



CALIFORNIA
TUMOR TISSUE REGISTRY

“GASTROINTESTINAL PATHOLOGY”

Minutes – Subscription B

March, 2005



SUGGESTED READING (General Topics from Recent Literature):

Von Hippel-Lindau Disease. Richard S, Graff J, Lindau J, Resche F. *The Lancet*, 2004 Apr 10; 363:1231-34.

Multiple Myeloma. Sirohi B, Powles R. *The Lancet*, 2004 Mar 13; 363:875-87.

Type 1 Diabetes: Recent Developments. Devendra D, Liu E, Eisenbarth GS. *Br Med J*, 2004; 328:750-4.

Evolution Of Untreated Hereditary Hemochromatosis In The Busselton Population: A 17-Year Study. Olynyk JK, Hagan SE, Cullen DJ, et al: *Mayo Clin Proc*, 2004; 79:309-13.

The Man Behind The Eponym: Lauren V. Ackerman And Verrucous Carcinoma Of Ackerman. Steffan C. *Am J Dermatopathol*, 2004 Aug; 26(4):334-41.

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FILE DIAGNOSES

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CTTR Subscription B

March, 2005

Case 1:

**Tubulovillous adenoma in setting of familial adenomatous polyposis
T-67000, M-8263/0**

Case 2:

**Barrett’s esophagus with invasive adenocarcinoma
T-62000, M-8140/3, M-7333/0**

Case 3:

**Mucinous signet-ring adenocarcinoma, colon
T-67000, M-8490/3**

Case 4:

**Mesenteric fibromatosis
T-65100, M-7610/0**

Case 5:

**Smooth muscle tumor of low malignant potential (“STUMP”)
T65900, M-8000/1**

Case 6:

**Gastrointestinal stromal tumor (GIST), small bowel
T-64000, M-96103**

Case 7:

**Pancreatic mucinous neoplasm with CIS and stromal micro-invasion
T-59000, M-8000/3, M-8010/2**

Case 8:

**Hepatocellular carcinoma, liver
T-56000, M-8170/3**

Case 9:

**Diffuse large B-cell lymphoma, colon
T-67000, M-9590/3**

Case 10:

**Poorly-differentiated malignant neoplasm suggestive of neuroendocrine origin, small bowel
T-64000, M-8000/3**

Escondido - Familial adenomatous polyposis
Glendale - Adenomatous polyposis coli
Granada Hills - Adenomatous polyposis coli; (tubular adenoma)
Sacramento (UC Davis Medical Center) - Tubular adenoma, familial adenomatous coli
San Francisco (San Francisco General Hospital) - Tubulo-villous adenoma in familial polyposis
Florida (Munroe Regional Medical Center) - Juvenile polyp
Florida (Winter Haven Hospital) - Familial polyposis coli
Georgia, Decatur - Familial adenomatous polyposis
Illinois (Evanston Northwestern Health Care) - Adenomatous polyp – Familial polyposis
Illinois (Heartland Regional Medical Center) - Tubular adenoma (polyposis coli)
Kansas (Coffeyville Regional Medical Center) - Tubulovillous adenoma
Kansas, Manhattan - Tubulovillous adenoma as part of FAP
Kentucky (University of Louisville Hospital) - Tubular adenoma
Maryland (Johns Hopkins Medical Institute) - Tubulovillous adenoma in the setting of familial adenomatous polyposis (1); Tubular adenoma {FAP} (1)
Maryland (National Naval Medical Center) - Tubulovillous adenoma associated with familial adenomatous polyposis
Maryland (University of Maryland Medical Center) - Familial adenomatous polyposis
Michigan (Pathology Services of West Michigan) - Juvenile polyp
New York (Nassau University Medical Center) - Peutz-Jegher's polyp
New York (State University of New York at Stony Brook) - Peutz-Jegher's polyposis
North Carolina (Wake Forest University School of Medicine) - Tubulovillous adenoma in a background of familial adenomatous polyposis syndrome
North Carolina (Winston-Salem) - Invasive, well-differentiated adenocarcinoma arising in a tubulovillous adenoma (1); Familial adenomatous polyposis (1)
Ohio (Medical College of Ohio) - Tubulovillous adenoma
Pennsylvania (Allegheny General Hospital) - Tubular adenoma
Pennsylvania (Conemaugh Memorial Medical Center) - Familial adenomatous polyposis
Pennsylvania (Drexel University College of Medicine) - Tubulovillous adenoma
Tennessee (East Tennessee State University) - Combined tubulovillous adenoma and juvenile polyp, colon, consistent with juvenile polyposis
Texas (Scott & White Memorial Hospital) - Peutz-Jegher polyp
Texas, Lubbock - Polyposis
Texas, Sugarland - Tubulovillous adenoma (familial adenomatous polyposis)
Washington, D.C. - Familial adenomatous polyposis
Canada (University of Calgary, Foothills Hospital) - Villous adenoma in background of familial adenomatous polyposis
Canada (Woodstock General Hospital) - Tubulovillous adenoma, colon (rule out familial adenomatous polyposis)
China (Sir Run Run Shaw Hospital) - Familial adenomatous polyposis
Japan (Asahi General Hospital) - Tubulo-villous adenoma, colon
Japan (Hamamatsu University School of Medicine) - Tubular adenoma with moderate atypia
Japan (Gunma University Hospital) - Familial adenomatous polyposis
Puerto Rico (University of Puerto Rico) - Tubular adenoma (FAP)
Qatar, Doha - Tubular adenoma
Spain (Povisa) - Familial adenomatous polyposis
The Netherlands, Amstelveen - Tubulovillous adenoma (1); Adenoma with high grade dysplasia (1)

