotti G, et al: Paraneoplastic Autoimmune Phenomena In Patients With Myelodysplastic Syndromes: Response To Immunosuppressive Therapy. *Br J Haematol*, 1995 Oct; 91(2):403-8.
 Incalzi RA, Arena V, Capelli A, Gambassi G: Isolated PACNS-Like Presentation Of A Systemic Vasculitis Complicating A Myelodysplastic Syndrome. *J Intern Med*, 2004 Jun; 255(6):674-9.
 Pirayesh A, Verbunt RJ, Kluin PM, et al: Myelodysplastic Syndrome With Vasculitic Manifestations. *J Intern Med*, 1997 Nov; 242(5):425-31. Review.
 Saitoh T, Murakami H, Uchiumi H, et al: Myelodysplastic Syndromes With Nephrotic Syndrome. *Am J Hematol*, 1999 Mar; 60(3):200-4.

Escondido - Metastatic papillary serous carcinoma
Glendale - Metastatic adenocarcinoma
Orange (UCI Medical Center Residents) - Primary peritoneal papillary carcinoma
Palo Alto Pathology - Metastatic adenocarcinoma and splenic fibrosis (due to portal vein thrombosis by tumor)
San Francisco (San Francisco General Hospital) - Metastatic clear cell adenocarcinoma
Arkansas (University of Arkansas Medical Center) - Metastatic papillary serous carcinoma, spleen
Florida (Munroe Regional Medical Center) - Papillary serous carcinoma
Florida (Winter Haven Hospital) - Metastatic adenocarcinoma
Georgia, Decatur - Metastatic adenocarcinoma
Illinois (Heartland Regional Medical Center) - Metastatic adenocarcinoma, serous type
Kansas (Coffeyville Regional Medical Center) - Metastatic adenocarcinoma, Grade II, ? colon
Kansas (Peterson Laboratory Services) - Metastatic adenocarcinoma, endometrioid type
Kentucky (University of Louisville Residents) - Metastatic adenocarcinoma
Maryland (Johns Hopkins Medical Institute) - Malignant mesothelioma
Michigan (Henry Ford Residents) - Metastatic papillary serous adenocarcinoma
New York (Nassau University Medical Center) - Metastatic micropapillary urothelial carcinoma
New York (Stony Brook University Hospital Residents) - Metastatic carcinoma, papillary peritoneal
New York (SUNY Downstate Residents) - Metastatic papillary carcinoma
New York (Westchester Medical Center) - Primary peritoneal serous carcinoma
North Carolina (Womack Army Medical Center) - Serous carcinoma (5)
Pennsylvania (Allegheny General Hospital) - Metastatic papillary serous carcinoma
Pennsylvania (Conemaugh Memorial Medical Center) - Metastatic adenocarcinoma
Pennsylvania (Drexel University College of Medicine) - Metastatic adenocarcinoma
Texas (Baylor College of Medicine) - Serous papillary carcinoma involving the spleen
Texas (Scott & White Hospital) - Angiosarcoma
Texas, Crystal Beach - Adenocarcinoma, metastatic
Texas, Dallas - Metastatic adenocarcinoma
Texas, Lubbock - Papillary serous carcinoma
West Virginia (Wetzel County Hospital) - Metastatic carcinoma, possibly urothelial in origin
Wisconsin, Marshfield - Metastatic carcinoma
Australia (Sullivan Nicolaides Pathology) - Peritoneal serous carcinoma metastatic to spleen
Canada (Pasqua Hospital) - Metastatic serous carcinoma
Japan (Hamamatsu University School of Medicine) - Serous adenocarcinoma, metastatic
Japan, Chiba - Metastatic serous adenocarcinoma from ovary
Oman (Khoula Hospital) - Metastatic papillary carcinoma. Primary ? pancreas, ? lung, ? breast
Puerto Rico (University of Puerto Rico) - Metastatic adenocarcinoma
Qatar, Doha - Metastatic carcinoma
Saudi Arabia (King Fahad National Guard Hospital) - Primary papillary serous carcinoma of peritoneum
Spain (Povisa) - Adenocarcinoma (Mullerian secondary system?)

Case 8 - Diagnosis:

Metastatic serous adenocarcinoma, likely of peritoneal surface origin, spleen

T-07000, M-8441/6

Case 8 - References:

- Cristallini EG, Peciarolo A, Bolis GB, Valenti L: Fine Needle Aspiration Biopsy Diagnosis Of A Splenic Metastasis From A Papillary Serous Ovarian Adenocarcinoma. *Acta Cytol*, 1991 Sep-Oct; 35(5):560-2.
- Yano H, Iwazawa T, Kinuta M, et al: Solitary Splenic Metastasis From Ovarian Cancer Successfully Treated By Hand-Assisted Laparoscopic Splenectomy: Report Of A Case. *Surg Today*, 2002; 32(8):750-2.
- Koh YS, Kim JC, Cho CK: Splenectomy For Solitary Splenic Metastasis Of Ovarian Cancer. *BMC Cancer*, 2004 Dec 22:4:96.
- Klinger PJ, Smith SL, Abendstein BJ, Hinder RA: Hand-Assisted Laparoscopic Splenectomy For Isolated Splenic Metastasis From An Ovarian Carcinoma: A Case Report With Review Of the Literature. *Surg Laparosc Endosc*, 1998 Feb; 8(1):49-54. Review.
- Nosanchuk JS, Tyler WS, Terepka RH: Fine-Needle Aspiration Of Spleen: Diagnosis Of A Solitary Ovarian Metastasis. *Diagn Cytopathol*, 1988; 4(2):159-61.

