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CALIFORNIA
TUMOR TISSUE REGISTRY

“GASTROINTESTINAL TRACT PATHOLOGY”

Study Cases, Subscription A

January 2003



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 page: www.cttr.org
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: Howard Otto, M.D.
Cheboygan, MI**

Case No. 1 - January 2003

Tissue from: Rectum

Accession #28924

Clinical Abstract:

Because of rectal discomfort and spasms, pelvic pressure and occasional blood in her stools, this 51-year-old female underwent a colonoscopy with biopsy, followed by an abdominoperineal resection.

Gross Pathology:

At the anorectal junction was a 4 x 8 cm circumferential nodular elevated mass distorting overlying rectal mucosa.

**Contributor: Arno A. Roscher, M.D.
Granada Hills, CA**

Case No. 2 - January 2003

Tissue from: Terminal ileum

Accession #29606

Clinical Abstract:

For three days this 41-year-old female suffered from right lower quadrant abdominal pain and diarrhea. A colonoscopy showed a nodule in the right colon and an enlarged ileocecal valve with friable and irregular mucosa. Following biopsy, a right hemicolectomy was performed.

Gross Pathology:

Just proximal to the ileocecal valve was a 1 x 2 x 2.5 cm yellow sessile mass. Two satellite nodules, 1 and 1.5 cm in diameter, were in the ileocecal valve and adjacent cecum. The attached mesentery and mesocolon were diffusely indurated.

SPECIAL STUDIES (Outside facility):

| | |
|-------------------------|----------|
| Chromogranin A | positive |
| Neuron specific enolase | positive |
| Synaptophysin | positive |

Contributor: Philip G. Robinson, M.D.
Boynton Beach, FL

Case No. 3 - January 2003

Tissue from: Small bowel

Accession #28167

Clinical Abstract:

After one day of severe abdominal pain, this 67-year-old male presented to the Emergency Department. A small bowel resection was performed.

Gross Pathology:

Within the resected small bowel was a 5.2 x 8.5 cm circumferential ulcer with a full-thickness perforation. The base of the ulcer and surrounding tissues were gray. Adjacent regions of small bowel mucosa showed multiple tan nodules up to 0.1 cm in diameter.

SPECIAL STUDIES (Outside facility):

| | |
|---------|----------|
| Keratin | negative |
| LCA | positive |

Contributor: Roger Terry, M.D.
San Gabriel, CA

Case No. 4 - January 2003

Tissue from: Gallbladder

Accession #29700

Clinical Abstract:

After eating a big meal on Christmas Eve, this 74-year-old female started feeling abdominal discomfort and attributed it to overeating. However, the pain persisted, accompanied by nausea and vomiting. CT scan showed a thickened gallbladder with multiple stones and pancreatic changes consistent with pancreatitis.

Gross Pathology:

The previously opened gallbladder measured 7.0 x 5.5 x 3.5 cm. The gallbladder wall averaged 2.3 cm in thickness throughout. There were multiple yellow discolorations measuring in size from 0.3 cm to 1.5 cm.

Contributor: Robert E. Riechmann, M.D.
Covina, CA

Case No. 5 - January 2003

Tissue from: Small bowel

Accession #24466

Clinical Abstract:

On workup, this 49-year-old female was found to have an abdominal mass.

Gross Pathology:

The 64 cm of resected small bowel was curled around and densely adherent to a hard mesentery that was expanded into an ovoid yellow-white 7.0 cm diameter mass.

Contributor: G. N. Pesselnick, M.D.
Los Angeles, CA

Case No. 6 - January 2003

Tissue from: Pancreas

Accession #23497

Clinical Abstract:

A female, age unknown, was found to have an abdominal mass.

Gross Pathology:

A 10.0 x 7.0 x 8.0 cm bosselated rubbery mass arose from the tail of the pancreas. The cut surface showed criss-crossing fibrous bands and small cystic spaces.

Contributor: Thomas E. Hall, M.D.
Reno, NV

Case No. 7 - January 2003

Tissue from: Sigmoid colon

Accession #24539

Clinical Abstract:

A 34-year-old male developed loose, mucoid stools with occasional bleeding. A barium enema revealed circumferential narrowing in the sigmoid region.

Gross Pathology:

The resected sigmoid colon contained a 5.5 cm annular mass that penetrated the entire thickness of the bowel wall. The pericolonic fat contained many enlarged lymph nodes.

Contributor: Henry Tesluk, M.D.
Sacramento, CA

Case No. 8 - January 2003

Tissue from: Small bowel

Accession #29637

Clinical Abstract:

This 83-year-old female was found to have severe iron deficiency anemia. She had recently been treated for *H. pylori* gastritis but no definite source of bleeding was found. An EGD showed a polyp in the jejunum, which was biopsied. She was otherwise in good health. There was no lymphadenopathy.

Gross Pathology:

A 3.0 cm polyp was removed from the jejunum.

SPECIAL STUDIES (Outside facility):

| | |
|---------------------|----------|
| HMB-45 | positive |
| Lymphocytic markers | negative |

Contributor: Otto Klinger, M.D.
Mission Hills, CA

Case No. 9 - January 2003

Tissue from: Ligament of Treitz

Accession #27242

Clinical Abstract:

This 33-year-old male pedestrian was struck by a motor vehicle and experienced massive trauma with ruptured viscus and multiple fractures. During the course of surgery, a mass in the region of the ligament of Treitz was found.

Gross Pathology:

The specimen included a 3.0 cm encapsulated spherical tumor.

SPECIALS STUDIES (Outside facility):

| | |
|---------------|----------|
| NSE | positive |
| Synaptophysin | positive |
| S-100 | negative |
| Keratin | negative |
| GFAP | negative |

Contributor: John McGill, M.D.
Pasadena, CA

Case No. 10 - January 2003

Tissue from: Small Bowel Mesentery

Accession #29595

Clinical Abstract:

This 77-year-old male was found to have occult blood in his stool. A CT scan showed a large intra-abdominal or retroperitoneal mass.

Gross Pathology:

Two bulging masses, 13.0 x 10.5 x 10.5 cm and 3.5 x 3.0 x 2.0 cm, were present in the mesentery of the resected small bowel. The cut surfaces were dense, white and fibrous. The smaller nodules showed some invasion of small bowel muscular wall.

SPECIAL STUDIES (Outside facility):

| | |
|--------|-------------------|
| CD-117 | strongly positive |
| S-100 | rare positivity |
| Actin | negative |
| Desmin | negative |

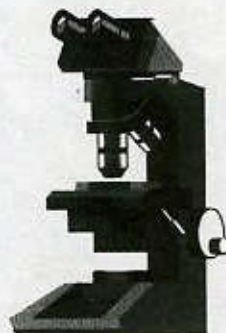


CALIFORNIA
TUMOR TISSUE REGISTRY

GASTROINTESTINAL TRACT PATHOLOGY

Minutes – Subscription A

January, 2003



SUGGESTED READING (General Topics from Recent Literature):

- Evaluation and Management of the “New” Lymphoma Entities. Mantle Cell Lymphoma, Lymphoma of Mucosa Associated Lymphoid Tissue, Anaplastic Large-Cell Lymphoma, and Primary Mediastinal B-Cell Lymphoma. Porcu P and Nichols CR. *Curr Probl Cancer* 1998; 22(5):283-368.
- Small Intestinal Stromal Tumors. A Clinicopathologic Study of 20 Cases with Immunohistochemical Assessment of Cell Differentiation and Prognostic Role of Proliferation Antigens. Ma CK, De Peralta MN, Amin MB, et al. *Am J Clin Pathol* 1997; 108(6):641-651.
- Proliferating Cell Nuclear Antigen as a Marker of Cell Kinetics in Aberrant Crypt Foci, Hyperplastic Polyps, Adenomas, and Adenocarcinomas of the Human Colon. Shpitz D, Bornstein Y, Mekori Y, et al. *Am J Surg* 1997; 17(4):425-430.
- Use of Robotic Telepathology for Frozen-Section Diagnosis. A Retrospective Trial of a Telepathology System for Intraoperative Consultation. Kaplan KJ, Burgess JR, et al. *Mod Pathol* 2002; 15:1197-1204.
- Low-Grade Tubular-Mucinous Renal Neoplasm. Morphologic, Immunohistochemical, and Genetic Features. Rakozy C, Schmahl GE, et al. *Mod Pathol* 2002; 15:1162-1171.
- The World Health Organization (WHO) Classification of the Myeloid Neoplasms. Vardiman JW, Harris NL, and Brunning RD. *Blood* 2002; 100(7):2292-2302.