Case 1 - Diagnosis:

Tubulovillous adenoma in setting of familial adenomatous polyposis
T-67000, M-8263/0

Case 1 - References:

Ackroyd FW, Hedberg SE: Colonic Polyps. *Annu Rev Med*, 1985; 36:619-25.
 Cappell MS; Colonic Tubulovillous Adenoma Associated With Gastric Heterotopia. *N J Med*, 1995 Aug; 92(8):512-5.
 Teo M, Roberts-Thomson IC: Gastrointestinal Colorectal Villous Adenomas. *J Gastroenterol Hepatol*, 2002 Sep; 17(9):1031.
 Greene FL: TMN Staging For Malignancies Of The Digestive Tract: 2003 Changes Beyond. *Semin Surg Oncol*, 2003; 21:23-29.

Escondido - Squamous cell carcinoma infiltrating muscularis propria and lymphatics
Glendale - Adenocarcinoma arising in Barrett's
Granada Hills - Moderately-differentiated adenocarcinoma
Sacramento (UC Davis Medical Center) - Invasive adenocarcinoma, arising in Barrett's esophagus
San Francisco (San Francisco General Hospital) - Superficial adenocarcinoma in Barrett's esophagus
Florida (Munroe Regional Medical Center) - Intramucosal adenocarcinoma
Florida (Winter Haven Hospital) - Adenocarcinoma
Georgia, Decatur - Adenocarcinoma, gastroesophageal junction
Illinois (Evanston Northwestern Health Care) - Adenocarcinoma
Illinois (Heartland Regional Medical Center) - Invasive adenocarcinoma, Grade II
Kansas (Coffeyville Regional Medical Center) - Adenocarcinoma; chronic inflammation; myxoid change
Kansas, Manhattan - Barrett's esophagus with invasive carcinoma
Kentucky (University of Louisville Hospital) - Adenocarcinoma, mucinous differentiation, moderately-poorly differentiated
Maryland (Johns Hopkins Medical Institute) - Infiltrating adenocarcinoma arising in Barrett's esophagus (1); Adenocarcinoma with angiolymphatic invasion (1)
Maryland (National Naval Medical Center) - Adenocarcinoma, invasive, esophagus
Maryland (University of Maryland Medical Center) - Adenocarcinoma
Michigan (Pathology Services of West Michigan) - Adenocarcinoma of esophagus
New York (Nassau University Medical Center) - Poorly-differentiated adenocarcinoma (signet-ring cell)
New York (State University of New York at Stony Brook) - Adenocarcinoma
North Carolina (Wake Forest University School of Medicine) - Adenocarcinoma
North Carolina (Winston-Salem) - Invasive adenosquamous carcinoma, esophagus (1); Adenocarcinoma (1)
Ohio (Medical College of Ohio) - Well-differentiated adenocarcinoma
Pennsylvania (Allegheny General Hospital) - Intramural cyst
Pennsylvania (Conemaugh Memorial Medical Center) - Well-differentiated adenocarcinoma
Pennsylvania (Drexel University College of Medicine) - Moderately-differentiated adenocarcinoma
Tennessee (East Tennessee State University) - Adenocarcinoma, esophagus