Escondido - Chronic myelogenous leukemia
Orange (UCI Medical Center Residents) - Acute myeloid leukemia
Palo Alto Pathology - Extramedullary hematopoiesis
San Francisco (San Francisco General Hospital) - Acute megakaryoblastic leukemia
Arkansas (University of Arkansas Medical Center) - Acute myeloid leukemia with multilineage dysplasia, spleen
Florida (Munroe Regional Medical Center) - Extramedullary hematopoiesis
Florida (Winter Haven Hospital) - Myeloid metaplasia
Georgia, Decatur - Acute myeloid leukemia
Illinois (Heartland Regional Medical Center) - Acute myelogenous leukemia and extramedullary hematopoiesis
Kansas (Coffeyville Regional Medical Center) - Extramedullary hematopoiesis, spleen
Kansas (Peterson Laboratory Services) - Chronic idiopathic myelofibrosis
Kentucky (University of Louisville Residents) - Granulocytic sarcoma
Maryland (Johns Hopkins Medical Institute) - Extramedullary hematopoiesis (EMH)
Michigan (Henry Ford Residents) - Acute myelogenous leukemia arising in extramedullary hematopoiesis
New York (Nassau University Medical Center) - AML-M7 with extramedullary hematopoiesis
New York (Stony Brook University Hospital Residents) - Myeloid metaplasia
New York (SUNY Downstate Residents) - Myelofibrosis
New York (Westchester Medical Center) - Myeloid metaplasia evolving into acute leukemia
North Carolina (Womack Army Medical Center) - Chronic idiopathic myelofibrosis (5)
Pennsylvania (Allegheny General Hospital) - Granulocytic sarcoma
Pennsylvania (Conemaugh Memorial Medical Center) - Granulocytic sarcoma
Pennsylvania (Drexel University College of Medicine) - Extramedullary hematopoiesis with increased blasts (if greater than 20% = AML)
Texas (Baylor College of Medicine) - Chronic myelogenous leukemia
Texas (Scott & White Hospital) - Granulocytic sarcoma
Texas, Crystal Beach - Chronic granulocytic leukemia
Texas, Dallas - Granulocytic sarcoma/myeloid sarcoma
Texas, Lubbock - Angiosarcoma
West Virginia (Wetzel County Hospital) - Agnogenic myeloid metaplasia
Wisconsin, Marshfield - Extramedullary hematopoiesis
Australia (Sullivan Nicolaides Pathology) - Extramedullary haemopoiesis
Canada (Pasqua Hospital) - Erythroleukemia
Japan (Hamamatsu University School of Medicine) - Extramedullary hematopoiesis
Japan, Chiba - Agnogenic myeloid metaplasia
Oman (Khoulia Hospital) - Blast transformation in myelodysplastic syndrome
Puerto Rico (University of Puerto Rico) - Acute leukemia/myeloid sarcoma
Qatar, Doha - Granulocytic sarcoma
Saudi Arabia (King Fahad National Guard Hospital) - Chronic myelogenous leukemia
Spain (Povisa) - Extramedullary haematopoiesis

Case 9 - Diagnosis:

Increased blasts with early extramedullary transformation to acute myeloid leukemia.
Myeloid metaplasia in spleen and splenic lymph nodes consistent with history of myelofibrosis.
T-07000, M-98603

Outside Consultation: Dennis P. O'Malley, M.D., Indiana University Medical Center: "Splenic transformation of chronic idiopathic myelofibrosis (CIMF) to acute myeloid leukemia."

Case 9 - References:

- Burrell SC, Fischman AJ: Myelofibrosis On F-18 FDG PET Imaging. *Clin Nucl Med*, 2005 Oct; 30(10):674.
 Barosi G, Bordessoule D, Briere J, et al: Response Criteria For Myelofibrosis With Myeloid Metaplasia: Results Of An Initiative Of The European Myelofibrosis Network (EUMNET). *Blood*, 2005 Oct 15; 106(8):2849-53.
 Vannucchi AM, Bianchi L, Paoletti F, et al: A Pathobiologic Pathway Linking Thrombopoietin, GATA-1, And TGF-Beta1 In The Development Of Myelofibrosis. *Blood*, 2005 May 1; 105(9):3493-501.
 Arora B, Ho CL, Hoyer JD, et al: Bone Marrow Angiogenesis And Its Clinical Correlates In Myelofibrosis With Myeloid Metaplasia. *Haematologica*, 2004 Dec; 89(12):1454-8.
 Emadi S, Clay D, Desterke C, et al: IL-8 And Its CXCR1 And CXCR2 Receptors Participate In The Control Of Megakaryocytic Proliferation, Differentiation, And Ploidy In Myeloid Metaplasia With Myelofibrosis. *Blood*, 2005 Jan 15; 105(2):464-73.