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FILE DIAGNOSES

CTTR Subscription A

January 2003

Case 1:

Basaloid squamous (cloacogenic) carcinoma, ano-rectal region
T-68000, M-81233

Case 2:

Carcinoid tumor, ileum
T-Y4400, M-82401

Case 3:

Diffuse large cell lymphoma, ileum
T-65200, M-95903

Case 4:

Inflammatory pseudotumor (xanthogranulomatous cholecystitis), gallbladder
T-57000, M-43000

Case 5:

Mesenteric fibromatosis (intra-abdominal desmoid tumor)
T-Y4300, M-76100

Case 6:

Serous microcystic adenoma (cystadenoma), pancreas
T-59000, M-84410

Case 7:

Poorly differentiated mucinous adenocarcinoma with signet ring features, sigmoid colon
T-67000, M-84803

Case 8:

Melanoma, small bowel
T-64000, M-87203

Case 9:

Gangliocytic paraganglioma, duodenum
T-64300, M-86801

Case 10:

Gastrointestinal stromal tumor (CD117 positive), small bowel mesentery
T-50500, M-88903

Bakersfield - Cloacogenic carcinoma

Baldwin Park (Kaiser Permanente) - Squamous carcinoma transition zone (1); Basaloid carcinoma (1); Basaloid squamous cell carcinoma (1)

Bay Area - Squamous cell carcinoma with basaloid features (3); Cloacogenic carcinoma (1)

Daly City (Seton Medical Center) - Cloacogenic basalosquamous carcinoma

Fontana (Kaiser Permanente) - Anal canal squamous cell carcinoma

Hayward/Fremont - Basaloid carcinoma

Laguna Beach (South Coast Medical Center) - SCCA (cloacogenic/basaloid)

Long Beach - Squamous cell carcinoma (basaloid) (9)

Monterey (Community Hospital of Monterey Peninsula) - Basaloid carcinoma

Mountain View (El Camino Pathology Group) - Squamous cell carcinoma, basaloid type

Oakland (Kaiser Permanente) - Basaloid squamous cell carcinoma (4)

Orange (Orange County Pathology Medical Group) - Basaloid squamous carcinoma

Orange (UCI Medical Center Residents) - Basaloid carcinoma

Sacramento (UC Davis Medical Center) - Squamous cell carcinoma, basaloid pattern

San Diego (Naval Medical Center) - Cloacogenic carcinoma

Santa Barbara (Cottage Hospital) - Squamous cell carcinoma

Santa Rosa (Santa Rosa Memorial Hospital) - Squamous cell carcinoma (3)

Ventura - Cloacogenic carcinoma (2)

Alaska (Alaska Native Medical Center) - Squamous cell carcinoma (basaloid/cloacogenic)

Arizona (Phoenix Memorial Hospital) - Basaloid (cloacogenic) carcinoma

Florida (Baptist Hospital) - Cloacogenic "basaloid" carcinoma (1); Cloacogenic carcinoma (SCC) (1); Poorly differentiated SCC ("cloacogenic") (1); Basaloid carcinoma (1); SCC ("cloacogenic") (1)

Florida (Munroe Regional Medical Center) - Basaloid carcinoma

Florida (Pathology Associates) - Poorly differentiated squamous carcinoma with basaloid features

Florida (Winter Haven Hospital) - Cloacogenic carcinoma

Indiana (Fort Wayne) - Basosquamous (cloacogenic) anal duct carcinoma, rectum

Louisiana (Louisiana State University Medical Center) - Basaloid (cloacogenic) squamous cell carcinoma

Maryland (Johns Hopkins Hospital Residents) - Squamous cell carcinoma with basaloid growth pattern (1); Basaloid/cloacogenic carcinoma (1)

Maryland (National Naval Medical Center) - Squamous cell carcinoma, basaloid type (8)

Maryland (NIH Pathology Residents) - Basaloid squamous carcinoma

Maryland (University of Maryland Residents) - Cloacogenic carcinoma

Massachusetts (Brigham & Women's Hospital) - Invasive basaloid (cloacogenic) squamous cell carcinoma

Massachusetts (New England Medical Center Residents) - Squamous cell carcinoma

Michigan (Oakwood Hospital) - Basaloid squamous cell carcinoma

Michigan (St. Joseph Mercy Hospital) - Basosquamous (cloacogenic) carcinoma

Minnesota (United Hospital) - Basaloid carcinoma (cloacogenic carcinoma)

Mississippi (University of MS Medical Center) - Squamous cell carcinoma, poorly differentiated

Nebraska (Creighton University School of Medicine Residents) - Squamous cell carcinoma

New Jersey (Overlook Hospital) - Invasive squamous cell carcinoma of anus (4)

New York (Long Island Jewish Medical Center) - Basaloid carcinoma (high grade)

New York (Nassau University Medical Center) - Cloacogenic carcinoma, rectum

New York (New York Medical College) - Cloacogenic (basaloid) carcinoma of ano-rectum

New York (Stony Brook University Hospital Residents) - Basaloid carcinoma

New York (Westchester Medical Center) - Cloacogenic (basaloid) carcinoma of ano-rectum

North Carolina (Mountain Area Pathology) - Keratinizing squamous anal canal carcinoma (1); Squamous cell carcinoma (1); Invasive keratinizing squamous cell carcinoma (1); Squamous cell carcinoma, keratinizing (anal canal tumor) (1)

Oklahoma (Tulsa) - Squamous cell carcinoma with basaloid features

Oklahoma (University of Oklahoma Residents) - Basaloid (cloacogenic) squamous cell carcinoma

Pennsylvania (Allegheny General Hospital) - Basaloid squamous cell carcinoma

Pennsylvania (Centre Community Hospital) - Basaloid carcinoma of anal transition zone

Pennsylvania (Memorial Medical Center) - Squamous cell carcinoma
Puerto Rico (University of Puerto Rico) - Squamous cell carcinoma, basaloid type
Rhode Island (Rhode Island Hospital Pathology Residents) - Squamous cell carcinoma with basaloid features
Texas (ProPath Services) - Basaloid carcinoma of anus (2)
Texas (Scott & White Memorial Hospital) - Basaloid squamous cell carcinoma (cloacogenic carcinoma)
West Virginia (Greenbrier Valley Medical Center) - Squamous cell carcinoma, basaloid variant
Wisconsin (Mercer Health Services) - Anal squamous cell carcinoma
Australia (Royal Prince Alfred Hospital) - Basaloid squamous cell carcinoma
Canada (Foothills Medical Center) - Basaloid squamous carcinoma of anus (cloacogenic carcinoma)
Hong Kong (Hong Kong Baptist Hospital) - Squamous cell carcinoma of anal canal, basaloid type
Japan (University of Yamanashi School of Medicine) - Squamous cell carcinoma (2); Basaloid carcinoma (1)
Qatar (Hamad Medical Corporation) - Basaloid carcinoma (cloacogenic)

Case 1 - Diagnosis:

Basaloid squamous (cloacogenic) carcinoma, ano-rectal region
 T-68000, M-81233

Case 1 - References:

Fenger C. Anal Neoplasia and Its Precursors. Facts and Controversies. *Semin Diagn Pathol* 1991; 8(3):190-201.
 Frisch M, Fenger C, van den Brule AJ, et al. Variants of Squamous Cell Carcinoma of the Anal Canal and Perianal Skin and their Relation to Human Papillomaviruses. *Cancer Res* 1999; 59(3):753-757.
 Zamecnik M, Skalova A, Pelikan K, et al. Basaloid Squamous Carcinoma with Collagenous Spherules and Crystalloids. *Ann Diagn Pathol* 2001, 5(4):233-239.
 Gilcrease MZ and Guzman-Paz M. Fine-Needle Aspiration of Basaloid Squamous Carcinoma. A Case Report with Review of Differential Diagnostic Considerations. *Diagn Cytopathol* 1998; 19(3):210-215.
 Kim JH, Sarani B, Orkin BA, et al. HIV-Positive Patients with Anal Carcinoma Have Poorer Treatment Tolerance and Outcome than HIV-Negative Patients. *Dis Colon Rectum* 2001; 44(10):1496-1502.

