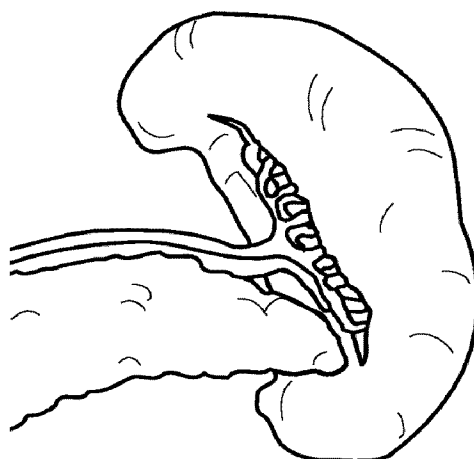




CALIFORNIA
TUMOR TISSUE REGISTRY

**“Tumors of Lymph Node & Spleen”
Study Cases, Subscription B**

April, 2004



California Tumor Tissue Registry
c/o: Department of Pathology and Human Anatomy
Loma Linda University School of Medicine
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Loma Linda, California 92350
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E-mail: cttr@linkline.com
Web site & Case of the Month: www.cttr.org

Target audience:

Practicing pathologists and pathology residents.

Goal:

To acquaint the participant with the histologic features of a variety of benign and malignant neoplasms and tumor-like conditions.

Objectives:

The participant will be able to recognize morphologic features of a variety of benign and malignant neoplasms and tumor-like conditions and relate those processes to pertinent references in the medical literature.

Educational methods and media:

Review of representative glass slides with associated histories.
Feedback on consensus diagnoses from participating pathologists.
Listing of selected references from the medical literature.

Principal faculty:

Weldon K. Bullock, MD
Donald R. Chase, MD

CME Credit:

Loma Linda University School of Medicine designates this continuing medical education activity for up to 2 hours of Category I of the Physician's Recognition Award of the American Medical Association.
CME credit is offered for the subscription year only.

Accreditation:

Loma Linda University School of Medicine is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to sponsor continuing medical education for physicians.

Contributor: Wallace E. Carroll, M.D.
Fort Leonard Wood, MO

Case No. 1 - April, 2004

Tissue from: Jugular lymph nodes

Accession #15940

Clinical Abstract:

A 20-year-old male was found to have enlarged jugular lymph nodes. They were excised.

Gross Pathology:

The 4.5 x 3.8 x 1.0 cm specimen consisted of multiple lymph nodes, up to 3.5 cm in greatest diameter, in fibroadipose tissue.

Special Studies:

Acid Fast Stain, GMS = Negative.

Contributor: Henry D. Slosser, M.D.
Pasadena, CA

Case No. 2 - April, 2004

Tissue from: Mediastinal mass

Accession #29619

Clinical Abstract:

After a seven-year history of asthma, a 36-year-old female presented with a cough that did not respond to her asthma medications or prednisone. She also complained of left-sided chest pain and shortness of breath, with some right back and arm pain. CT scan revealed an 8 x 7 x 6 cm right anterior mediastinal mass with probable phrenic involvement. She did not display symptoms of myasthenia gravis.

Gross Pathology:

A 278 gram, 10.5 x 9.5 x 7.0 cm bosselated mass had attached portion of lung, pericardium, superior vena cava and fibrofatty adhesions. On sectioning, the mass focally abutted the pleural surface with possible invasion.

Special Studies:

CD20 (L-26)	= Strongly positive
CD30, CD3, CD5, CD23, CD43	= Positive
Bcl-2	= rare positivity
AE1.3, CAM 5.2	= Negative
CD15 (Leu-M1), CD10, CD30	= Negative
IgM = Diffuse 2+	IgG = 0
Kappa = 4+	Lambda = 0
	IgA = 0

Contributor: Jozef Kollin, M.D.
Lakewood, CA

Case No. 3 - April, 2004

Tissue from: Colon

Accession #29535

Clinical Abstract:

A 75-year-old male sought treatment for abdominal pain of several days' duration. CT scan demonstrated a large right lower quadrant abdominal mass.

Gross Pathology:

The 17 cm diameter mesenteric mass had expanded the mesentery, encased the appendix and eroded into the cecum. It consisted of highly necrotic, soft, grayish-white tissue, which in some areas had a soft, fish-flesh appearance.

Special Studies:

CD20, CD45, Bcl-2, and Ki-67	= Positive
CD21, Bcl-1, CD10, and TdT	= Negative
Kappa, Lambda	= Non-contributory
CD3, CD43	= Scattered small lymphocytes positive

Contributor: Donovan Hare, M.D.
Redlands, CA

Case No. 4 - April, 2004

Tissue from: Spleen

Accession #29770

Clinical Abstract:

This 41-year-old male had a history of thrombocytopenia and splenomegaly.

Gross Pathology:

The 4,430 gram spleen was 21.0 x 15.0 x 28.0 cm. The cut surface showed an effaced pink to red-tan architecture with rare, darker red, slightly depressed areas suggestive of residual spleen. There were several hemorrhagic nodular areas up to 5.5 cm.