Escondido - CLL, prolymphocytoid change
Glendale - High-grade B-cell lymphoma
Orange (UCI Medical Center Residents) - Prolymphocytic transformation in CLL, Herpes virus in necrotic areas
Palo Alto Pathology - CLL and Herpes lymphadenitis
San Francisco (San Francisco General Hospital) - Acute Herpetic lymphadenitis
Arkansas (University of Arkansas Medical Center) - HSV lymphadenitis + small B-cell lymphoma/CLL
Florida (Munroe Regional Medical Center) - Burkitt's-like lymphoma
Florida (Winter Haven Hospital) - Herpes lymphadenitis, CLL
Georgia, Decatur - Chronic lymphocytic lymphoma and Herpes infection
Illinois (Heartland Regional Medical Center) - Chronic lymphocytic leukemia with prolymphocytic transformation and necrosis of lymph node
Kansas (Coffeyville Regional Medical Center) - Recurrent well-differentiated lymphocytic lymphoma
Kansas (Peterson Laboratory Services) - CLL with Herpetic lymphadenitis
Kentucky (University of Louisville Residents) - CLL/SLL with concomitant Herpes infection
Maryland (Johns Hopkins Medical Institute) - CLL/SLL + Herpes lymphadenitis
Michigan (Henry Ford Residents) - Chronic lymphocytic leukemia
New York (Nassau University Medical Center) - CLL/PL with Herpetic splenitis
New York (Stony Brook University Hospital Residents) - Large B-cell lymphoma
New York (SUNY Downstate Residents) - CLL with Herpes lymphadenitis
New York (Westchester Medical Center) - HSV necrotizing lymphadenitis with CLL
North Carolina (Womack Army Medical Center) - Herpes lymphadenitis (5)
Pennsylvania (Allegheny General Hospital) - Transformation to diffuse large B-cell lymphoma
Pennsylvania (Conemaugh Memorial Medical Center) - CLL/SLL transformed to large cell lymphoma (Richter's syndrome)
Pennsylvania (Drexel University College of Medicine) - Richter transformation (syndrome) from chronic lymphocytic leukemia and Herpes lymphadenitis
Texas (Baylor College of Medicine) - Herpes lymphadenitis
Texas (Scott & White Hospital) - Herpetic lymphadenitis with CLL
Texas, Crystal Beach - Richter syndrome (large cell lymphoma)
Texas, Dallas - CLL/SLL
Texas, Lubbock - Herpes lymphadenitis
West Virginia (Wetzel County Hospital) - Diffuse small lymphocytic lymphoma/B-cell CLL with plasmacytoid features
Wisconsin, Marshfield - CLL
Australia (Sullivan Nicolaides Pathology) - Necrotizing HSV lymphadenitis and CLL
Canada (Pasqua Hospital) - Herpes simplex
Japan (Hamamatsu University School of Medicine) - CLL with Herpes infection
Japan, Chiba - Herpes simplex viral lymphadenitis
Oman (Khoula Hospital) - Prolymphocytic transformation of B-CLL and HSV infection
Puerto Rico (University of Puerto Rico) - Chronic lymphocytic leukemia/small lymphocytic lymphoma with prolymphocytic transformation (Richter transformation, less likely)
Qatar, Doha - NHL – CLL type
Saudi Arabia (King Fahad National Guard Hospital) - Small lymphocytic lymphoma
Spain (Povisa) - Chronic lymphocytic leukemia/small lymphocytic lymphoma

Case 10 - Diagnosis:

Co-existent Herpetic lymphadenitis and chronic B-cell lymphoma/leukemia, lymph node
T-08000, M-40000, M-9590/3

Case 10 - References:

- Saka B, Aktan M, Sami U, et al: Prognostic Importance Of Soluble CD23 In B-Cell Chronic Lymphocytic Leukemia. *Clin Lab Haematol*, 2006 Feb; 28(1):30-5.
 Zucchetto A, Bomben R, Dal Bo M, et al: CD49d in B-Cell Chronic Lymphocytic Leukemia: Correlated Expression With CD38 And Prognostic Relevance. *Leukemia*, 2006 Mar; 20(3):523-5.
 Mehes G: Chromosome Abnormalities With Prognostic Impact In B-Cell Chronic Lymphocytic Leukemia. *Pathol Oncol Res*, 2005; 11(4):205-10.
 Molica S, Vitelli G, Mirabelli R, et al: Serum Insulin-Like Growth Factor Is Not Elevated In Patients With Early B-Cell Chronic Lymphocytic Leukemia But Is Still A Prognostic Factor For Disease Progression. *Eur J Haematol*, 2006 Jan; 76(1):51-7.
 Richardson SJ, Matthews C, Catherwood MA, et al: ZAP-70 Expression Is Associated With Enhanced Ability To Respond To Migratory And Survival Signals In B-Cell Chronic Lymphocytic Leukemia (B-CLL). *Blood*, 2006 May 1; 107(9):3584-92.