Case No. 2, Accession No. 29606

January 2003

Bakersfield - Carcinoid tumor
Baldwin Park (Kaiser Permanente) - Carcinoid tumor (2); Neuroendocrine carcinoma (1)
Bay Area - Carcinoid, aggressive (4)
Daly City (Seton Medical Center) - Carcinoid
Fontana (Kaiser Permanente) - Carcinoid
Hayward/Fremont - Carcinoid
Laguna Beach (South Coast Medical Center) - Carcinoid tumor
Long Beach - Low grade neuroendocrine carcinoma (carcinoid) (9)
Monterey (Community Hospital of Monterey Peninsula) - Carcinoid vs. atypical carcinoid
Mountain View (El Camino Pathology Group) - Carcinoid tumor
Oakland (Kaiser Permanente) - Carcinoid tumor (4)
Orange (Orange County Pathology Medical Group) - Carcinoid
Orange (UCI Medical Center Residents) - Carcinoid
Sacramento (UC Davis Medical Center) - Carcinoid tumor
San Diego (Naval Medical Center) - Carcinoid
Santa Barbara (Cottage Hospital) - Carcinoid tumor
Santa Rosa (Santa Rosa Memorial Hospital) - Carcinoid tumor (3)
Ventura - Carcinoid tumor (2)
Alaska (Alaska Native Medical Center) - Malignant carcinoid tumor
Arizona (Phoenix Memorial Hospital) - Carcinoid tumor
Florida (Baptist Hospital) - Atypical carcinoid tumor (1); Carcinoid (probably malignant) (1); Carcinoid tumor (3)
Florida (Munroe Regional Medical Center) - Carcinoid tumor
Florida (Pathology Associates) - Carcinoid tumor

Florida (Winter Haven Hospital) - Carcinoid
Indiana (Fort Wayne) - Carcinoid neoplasm, terminal ileum
Louisiana (Louisiana State University Medical Center) - Carcinoid
Maryland (Johns Hopkins Hospital Residents) - Carcinoid tumor (2)
Maryland (National Naval Medical Center) - Carcinoid (8)
Maryland (NIH Pathology Residents) - Neuroendocrine tumor
Maryland (University of Maryland Residents) - Carcinoid
Massachusetts (Brigham & Women's Hospital) - Carcinoid
Massachusetts (New England Medical Center Residents) - Neuroendocrine tumor (carcinoid) with malignant features
Michigan (Oakwood Hospital) - Carcinoid
Michigan (St. Joseph Mercy Hospital) - Carcinoid
Minnesota (United Hospital) - Carcinoid tumor
Mississippi (University of MS Medical Center) - Carcinoid tumor
Nebraska (Creighton University School of Medicine Residents) - Carcinoid tumor
New Jersey (Overlook Hospital) - Carcinoid tumor, colon (4)
New York (Long Island Jewish Medical Center) - Typical carcinoid
New York (Nassau University Medical Center) - Carcinoid tumor, terminal ileum
New York (New York Medical College) - Carcinoid tumor
New York (Stony Brook University Hospital Residents) - Carcinoid tumor, classic
New York (Westchester Medical Center) - Carcinoid tumor
North Carolina (Mountain Area Pathology) - Carcinoid tumor (4)
Oklahoma (Tulsa) - Carcinoid tumor (2)
Oklahoma (University of Oklahoma Residents) - Carcinoid tumor
Pennsylvania (Allegheny General Hospital) - Carcinoid tumor of GI
Pennsylvania (Centre Community Hospital) - Carcinoid tumor of small bowel
Pennsylvania (Memorial Medical Center) - Carcinoid tumor
Puerto Rico (University of Puerto Rico) - Carcinoid tumor
Rhode Island (Rhode Island Hospital Pathology Residents) - Carcinoid tumor
Texas (ProPath Services) - Carcinoid tumor (2)
Texas (Scott & White Memorial Hospital) - Carcinoid (2)
West Virginia (Greenbrier Valley Medical Center) - Carcinoid tumor
Wisconsin (Meriter Health Services) - Carcinoid
Australia (Royal Prince Alfred Hospital) - Carcinoid tumor
Canada (Foothills Medical Center) - Carcinoid tumor
Hong Kong (Hong Kong Baptist Hospital) - Carcinoid tumor
Japan (University of Yamanashi School of Medicine) - Carcinoid (2); Neuroendocrine cell carcinoma (1)
Qatar (Hamad Medical Corporation) - Carcinoid tumor

Case 2 - Diagnosis:

Carcinoid tumor, ileum

T-Y4400, M-82401

Case 2 - References:

- Hellman P, Lundstrom T, Ohrvall U and Eriksson B. Effect of Surgery on the Outcome of Midgut Carcinoid Disease with Lymph Node and Liver Metastases. *World J Surg* 2002; 26(8):991-997.
- Danikas D, Sachs R, Dressner RM, et al. Testicular Metastasis from Ileal Carcinoid. Report of Case. *Dis Colon Rec* 2001; 44(9):1365-1366.
- Cunningham JD, Aleali R, Aleali M, et al. Malignant Small Bowel Neoplasms. Histopathologic Determinants of Recurrence and Survival. *Ann Surg* 1997; 225(3):300-306.
- Modlin IM and Sandor A. An Analysis of 8305 Cases of Carcinoid Tumors. *Cancer* 1997; 79(4):813-829.
- Portel-Gomes GM, Grimelius L, Johansson H, et al. Chromogranin A in Human Neuroendocrine Tumors. An Immunohistochemical Study with Region-Specific Antibodies. *Am J Surg Pathol* 2001; 25(10):1261-1267.

- Bakersfield - Large cell lymphoma
- Baldwin Park (Kaiser Permanente) - Diffuse large cell lymphoma (3)
- Bay Area - Lymphoma ("maltoma") (4)
- Daly City (Seton Medical Center) - Large cell lymphoma, ? anaplastic lymphoma
- Fontana (Kaiser Permanente) - Large cell lymphoma
- Hayward/Fremont - High grade lymphoma (pleomorphic B cell?)
- Laguna Beach (South Coast Medical Center) - High grade lymphoma
- Long Beach - Large cell lymphoma (9)
- Monterey (Community Hospital of Monterey Peninsula) - Lymphoma, diffuse large cell
- Mountain View (El Camino Pathology Group) - Malignant lymphoma, large cell type
- Oakland (Kaiser Permanente) - Large cell lymphoma (4)
- Orange (Orange County Pathology Medical Group) - Non-Hodgkin's lymphoma, large cell
- Orange (UCI Medical Center Residents) - Lymphoma (favor diffuse large cell)
- Sacramento (UC Davis Medical Center) - Lymphoma, high grade
- San Diego (Naval Medical Center) - Non-Hodgkin's lymphoma
- Santa Barbara (Cottage Hospital) - Malignant lymphoma, large cell
- Santa Rosa (Santa Rosa Memorial Hospital) - Non-Hodgkin's lymphoma, large cell type (1); Large cell malignant lymphoma (1); Malignant lymphoma, diffuse large cell type (1)
- Ventura - Large cell lymphoma (2)
- Alaska (Alaska Native Medical Center) - Multiple lymphomatous polyposis (Mantle cell lymphoma); (2) Diffuse large cell lymphoma
- Arizona (Phoenix Memorial Hospital) - Large cell immunoblastic lymphoma
- Florida (Baptist Hospital) - Anaplastic lymphoma (1); Malignant lymphoma, diffuse large cell (4)
- Florida (Munroe Regional Medical Center) - Large cell lymphoma
- Florida (Pathology Associates) - Diffuse large cell lymphoma
- Florida (Winter Haven Hospital) - Small cleaved cell lymphoma
- Indiana (Fort Wayne) - Lymphoma of small bowel
- Louisiana (Louisiana State University Medical Center) - Large cell lymphoma
- Maryland (Johns Hopkins Hospital Residents) - Large cell lymphoma (1); Large cell lymphoma vs. myeloid sarcoma(1)
- Maryland (National Naval Medical Center) - Malignant lymphoma (8)
- Maryland (NIH Pathology Residents) - Lymphoma, favor diffuse large B-cell lymphoma
- Maryland (University of Maryland Residents) - B-cell lymphoma
- Massachusetts (Brigham & Women's Hospital) - Large cell lymphoma, likely diffuse large B-cell lymphoma
- Massachusetts (New England Medical Center Residents) - Lymphoma, diffuse large B-cell type
- Michigan (Oakwood Hospital) - Non-Hodgkin's lymphoma, large cell
- Michigan (St. Joseph Mercy Hospital) - Large cell lymphoma
- Minnesota (United Hospital) - Monocytic/granulocytic sarcoma
- Mississippi (University of MS Medical Center) - Large cell lymphoma
- Nebraska (Creighton University School of Medicine Residents) - Lymphoma (diffuse B-cell)
- New Jersey (Overlook Hospital) - Diffuse large cell lymphoma, small bowel (4)
- New York (Long Island Jewish Medical Center) - Diffuse large cell lymphoma
- New York (Nassau University Medical Center) - Diffuse large cell lymphoma, small bowel
- New York (New York Medical College) - Diffuse large B-cell lymphoma, small bowel
- New York (Stony Brook University Hospital Residents) - Malignant lymphoma, primary, most likely diffuse large B-cell
- New York (Westchester Medical Center) - Diffuse large B-cell lymphoma, small bowel
- North Carolina (Mountain Area Pathology) - Large cell lymphoma (4)
- Oklahoma (Tulsa) - Malignant lymphoma, large cell type
- Oklahoma (University of Oklahoma Residents) - Diffuse large cell lymphoma
- Pennsylvania (Allegheny General Hospital) - Large B-cell lymphoma
- Pennsylvania (Centre Community Hospital) - Malignant lymphoma, favor enteropathy-type T-cell lymphoma
- Pennsylvania (Memorial Medical Center) - Large cell lymphoma (maltoma)