Special Studies:

CD20 (L26)	= Positive in follicles, mantle and marginal zones
CD3, CD5	= Scattered small lymphocytes positive
CD43 (Leu22)	= T cells & histiocytes positive
CD21	= positive in residual follicular dendritic reticulum cells
Kappa, Lambda	= Lymphoid and plasma cells positive
CD10	= follicles positive
CD68 (KP1)	= Histiocytes positive
CD23	= positive in residual follicular dendritic reticulum cells and mantle zones positive
Bcl-1, S-100 and CD1a	= Negative
Bcl-2	= Negative in follicles; positive in marginal and mantle zones

Contributor: Jozef Kollin, M.D.
Lakewood, CA

Case No. 5 - April, 2004

Tissue from: Left cervical lymph node

Accession #29565

Clinical Abstract:

Because of cervical lymphadenopathy, this 72-year-old male underwent work-up with biopsy.

Gross Pathology:

Three round lymph nodes measuring 1.0, 1.5 and 3.3 cm in greatest diameter were relatively soft in consistency. Sectioning revealed tan-gray and yellow tissue with areas of necrosis.

Special Studies:

Malignant cells were positive for CD45 (LCA), CD20 (L26), CD30 (BerH2), CD15 (LeuM1),
Bcl-2, CD22, CD79a
EMA, CD23, CD8 = Focally Positive
Alk-1, Bcl-1, CD10 = Negative

Contributor: Lawrence L. McAlpine, M.D.
Santa Barbara, CA

Case No. 6 - April, 2004

Tissue from: Spleen

Accession #15732

Clinical Abstract:

During her pregnancy, a 27-year-old female noted discomfort in her left upper abdominal quadrant. At her post-delivery checkup, she was told she had an enlarged spleen. Physical examination revealed hepatomegaly, palpable 21 cm below the left costal margin and well down into the pelvis. A splenectomy was performed.

Gross Pathology:

The 2330 gram red-purple spleen was 30 x 15 x 10 cm. Sectioning revealed a somewhat nodular splenic parenchyma infiltrated by a moderately firm, gray-pink process.

Special Studies:

AFB, GMS = Negative

Contributor: Kenneth Frankel, M.D.
Glendale, CA

Case No. 7 - April, 2004

Tissue from: Spleen

Accession #29633

Clinical Abstract:

A 64-year-old male presented to the Emergency Room with abdominal pain. He was found to have a ruptured spleen. A splenectomy was performed. At surgery, there was extensive lymphadenopathy.

Gross Pathology:

The 940 gram spleen measured 23 x 11 x 7 cm. Sectioning revealed a soft, dark red interior with irregularly-shaped, pale yellow areas of apparent infarction up to 4.5 cm in diameter.

Special Studies:

CD20 (L26), Bcl-1, Bcl-2	= Positive
CD3, CD5	= Small lymphocytes immunoreactive
CD21	= Positive in residual follicular dendritic reticulum cells
CD43 (Leu 22)	= T-cells and histiocytes immunoreactive
Ki-67	= Variable; up to 99% of infiltrate in focal high power fields
Kappa, Lambda	= Lymphoid cells kappa monoclonal; plasma cell polyclonal
CD10, Bcl-6	= Negative

Tissue from: Spleen

Case No. 8 - April, 2004

Contributor: LLUMC Pathology Group (md)
Loma Linda, CA (29064)

Accession #29064

Contributor: Kenneth Frankel, M.D.
Glendale, CA (28585)

Accession #28585

Clinical Abstract:

(29064): A 52-year-old female with a history of pancytopenia and splenomegaly presented with lower abdominal pain and an eleven-pound weight loss over the last year.

(28585): A 76-year-old female presented with a left sided abdominal mass. CT revealed marked splenomegaly with the tip of the spleen extending down to the iliac crest, compressing the stomach and the left kidney. A splenectomy was performed.

Gross Pathology:

(29064): A 2450 gram, 22.0 x 17.0 x 7.0 cm dark red-purple spleen had beefy red parenchyma with inconspicuous white pulp.

(28585): The 1010 gram spleen was 23.0 x 16.0 x 10.0 cm. The cut surface showed multiple, 0.2 to 0.3 cm, well-circumscribed, gray-white nodules.

Special Studies

(29064):	CD20, Bcl-2, Ki-67	= Positive
	CD3, CD43, Kappa, Lambda	= Negative
(28585):	CD20, Bcl-2, Ki-67	= Positive
	CD3, CD43, Kappa, Lambda	= Negative

Contributor: Dennis O'Malley, M.D.
Indianapolis, IN

Case No. 9 - April, 2004

Tissue from: Spleen

Accession #29812

Clinical Abstract:

Eleven years after this 69-year-old male was diagnosed with chronic lymphocytic leukemia he presented with worsening thrombocytopenia, abdominal discomfort and early satiety. A splenectomy was performed.

Gross Pathology:

The 22.0 x 17.0 x 9.0 cm purple-red spleen had a deep red cut surface with an exaggerated miliary pattern of white pulp.

Special Studies (Flow Cytometry):

CD19, CD5, CD23, kappa, HLA-DR = Positive
CD20 = Dim positivity
CD10 = Negative

Contributor: LLUMC Pathology Group (jdc)
Loma Linda, CA

Case No. 10 - April, 2004

Tissue from: Spleen

Accession #29546

Clinical Abstract:

During work-up for a burning pain in her back, this 70-year-old female was found to have splenomegaly. A splenectomy was performed.

Gross Pathology:

The 3,003 gram, 30.0 x 19.0 x 18.0 cm spleen had purple-tan parenchyma diffusely studded with multiple white nodules ranging from 0.1 to 0.2 cm.

Special Studies:

CD20 = Vast majority positive
CD3, CD43 = Positive mainly in small numbers of thin sheath of peri-arteriolar lymphocytes
Cyclin D1 = Negative

Cytogenetics: T(11:14)(q13;q32) translocation