Puerto Rico (University of Puerto Rico) - Diffuse large cell lymphoma
Rhode Island (Rhode Island Hospital Pathology Residents) - Lymphoma, diffuse large cell with signet ring feature
Texas (ProPath Services) - Malignant lymphoma, large cell type (2)
Texas (Scott & White Memorial Hospital) - Large cell lymphoma
West Virginia (Greenbrier Valley Medical Center) - Lymphoma, large cell
Wisconsin (Meriter Health Services) - Large cell lymphoma
Australia (Royal Prince Alfred Hospital) - Diffuse large B-cell lymphoma
Canada (Foothills Medical Center) - Malignant lymphoma, diffuse large B-cell
Hong Kong (Hong Kong Baptist Hospital) - Malignant lymphoma
Japan (University of Yamanashi School of Medicine) - Non-Hodgkin's lymphoma, diffuse (3)
Qatar (Hamad Medical Corporation) - Large B-cell lymphoma

Case 3 - Diagnosis:

Diffuse large cell lymphoma, ileum
 T-65200, M-95903

Case 3 - References:

Shipp MA, Ross KN, Tamayo P, et al. Diffuse Large B-Cell Lymphoma Outcome Prediction by Gene-Expression Profiling and Supervised Machine Learning. *Nat Med* 2002;8(1):68-74.
 Sakai A, Thieblemont C, Wellmann A, et al. PTEN Gene Alterations in Lymphoid Neoplasms. *Blood* 1998; 92(9):3410-3415.
 Isaacson PG. Gastrointestinal Lymphomas of T- and B- Cell Types. *Mod Pathol* 1999; 12(2):151-158.
 Sugimoto M, Kajimura M, Sato Y, et al. Regression of Primary Gastric Diffuse Large B-Cell Lymphoma After Eradication of Helicobacter Pylori. *Gastrointest Endosc* 2001; 54(5):643-45.
 Ree HJ, Yang WJ, Kim CW, et al. Coexpression of Bcl-6 and CD10 in Diffuse Large B-Cell Lymphomas. Significance of Bcl-6 Expression Patterns in Identifying Germinal Center B-Cell Lymphoma. *Hum Pathol* 2001; 32(9):954-962.

Case No. 4, Accession No. 29700

January 2003

Bakersfield - Xanthogranulomatous cholecystitis
Baldwin Park (Kaiser Permanente) - Xanthogranulomatous cholecystitis (2); Malakoplakia (1)
Bay Area - Xanthogranulomatous cholecystitis (3); Polypoid inflammatory pseudotumor (1)
Daly City (Seton Medical Center) - Xanthogranulomatous cholecystitis
Fontana (Kaiser Permanente) - Xanthogranulomatous cholecystitis
Hayward/Fremont - Inflammatory pseudotumor (inflammatory myofibroblastoma)
Laguna Beach (South Coast Medical Center) - Xanthogranulomatous inflammation
Long Beach - Xanthogranulomatous cholecystitis (9)
Monterey (Community Hospital of Monterey Peninsula) - Pseudotumor
Mountain View (El Camino Pathology Group) - Xanthogranulomatous cholecystitis
Oakland (Kaiser Permanente) - Xanthogranulomatous cholecystitis (4)
Orange (Orange County Pathology Medical Group) - Xanthogranulomatous cholecystitis
Orange (UCI Medical Center Residents) - Adenomyoma, xanthogranulomatous cholecystitis
Sacramento (UC Davis Medical Center) - Xanthogranulomatous cholecystitis
San Diego (Naval Medical Center) - Xanthogranulomatous cholecystitis
Santa Barbara (Cottage Hospital) - Xanthogranulomatous cholecystitis
Santa Rosa (Santa Rosa Memorial Hospital) - Xanthogranulomatous cholecystitis (3)
Ventura - Inflammatory pseudotumor (2)
Alaska (Alaska Native Medical Center) - Xanthogranulomatous cholecystitis
Arizona (Phoenix Memorial Hospital) - Xanthomatous cholecystitis
Florida (Baptist Hospital) - Xanthogranulomatous cholecystitis (5)
Florida (Munroe Regional Medical Center) - Xanthogranulomatous cholecystitis
Florida (Pathology Associates) - Inflammatory pseudotumor, xanthogranulomatous cholecystitis
Florida (Winter Haven Hospital) - Xanthogranulomatous cholecystitis
Indiana (Fort Wayne) - Xanthogranulomatous cholecystitis, gallbladder

Louisiana (Louisiana State University Medical Center) - Xanthogranulomatous cholecystitis

Maryland (Johns Hopkins Hospital Residents) - Xanthogranulomatous cholecystitis (1); Inflammatory myofibroblastic tumor vs. xanthogranulomatous cholecystitis (1)

Maryland (National Naval Medical Center) - Xanthogranulomatous cholecystitis (8)

Maryland (NIH Pathology Residents) - Chronic cholecystitis with amyloidosis

Maryland (University of Maryland Residents) - Inflammatory myofibroblastic tumor, inflammatory pseudotumor

Massachusetts (Brigham & Women's Hospital) - Xanthogranulomatous cholecystitis

Massachusetts (New England Medical Center Residents) - Xanthogranulomatous cholecystitis

Michigan (Oakwood Hospital) - Xanthogranulomatous cholecystitis, rule out malakoplakia

Michigan (St. Joseph Mercy Hospital) - Malakoplakia vs. xanthogranulomatous cholecystitis

Minnesota (United Hospital) - Nodular fasciitis

Mississippi (University of MS Medical Center) - Xanthogranulomatous cholecystitis

Nebraska (Creighton University School of Medicine Residents) - Inflammatory pseudotumor, rule out malakoplakia

New Jersey (Overlook Hospital) - Xanthogranulomatous cholecystitis (4)

New York (Long Island Jewish Medical Center) - Xanthogranulomatous cholecystitis

New York (Nassau University Medical Center) - Xanthogranulomatous cholecystitis, gallbladder

New York (New York Medical College) - Xanthogranulomatous cholecystitis

New York (Stony Brook University Hospital Residents) - Xanthogranulomatous cholecystitis

New York (Westchester Medical Center) - Xanthogranulomatous cholecystitis

North Carolina (Mountain Area Pathology) - Xanthogranulomatous cholecystitis (3); Malakoplakia (1)

Oklahoma (Tulsa) - Xanthogranulomatous cholecystitis

Oklahoma (University of Oklahoma Residents) - Xanthogranulomatous cholecystitis

Pennsylvania (Allegheny General Hospital) - Xanthogranulomatous cholecystitis

Pennsylvania (Centre Community Hospital) - Xanthogranulomatous cholecystitis of gallbladder

Pennsylvania (Memorial Medical Center) - Xanthogranulomatous cholecystitis

Puerto Rico (University of Puerto Rico) - Xanthogranulomatous cholecystitis

Rhode Island (Rhode Island Hospital Pathology Residents) - Xanthogranulomatous cholecystitis

Texas (ProPath Services) - Inflammatory pseudotumor (1); Myofibroblastic proliferative (inflammatory pseudotumor) (1)

Texas (Scott & White Memorial Hospital) - Inflammatory pseudotumor

West Virginia (Greenbrier Valley Medical Center) - Inflammatory pseudotumor

Wisconsin (Meriter Health Services) - Xanthogranulomatous cholecystitis

Australia (Roval Prince Alfred Hospital) - Xanthogranulomatous cholecystitis (3); Inflammatory myofibroblastic tumor (3)

Canada (Foothills Medical Center) - Xanthogranulomatous cholecystitis

Hong Kong (Hong Kong Baptist Hospital) - Xanthogranulomatous cholecystitis

Japan (University of Yamanashi School of Medicine) - Xanthogranulomatous cholecystitis (3)

Qatar (Hamad Medical Corporation) - Xanthogranulomatous cholecystitis

Case 4 - Diagnosis:

Inflammatory pseudotumor (xanthogranulomatous cholecystitis), gallbladder
T-57000, M-43000

Case 4 - References:

- Ikeda H, Oka T, Imafuku I, et al. A Case of Inflammatory Pseudotumor of the Gallbladder and Bile Duct. *Am J Gastroenterol* 1990; 85(2):203-206.
- Krishnani N, Shukla S, Jain M, et al. Fine Needle Aspiration Cytology in Xanthogranulomatous Cholecystitis, Gallbladder Adenocarcinoma and Coexistent Lesions. *Acta Cytol* 2000; 44(4):508-514.
- Shukla S, Krishnani N, Jain M, et al. Xanthogranulomatous Cholecystitis. Fine Needle Aspiration Cytology in 17 Cases. *Acta Cytol* 1997; 41(2):413-418.

Bakersfield - Mesenteric fibromatosis
Baldwin Park (Kaiser Permanente) - Fibromatosis (desmoid) (1); Desmoid tumor (2)
Bay Area - Fibromatosis, desmoid (2); Inflammatory pseudotumor (1)
Daly City (Seton Medical Center) - Fibromatosis
Fontana (Kaiser Permanente) - Idiopathic retroperitoneal fibrosis
Hayward/Fremont - Sclerosing mesenteritis
Laguna Beach (South Coast Medical Center) - Idiopathic retractile, sclerosing mesenteritis
Long Beach - Mesenteric fibromatosis, desmoid (9)
Monterey (Community Hospital of Monterey Peninsula) - Desmoid vs. fibromatosis
Mountain View (El Camino Pathology Group) - Fibromatosis, desmoid tumor
Oakland (Kaiser Permanente) - Fibromatosis (4)
Orange (Orange County Pathology Medical Group) - Mesenteric fibromatosis
Orange (UCI Medical Center Residents) - Retroperitoneal fibromatosis
Sacramento (UC Davis Medical Center) - Fibromatosis or sclerosing mesenteritis
San Diego (Naval Medical Center) - Mesenteric fibromatosis
Santa Barbara (Cottage Hospital) - Intra-abdominal desmoid tumor
Santa Rosa (Santa Rosa Memorial Hospital) - Desmoid (1); Sclerosing mesenteritis (1); Mesenteric fibromatosis (intra-abdominal fibromatosis/intra-abdominal desmoid) (1)
Ventura - Mesenteric fibromatosis (2)
Alaska (Alaska Native Medical Center) - Intra-abdominal fibromatosis (desmoid)
Arizona (Phoenix Memorial Hospital) - Sclerosing mesenteritis
Florida (Baptist Hospital) - Mesenteric fibromatosis (1); Mesenteric intra-abdominal desmoid (1); Intra-abdominal desmoid (1); Desmoid (2)
Florida (Munroe Regional Medical Center) - Desmoid tumor
Florida (Pathology Associates) - Desmoid
Florida (Winter Haven Hospital) - Desmoid tumor
Indiana (Fort Wayne) - Abdominal desmoid, small bowel
Louisiana (Louisiana State University Medical Center) - Fibromatosis
Maryland (Johns Hopkins Hospital Residents) - Sclerosing mesenteritis (1); Mesenteric fibromatosis (1)
Maryland (National Naval Medical Center) - Desmoid tumor (7); Sclerosing mesenteritis (1)
Maryland (NIH Pathology Residents) - Desmoid tumor
Maryland (University of Maryland Residents) - Desmoid tumor
Massachusetts (Brigham & Women's Hospital) - Mesenteric desmoid fibromatosis
Massachusetts (New England Medical Center Residents) - Fibromatosis
Michigan (Oakwood Hospital) - Fibromatosis
Michigan (St. Joseph Mercy Hospital) - Fibromatosis (desmoid)
Minnesota (United Hospital) - Abdominal fibromatosis
Mississippi (University of MS Medical Center) - Desmoid tumor
Nebraska (Creighton University School of Medicine Residents) - Leiomyoma
New Jersey (Overlook Hospital) - Fibromatosis (4)
New York (Long Island Jewish Medical Center) - Mesentery fibromatosis; Diff dx: Sclerosing mesenteritis; GIST
New York (Nassau University Medical Center) - Intra-abdominal desmoid tumor
New York (New York Medical College) - Mesenteric fibromatosis
New York (Stony Brook University Hospital Residents) - Desmoid fibromatosis
New York (Westchester Medical Center) - Mesenteric fibromatosis
North Carolina (Mountain Area Pathology) - Mesenteric fibromatosis (4)
Oklahoma (Tulsa) - Mesenteric fibromatosis
Oklahoma (University of Oklahoma Residents) - Fibromatosis
Pennsylvania (Allegheny General Hospital) - Abdominal fibromatosis "desmoid tumor"
Pennsylvania (Centre Community Hospital) - Mesenteric fibromatosis

Pennsylvania (Memorial Medical Center) - Desmoid tumor
Puerto Rico (University of Puerto Rico) - Intra-abdominal fibromatosis
Rhode Island (Rhode Island Hospital Pathology Residents) - Mesenteric fibromatosis
Texas (ProPath Services) - Desmoid tumor (2)
Texas (Scott & White Memorial Hospital) - Extra-abdominal desmoid
West Virginia (Greenbrier Valley Medical Center) - Stromal tumor, malignant
Wisconsin (Meriter Health Services) - Desmoid tumor
Australia (Royal Prince Alfred Hospital) - Desmoid (abdominal fibromatosis)
Canada (Foothills Medical Center) - Fibromatosis
Hong Kong (Hong Kong Baptist Hospital) - Atypical lipoma
Japan (University of Yamanashi School of Medicine) - Sclerosing mesenteritis (1); Intra-abdominal desmoid (2)
Qatar (Hamad Medical Corporation) - Mesenteric fibromatosis

Case 5 - Diagnosis:

Mesenteric fibromatosis (intra-abdominal desmoid tumor)
 T-Y4300, M-76100

Case 5 - References:

Burke AP, Sobin LH and Shekitka KM. Mesenteric Fibromatosis. A Follow-Up Study. *Arch Pathol Lab Med* 1990; 114(8):832-835.
 Remmele W, Muller-Lobeck H and Paulus W. Primary Mesenteritis, Mesenteric Fibrosis, and Mesenteric Fibromatosis. Report of Four Cases, Pathology, and Classification. *Pathol Res Pract* 1988; 184(1):77-85.
 Yantiss RK, Spiro IJ, Compton CC, et al. Gastrointestinal Stromal Tumor Versus Intra-Abdominal Fibromatosis of the Bowel Wall. A Clinically Important Differential Diagnosis. *Am J Surg Pathol* 2000; 24(7):947-957.
 Soravia C, Berk T, McLeod RS, et al. Desmoid Disease in Patients with Familial Adenomatous Polyposis. *Dis Colon Rectum* 2000; 43(3):363-369.
 Badmanaban B, Aye WM, Rayis A, et al. Mesenteric Fibromatosis in Gardners Syndrome. *Ir Med J* 1997; 90(7):276.

Case No. 6, Accession No. 23497

January 2003

Bakersfield - Serous microcystic adenoma
Baldwin Park (Kaiser Permanente) - Serous microcystic tumor, pancreas (3)
Bay Area - Serous microcystic adenoma (4)
Daly City (Seton Medical Center) - Serous cystadenoma
Fontana (Kaiser Permanente) - Serous microcystic adenoma
Hayward/Fremont - Serous microcystic adenoma
Laguna Beach (South Coast Medical Center) - Serous cystadenoma (glycogen-rich adenoma)
Long Beach - Microcystic adenoma of pancreas (9)
Monterey (Community Hospital of Monterey Peninsula) - Serous microcystic adenoma
Mountain View (El Camino Pathology Group) - Microcystic adenoma, clear cell type
Oakland (Kaiser Permanente) - Serous microcystic adenoma (4)
Orange (Orange County Pathology Medical Group) - Microcystic serous cystadenoma
Orange (UCI Medical Center Residents) - Microcystic adenoma
Sacramento (UC Davis Medical Center) - Serous cystadenoma
San Diego (Naval Medical Center) - Serous microcystic adenoma
Santa Barbara (Cottage Hospital) - Microcystic adenoma
Santa Rosa (Santa Rosa Memorial Hospital) - Microcystic cystadenoma (1); Pancreatic cystadenoma (1); Serous microcystic adenoma (1)
Ventura - Serous microcystic adenoma (2)
Alaska (Alaska Native Medical Center) - Serous microcystic adenoma
Arizona (Phoenix Memorial Hospital) - Serous cystadenoma, pancreas
Florida (Baptist Hospital) - Serous microcystic adenoma (2); Cystadenoma, microcystic type (2); Microcystic adenoma (1)
Florida (Munroe Regional Medical Center) - Serous microcystic adenoma

Florida (Pathology Associates) - Microcystic adenoma, glycogen-rich adenoma of Compagno and Oertel

Florida (Winter Haven Hospital) - Cystadenoma

Indiana (Fort Wayne) - Serous microcystic adenoma (serous cystadenoma), pancreas

Louisiana (Louisiana State University Medical Center) - Serous cystadenoma (microcystic)

Maryland (Johns Hopkins Hospital Residents) - Serous cystadenoma (1); Pancreatic serous cystic neoplasm (1)

Maryland (National Naval Medical Center) - Microcystic adenoma (serous cystadenoma) (8)

Maryland (NIH Pathology Residents) - Microcystic adenoma (serous cystadenoma)

Maryland (University of Maryland Residents) - Serous cystadenoma

Massachusetts (Brigham & Women's Hospital) - Serous cystadenoma

Massachusetts (New England Medical Center Residents) - Serous microcystic adenoma

Michigan (Oakwood Hospital) - Serous microcystic neoplasm

Michigan (St. Joseph Mercy Hospital) - Serous (microcystic) adenoma

Minnesota (United Hospital) - Serous microcystic adenoma

Mississippi (University of MS Medical Center) - Microcystic adenoma

Nebraska (Creighton University School of Medicine Residents) - Serous cystadenoma, microcystic

New Jersey (Overlook Hospital) - Microcystic serous tumor, pancreas (4)

New York (Long Island Jewish Medical Center) - Serous cystadenoma, microcystic type

New York (Nassau University Medical Center) - Serous cystadenoma, pancreas

New York (New York Medical College) - Microcystic cystadenoma of pancreas

New York (Stony Brook University Hospital Residents) - Serous microcystic adenoma, pancreas

New York (Westchester Medical Center) - Microcystic cystadenoma of pancreas

North Carolina (Mountain Area Pathology) - Serous cystadenoma (microcystic adenoma) (4)

Oklahoma (Tulsa) - Serous microcystic adenoma

Oklahoma (University of Oklahoma Residents) - Serous cystadenoma of the pancreas

Pennsylvania (Allegheny General Hospital) - Microcystic adenoma of pancreas

Pennsylvania (Centre Community Hospital) - Serous cystadenoma of pancreas

Pennsylvania (Memorial Medical Center) - Microcystic serous cystadenoma

Puerto Rico (University of Puerto Rico) - Serous cystadenoma

Rhode Island (Rhode Island Hospital Pathology Residents) - Serous microcystic adenoma

Texas (ProPath Services) - Microcystic cystadenoma (2)

Texas (Scott & White Memorial Hospital) - Microcystic adenoma (2)

West Virginia (Greenbrier Valley Medical Center) - Serous microcystic adenoma

Wisconsin (Meriter Health Services) - Serous microcystic adenoma

Australia (Royal Prince Alfred Hospital) - Serous microcystic adenoma

Canada (Foothills Medical Center) - Serous microcystic cystadenoma of pancreas

Hong Kong (Hong Kong Baptist Hospital) - Multicystic cystadenoma of the pancreas

Japan (University of Yamanashi School of Medicine) - Serous microcystic adenoma (3)

Qatar (Hamad Medical Corporation) - Microcystic adenoma pancreas

Case 6 - Diagnosis:

Serous microcystic adenoma (cystadenoma), pancreas
T-59000, M-84410

Case 6 – References:

- Alpert LC, Truong LD, Bossart MI, Spjut HJ. Microcystic Adenoma (Serous Cystadenoma) of the Pancreas. A Study of 14 Cases with Immunohistochemical and Electron-Microscopic Correlation. *Am J Surg Pathol* 1988; 12(4):251-263.
- Itai Y, Ohhashi K, Furui S, et al. Microcystic Adenoma of the Pancreas. Spectrum of Computed Tomographic Findings. *J Comput Assist Tomogr* 1988; 12(5):797-803.
- Tripodi SA, Civitelli S, Schurfeld K, et al. Microcystic Adenoma of the Pancreas (Glycogen-Rich Cystadenoma) with Stromal Amyloid Deposits. *Histopathol* 2000; 37(2): 147-149.
- Logrono R, Vyas SH, Molina CP, et al. Microcystic Adenoma of the Pancreas. Cytologic Appearance on Percutaneous and Endoscopic Ultrasound-Guided Fine-Needle Aspiration. Report of a Case. *Diagn Cytopathol* 1999; 20(5):298-301.
- Omeroglu A, Paner GP, Ciesla MC, et al. Serous Microcystic Adenoma of the Pancreas. *Arch Pathol Lab Med* 2001; 125(12):1613-1614.

- Bakersfield - Poorly differentiated adenocarcinoma (signet ring adenocarcinoma)
- Baldwin Park (Kaiser Permanente) - Poorly differentiated signet ring carcinoma (3)
- Bay Area - Mucinous "signet ring" adenocarcinoma (4)
- Daly City (Seton Medical Center) - Poorly differentiated signet ring cell carcinoma
- Fontana (Kaiser Permanente) - Signet ring cell carcinoma
- Hayward/Fremont - Anaplastic T-cell lymphoma vs. anaplastic carcinoma
- Laguna Beach (South Coast Medical Center) - Poorly differentiated (signet ring) adenocarcinoma
- Long Beach - Poorly differentiated signet-ring adenocarcinoma (9)
- Monterey (Community Hospital of Monterey Peninsula) - Signet ring carcinoma
- Mountain View (El Camino Pathology Group) - Signet ring adenocarcinoma with mucinous features
- Oakland (Kaiser Permanente) - Poorly differentiated signet ring adenocarcinoma (4)
- Orange (Orange County Pathology Medical Group) - Adenocarcinoma, signet ring/mucinous
- Orange (UCI Medical Center Residents) - Mucinous adenocarcinoma
- Sacramento (UC Davis Medical Center) - Mucinous adenocarcinoma
- San Diego (Naval Medical Center) - Poorly differentiated adenocarcinoma
- Santa Barbara (Cottage Hospital) - Mucinous carcinoma
- Santa Rosa (Santa Rosa Memorial Hospital) - Signet ring cell adenocarcinoma (1); Colonic adenocarcinoma, mucin secreting signet ring (1); Mucinous adenocarcinoma, signet ring cell type (1)
- Ventura - Mucinous adenocarcinoma (2)
- Alaska (Alaska Native Medical Center) - Poorly differentiated adenocarcinoma (with signet ring and sarcomatoid features)
- Arizona (Phoenix Memorial Hospital) - Poorly differentiated adenocarcinoma with rhabdoid features
- Florida (Baptist Hospital) - Poorly differentiated "signet ring" cell carcinoma (1); Signet ring cell adenocarcinoma (3); Signet ring carcinoma (1)
- Florida (Munroe Regional Medical Center) - Signet cell adenocarcinoma
- Florida (Pathology Associates) - Mucinous signet ring cell adenocarcinoma
- Florida (Winter Haven Hospital) - Signet cell adenocarcinoma
- Indiana (Fort Wayne) - Pleomorphic adenocarcinoma, signet colon
- Louisiana (Louisiana State University Medical Center) - Signet ring cell adenocarcinoma
- Maryland (Johns Hopkins Hospital Residents) - Signet ring carcinoma (consider HNPCC) (1); Poorly differentiated/signet ring adenocarcinoma with involvement of one associated node (1)
- Maryland (National Naval Medical Center) - Poorly differentiated adenocarcinoma with signet ring cell features (8)
- Maryland (NIH Pathology Residents) - Poorly differentiated mucinous adenocarcinoma (signet ring cell)
- Maryland (University of Maryland Residents) - Signet ring cell carcinoma
- Massachusetts (Brigham & Women's Hospital) - Poorly differentiated adenocarcinoma, signet ring cell type
- Massachusetts (New England Medical Center Residents) - Adenocarcinoma, invasive with signet ring features
- Michigan (Oakwood Hospital) - Mucinous carcinoma, signet ring type
- Michigan (St. Joseph Mercy Hospital) - Signet ring cell carcinoma
- Minnesota (United Hospital) - Poorly differentiated adenocarcinoma
- Mississippi (University of MS Medical Center) - Signet ring cell adenocarcinoma
- Nebraska (Creighton University School of Medicine Residents) - Poorly differentiated adenocarcinoma
- New Jersey (Overlook Hospital) - Signet ring cell carcinoma, colon (4)
- New York (Long Island Jewish Medical Center) - High grade adenocarcinoma, signet ring cell type
- New York (Nassau University Medical Center) - Poorly differentiated adenocarcinoma, signet ring type, colon
- New York (New York Medical College) - Poorly differentiated mucinous (signet ring) adenocarcinoma, colon
- New York (Stony Brook University Hospital Residents) - Poorly differentiated adenocarcinoma with signet ring
- New York (Westchester Medical Center) - Poorly differentiated mucinous (signet ring) adenocarcinoma, colon
- North Carolina (Mountain Area Pathology) - Signet ring adenocarcinoma (1); Signet ring cell carcinoma (1); Poorly differentiated adenocarcinoma (signet ring) (1); Diffuse adenocarcinoma (signet ring type) (1)
- Oklahoma (Tulsa) - Signet ring cell type adenocarcinoma
- Oklahoma (University of Oklahoma Residents) - Poorly differentiated mucinous adenocarcinoma with signet ring cells
- Pennsylvania (Allegheny General Hospital) - Mucinous adenocarcinoma
- Pennsylvania (Centre Community Hospital) - Mucinous adenocarcinoma with signet ring differentiation

Pennsylvania (Memorial Medical Center) - Poorly differentiated mucinous adenocarcinoma
Puerto Rico (University of Puerto Rico) - Signet ring cell carcinoma
Rhode Island (Rhode Island Hospital Pathology Residents) - Signet ring cell carcinoma
Texas (ProPath Services) - Signet ring carcinoma (2)
Texas (Scott & White Memorial Hospital) - Poorly differentiated adenocarcinoma with signet ring cells
West Virginia (Greenbrier Valley Medical Center) - Adenocarcinoma, signet ring
Wisconsin (Meriter Health Services) - Signet ring adenocarcinoma
Australia (Royal Prince Alfred Hospital) - Signet ring adenocarcinoma with mucinous areas
Canada (Foothills Medical Center) - Signet ring adenocarcinoma
Hong Kong (Hong Kong Baptist Hospital) - Signet ring cell carcinoma
Japan (University of Yamanashi School of Medicine) - Signet ring cell carcinoid (1); Mucinous adenocarcinoma (2)
Qatar (Hamad Medical Corporation) - Poorly differentiated carcinoma with signet ring features

Case 7 - Diagnosis:

Poorly differentiated mucinous adenocarcinoma with signet ring features, sigmoid colon
 T-67000, M-84803

Case 7 - References:

Stevens WR and Ruiz P. Primary Linitis Plastica Carcinoma of the Colon and Rectum. *Mod Pathol* 1989; 2(3):265-269.
 Prasad S, Patankar T, Zakaria TT, et al. Primary Linitis Plastica of the Rectosigmoid in a Thirteen Year Old Boy. *J Postgrad Med* 1998; 44(2):40-42.
 Bonello JC, Quan SH and Sternberg SS. Primary Linitis Plastica of the Rectum. *Dis Colon Rectum* 1980; 23(5):337-42U.
 Tandon M, Sostek M and Klein MA. Focus of Signet Ring Cell Carcinoma in an Adenoma of the Sigmoid Colon. *Arch Pathol Lab Med* 1999; 123(10):957-959.
 Nissan A, Guillem JG, Paty PB, et al. Signet-Ring Cell Carcinoma of the Colon and Rectum. A Matched Control Study. *Dis Colon Rectum* 1999; 42(9):1176-1180.

Case No. 8, Accession No. 29637

January 2003

Bakersfield - Melanoma
Baldwin Park (Kaiser Permanente) - Metastatic melanoma (3)
Bay Area - Melanoma (4)
Daly City (Seton Medical Center) - Malignant melanoma
Fontana (Kaiser Permanente) - Melanoma
Hayward/Fremont - Melanoma
Laguna Beach (South Coast Medical Center) - Melanoma
Long Beach - Metastatic malignant melanoma (9)
Monterey (Community Hospital of Monterey Peninsula) - Melanoma
Mountain View (El Camino Pathology Group) - Metastatic melanoma
Oakland (Kaiser Permanente) - Melanoma (4)
Orange (Orange County Pathology Medical Group) - Metastatic malignant melanoma
Orange (UCI Medical Center Residents) - Melanoma, metastatic
Sacramento (UC Davis Medical Center) - Melanoma
San Diego (Naval Medical Center) - Metastatic melanoma
Santa Barbara (Cottage Hospital) - Metastatic melanoma
Santa Rosa (Santa Rosa Memorial Hospital) - Malignant melanoma (3)
Ventura - Malignant melanoma (2)
Alaska (Alaska Native Medical Center) - Malignant melanoma
Arizona (Phoenix Memorial Hospital) - Malignant melanoma, metastatic to small bowel
Florida (Baptist Hospital) - Metastatic melanoma (2); Malignant melanoma (3)
Florida (Munroe Regional Medical Center) - Melanoma
Florida (Pathology Associates) - Melanoma
Florida (Winter Haven Hospital) - Melanoma

Indiana (Fort Wayne) - Melanoma, small bowel

Louisiana (Louisiana State University Medical Center) - Metastatic melanoma

Maryland (Johns Hopkins Hospital Residents) - Malignant melanoma (1); Malignant melanoma, likely metastatic (1)

Maryland (National Naval Medical Center) - Malignant melanoma

Maryland (NIH Pathology Residents) - Metastatic melanoma

Maryland (University of Maryland Residents) - Metastatic melanoma

Massachusetts (Brigham & Women's Hospital) - Metastatic melanoma

Massachusetts (New England Medical Center Residents) - Metastatic malignant melanoma

Michigan (Oakwood Hospital) - Metastatic melanoma

Michigan (St. Joseph Mercy Hospital) - Metastatic melanoma

Minnesota (United Hospital) - Malignant melanoma

Mississippi (University of MS Medical Center) - Metastatic melanoma

Nebraska (Creighton University School of Medicine Residents) - Melanoma

New Jersey (Overlook Hospital) - Metastatic melanoma, small bowel (4)

New York (Long Island Jewish Medical Center) - Melanoma, metastatic

New York (Nassau University Medical Center) - Melanoma, small bowel

New York (New York Medical College) - Melanoma

New York (Stony Brook University Hospital Residents) - Malignant melanoma, metastatic

New York (Westchester Medical Center) - Melanoma

North Carolina (Mountain Area Pathology) - Malignant melanoma (3); Malignant melanoma, probably metastatic (1)

Oklahoma (Tulsa) - Malignant melanoma

Oklahoma (University of Oklahoma Residents) - Melanoma

Pennsylvania (Allegheny General Hospital) - Metastatic melanoma

Pennsylvania (Centre Community Hospital) - Metastatic malignant melanoma

Pennsylvania (Memorial Medical Center) - Malignant melanoma

Puerto Rico (University of Puerto Rico) - Malignant melanoma

Rhode Island (Rhode Island Hospital Pathology Residents) - Malignant melanoma

Texas (ProPath Services) - Malignant melanoma (2)

Texas (Scott & White Memorial Hospital) - Malignant melanoma (2)

West Virginia (Greenbrier Valley Medical Center) - Melanoma, malignant

Wisconsin (Meriter Health Services) - Metastatic melanoma

Australia (Royal Prince Alfred Hospital) - Melanoma

Canada (Foothills Medical Center) - Malignant melanoma

Hong Kong (Hong Kong Baptist Hospital) - Malignant melanoma

Japan (University of Yamanashi School of Medicine) - Malignant melanoma (3)

Qatar (Hamad Medical Corporation) - Metastatic malignant melanoma

Case 8 - Diagnosis:

Melanoma, small bowel
T-64000, M-87203

Case 8 – References:

Wilson BG and Anderson JR. Malignant Melanoma Involving the Small Bowel. *Postgrad Med J* 1986; 62(727):355-357.

Goodman PL and Karakousis CP. Symptomatic Gastrointestinal Metastases from Malignant Melanoma. *Cancer* 1981; 48(4):1058-1059.

Bender GN, Maglinte DD, McLarney JH, et al. Malignant Melanoma. Patterns of Metastasis to the Small Bowel, Reliability of Imaging Studies, and Clinical Relevance. *Am J Gastroenterol* 2001; 96(8):2392-2400.

Blecker D, Abraham S, Furth EE, et al. Melanoma in the Gastrointestinal Tract. *Am J Gastroenterol* 1999; 94(12):3427-3433.

Sachs DL, Lowe L, Chang AE, et al. Do Primary Small Intestinal Melanomas Exist? Report of a Case. *J Am Acad Dermatol* 1999; 41(6):1042-1044.

Bakersfield - Neuroendocrine neoplasm
Baldwin Park (Kaiser Permanente) - Paraganglioma (2); Carcinoid tumor (1)
Bay Area - Extra-adrenal pheochromocytoma /paraganglioma (3)
Daly City (Seton Medical Center) - Paraganglioma
Fontana (Kaiser Permanente) - Paraganglioma
Hayward/Fremont - Large cell neuroendocrine carcinoma
Laguna Beach (South Coast Medical Center) - Extra-adrenal paraganglioma
Long Beach - Paraganglioma (9)
Monterey (Community Hospital of Monterey Peninsula) - Pheochromocytoma
Mountain View (El Camino Pathology Group) - Paraganglioma
Oakland (Kaiser Permanente) - Extra-adrenal pheochromocytoma (4)
Orange (Orange County Pathology Medical Group) - Extra-adrenal paraganglioma
Orange (UCI Medical Center Residents) - Paraganglioma
Sacramento (UC Davis Medical Center) - Paraganglioma
San Diego (Naval Medical Center) - Paraganglioma
Santa Barbara (Cottage Hospital) - Paraganglioma
Santa Rosa (Santa Rosa Memorial Hospital) - Paraganglioma (3)
Ventura - Intra-abdominal paraganglioma (2)
Alaska (Alaska Native Medical Center) - Islet cell tumor
Arizona (Phoenix Memorial Hospital) - Neuroendocrine carcinoma, high grade
Florida (Baptist Hospital) - Paraganglioma (1); Islet cell tumor (1); Neuroendocrine tumor (islet cell vs. carcinoid) (1); Metastatic neuroendocrine carcinoma (? pancreas) (1); Islet cell/carcinoid/neuroendocrine carcinoma (1)
Florida (Munroe Regional Medical Center) - Paraganglioma
Florida (Pathology Associates) - Paraganglioma
Florida (Winter Haven Hospital) - Paraganglioma
Indiana (Fort Wayne) - Paraganglioma, area of ligament of Treitz
Louisiana (Louisiana State University Medical Center) - Endocrine carcinoma (possibly a metastasis from the pancreas)
Maryland (Johns Hopkins Hospital Residents) - Paraganglioma (2)
Maryland (National Naval Medical Center) - Paraganglioma (7); Gangliocytic paraganglioma (1)
Maryland (NIH Pathology Residents) - Neuroendocrine tumor, possibly paraganglioma
Maryland (University of Maryland Residents) - Paraganglioma
Massachusetts (Brigham & Women's Hospital) - Paraganglioma
Massachusetts (New England Medical Center Residents) - Paraganglioma
Michigan (Oakwood Hospital) - Extra-adrenal paraganglioma
Michigan (St. Joseph Mercy Hospital) - Neuroendocrine tumor, favor paraganglioma
Minnesota (United Hospital) - Paraganglioma
Mississippi (University of MS Medical Center) - Retroperitoneal paraganglioma
Nebraska (Creighton University School of Medicine Residents) - Paraganglioma
New Jersey (Overlook Hospital) - Neuroendocrine tumor, NOS (4)
New York (Long Island Jewish Medical Center) - Paraganglioma (extra-adrenal pheochromocytoma)
New York (Nassau University Medical Center) - Paraganglioma, ligament of Treitz
New York (New York Medical College) - Paraganglioma
New York (Stony Brook University Hospital Residents) - Gangliocytic paraganglioma
New York (Westchester Medical Center) - Paraganglioma
North Carolina (Mountain Area Pathology) - Paraganglioma (2); Pheochromocytoma vs. paraganglioma (2)
Oklahoma (Tulsa) - Paraganglioma
Oklahoma (University of Oklahoma Residents) - Extra-adrenal paraganglioma
Pennsylvania (Allegheny General Hospital) - Paraganglioma
Pennsylvania (Centre Community Hospital) - Intra-abdominal small round-cell tumor
Pennsylvania (Memorial Medical Center) - Paraganglioma
Puerto Rico (University of Puerto Rico) - Paraganglioma

Rhode Island (Rhode Island Hospital Pathology Residents) - Paraganglioma
Texas (ProPath Services) - Paraganglioma (1); paraganglioma (extra-adrenal pheochromocytoma)
Texas (Scott & White Memorial Hospital) - Paraganglioma
West Virginia (Greenbrier Valley Medical Center) - Paraganglioma pheochromocytoma
Wisconsin (Meriter Health Services) - Paraganglioma
Australia (Royal Prince Alfred Hospital) - Paraganglioma
Canada (Foothills Medical Center) - Gangliocytic paraganglioma
Hong Kong (Hong Kong Baptist Hospital) - Paraganglioma
Japan (University of Yamanashi School of Medicine) - Paraganglioma (2); Endocrine tumor (1)
Qatar (Hamad Medical Corporation) - Extra-adrenal paraganglioma

Case 9 - Diagnosis:

Gangliocytic paraganglioma, duodenum
T-64300, M-86801

Case 9 – References:

Min KW. Gangliocytic Paraganglioma of the Duodenum. Report of a Case with Immunocytochemical and Ultrastructural Investigation. *Ultrastruct Pathol* 1997; 21(6):587-595.
Perrone T, Sibley RK and Rosai J. Duodenal Gangliocytic Paraganglioma. An Immunohistochemical and Ultrastructural Study and a Hypothesis Concerning its Origin. *Am J Surg Pathol* 1985; 9(1):31-41.
Hamid QA, Bishop AE, Rode J, et al. Duodenal Gangliocytic Paragangliomas. A Study of 10 Cases with Immunocytochemical Neuroendocrine Markers. *Hum Pathol* 1986; 17(11):1151-1157.
Barbareschi M, Frigo B, Aldovini D, et al. Duodenal Gangliocytic Paraganglioma. Report of a Case and Review of the Literature. *Virchows Arch A Pathol Anat Histopathol* 1989; 416(1):81-89.
Guarda LA and Ordonez NG. Gangliocytic Paraganglioma of the Duodenum. Report of Cytologic Histologic, Immunohistochemical, and Ultrastructural Features of a Case. *Diagn Cytopathol* 1987; 3(4):314-319.

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Bakersfield - Gastrointestinal stromal tumor, low grade
Baldwin Park (Kaiser Permanente) - GIST (3)
Bay Area - Gastrointestinal stromal tumor (GIST/GANT) (4)
Daly City (Seton Medical Center) - Inflammatory fibrous tumor
Fontana (Kaiser Permanente) - Gastrointestinal stromal tumor
Hayward/Fremont - Gastrointestinal stromal tumor
Laguna Beach (South Coast Medical Center) - GIST
Long Beach - GIST (low malignant potential) (9)
Monterey (Community Hospital of Monterey Peninsula) - GIST
Mountain View (El Camino Pathology Group) - GI stromal tumor
Oakland (Kaiser Permanente) - Fibromatosis (4)
Orange (Orange County Pathology Medical Group) - Gastrointestinal stromal tumor
Orange (UCI Medical Center Residents) - GIST
Sacramento (UC Davis Medical Center) - GIST
San Diego (Naval Medical Center) - Gastrointestinal stromal tumor
Santa Barbara (Cottage Hospital) - Gastrointestinal stromal tumor
Santa Rosa (Santa Rosa Memorial Hospital) - Gastrointestinal stromal tumor (GIST) (3)
Ventura - Gastrointestinal stromal tumor (2)
Alaska (Alaska Native Medical Center) - Malignant GI stromal tumor (GIST)
Arizona (Phoenix Memorial Hospital) - Gastrointestinal stromal tumor
Florida (Baptist Hospital) - Extra-gastrointestinal stromal tumor (2); GIST (3)
Florida (Munroe Regional Medical Center) - Gastrointestinal stromal tumor
Florida (Pathology Associates) - GIST
Florida (Winter Haven Hospital) - Fibromatosis

Indiana (Fort Wayne) - Gastrointestinal stromal tumor (GIST), small bowel mesentery
Louisiana (Louisiana State University Medical Center) - Fibromatosis
Maryland (Johns Hopkins Hospital Residents) - GIST (2)
Maryland (National Naval Medical Center) - Gastrointestinal stromal tumor
Maryland (NIH Pathology Residents) - GIST
Maryland (University of Maryland Residents) - Gastrointestinal stromal tumor
Massachusetts (Brigham & Women's Hospital) - Spindle cell GIST
Massachusetts (New England Medical Center Residents) - Gastrointestinal stromal tumor
Michigan (Oakwood Hospital) - Gastrointestinal stromal tumor
Michigan (St. Joseph Mercy Hospital) - Gastrointestinal stromal tumor (GIST)
Minnesota (United Hospital) - Gastrointestinal stromal tumor
Mississippi (University of MS Medical Center) - Extragastric stromal tumor
Nebraska (Creighton University School of Medicine Residents) - GIST
New Jersey (Overlook Hospital) - GIST (4)
New York (Long Island Jewish Medical Center) - GIST
New York (Nassau University Medical Center) - GIST, low grade, mesentery
New York (New York Medical College) - Gastrointestinal stromal tumor (GIST)
New York (Stony Brook University Hospital Residents) - Gastrointestinal stromal tumor (GIST)
New York (Westchester Medical Center) - Gastrointestinal stromal tumor (GIST)
North Carolina (Mountain Area Pathology) - Gastrointestinal stromal tumor (4)
Oklahoma (Tulsa) - Gastrointestinal stromal tumor
Oklahoma (University of Oklahoma Residents) - Gastrointestinal stromal tumor
Pennsylvania (Allegheny General Hospital) - Gastrointestinal stromal tumor ("GIST"), malignant potential
Pennsylvania (Centre Community Hospital) - Mesenteric fibromatosis
Pennsylvania (Memorial Medical Center) - GIST (borderline malignancy)
Puerto Rico (University of Puerto Rico) - Gastrointestinal stromal tumor
Rhode Island (Rhode Island Hospital Pathology Residents) - Gastrointestinal stromal tumor
Texas (ProPath Services) - Gastrointestinal stromal tumor (2)
Texas (Scott & White Memorial Hospital) - GIST (malignant)
West Virginia (Greenbrier Valley Medical Center) - Neurofibroma
Wisconsin (Meriter Health Services) - Gastrointestinal stromal tumor
Australia (Royal Prince Alfred Hospital) - Desmoid tumor
Canada (Foothills Medical Center) - GI stromal tumor
Hong Kong (Hong Kong Baptist Hospital) - Gastrointestinal stromal tumor, moderate malignant potential
Japan (University of Yamanashi School of Medicine) - Gastrointestinal stromal tumor (3)
Qatar (Hamad Medical Corporation) - GIST (malignant)

Case 10 - Diagnosis:

Gastrointestinal stromal tumor (CD117 positive), small bowel mesentery
 T-50500, M-88903

Case 10 - References:

- Hasegawa T, Matsuno Y, Shimoda T, et al. Gastrointestinal Stromal Tumor. Consistent CD117 Immunostaining for Diagnosis, and Prognostic Classification Based on Tumor Size and MIB-1 Grade. *Hum Pathol* 2002; 33(6):669-676.
- Capdeville R, Buchdunger E and Zimermann J. Glivec (STI571, Imatinib) A Rationally Developed, Targeted Anticancer Drug. *Nature Rev Drug Discov* 2002; 1(7):493-502.
- Joensuu H, Roberts PJ, Sarlomo-Rikala M, et al. Effect of Tyrosine Kinase Inhibitor STI571 in a Patient with a Metastatic Gastrointestinal Stromal Tumor. *N Eng J Med* 2001; 344(14):1052-1056.
- van Oosterom AT, Judson I, Verweij J, et al. Safety and Efficacy of Imatinib (STI571) in Metastatic Gastrointestinal Stromal Tumours. A Phase 1 Study. *Lancet* 2001; 358(9291):1421-1423.