Texas (Scott & White Memorial Hospital) - Invasive adenocarcinoma
Texas, Lubbock - Adenocarcinoma
Texas, Sugarland - Intramucosal adenocarcinoma
Washington, D.C. - Adenocarcinoma
Canada (University of Calgary, Foothills Hospital) - Adenocarcinoma of esophagus in background of Barrett's esophagus
Canada (Woodstock General Hospital) - Adenocarcinoma arising in Barrett's esophagus
China (Sir Run Run Shaw Hospital) - Adenocarcinoma
Japan (Asahi General Hospital) - Well-differentiated adenocarcinoma arising in Barrett's esophagus, distal esophagus
Japan (Hamamatsu University School of Medicine) - Well-differentiated adenocarcinoma, tubular type
Japan (Gunma University Hospital) - Adenocarcinoma derived from Barrett's esophagus
Puerto Rico (University of Puerto Rico) - Adenocarcinoma arising in Barrett's esophagus
Qatar, Doha - Adenocarcinoma arising in Barrett's esophagus
Spain (Povisa) - Adenocarcinoma
The Netherlands, Amstelveen - Adenocarcinoma in Barrett's mucosa (1); Barrett esophagus with intramucosal carcinoma (1)

Case 2 - Diagnosis:

Barrett's esophagus with invasive adenocarcinoma

T-62000, M-8140/3, M-7333/0

Case 2 - References:

- Chandrasoma PT, Der R, Ma Y, Et Al: Histologic Classification Of Patients Based ON Mapping Biopsies Of The Gastroesophageal Junction. *Am J Surg Pathol*, 2003 Jul; 27(7):929-36.
- Wieczorek TJ, Wang HH, Antonioli DA, et al: Pathologic Features Of Reflux And Helicobacter Pylori-Associated Carditis: A Comparative Study. *Am J Surg Pathol*, 2003 Jul; 29(7):960-8.
- Shaheen N, Ransohoff DF: Gastroesophageal Reflux, Barrett Esophagus, And Esophageal Cancer. Clinical Applications. *JAMA*, 2002 Apr 17; 287(15):1982-6.
- Derdoy JJ, Bergwerk A, Cohen H, et al: The Gastric Cardia: To Be Or Not To Be? *Am J Surg Pathol*, 2003 Apr; 27(4):499-504.
- Klaase JM, Hulscher JB, Offerhaus GJ, Et Al: Surgery For Unusual Histopathologic Variants Of Esophageal Neoplasms: A Report Of 23 Cases With Emphasis On Histologic Characteristics. *Ann Surg Oncol*, 2003 Apr; 10(3):261-7.
- Huttenbach Y, Hamilton C, Lechago J, Younes M: Non-Dysplastic And Dysplastic Barrett's Mucosa And Adenocarcinoma Lack A Subepithelial Myofibroblastic Cell Layer. *Anticancer Res*, 2003 May-Jun; 23(3B):2261-5.

Escondido - Signet-ring carcinoma
Glendale - Moderate to poorly-differentiated adenocarcinoma
Granada Hills - Well-differentiated mucinous adenocarcinoma, with poorly-differentiated signet ring cells
Sacramento (UC Davis Medical Center) - Mucinous adenocarcinoma, signet-ring type
San Francisco (San Francisco General Hospital) - Adenocarcinoma mixed with goblet cell carcinoid
Florida (Munroe Regional Medical Center) - Signet cell adenocarcinoma
Florida (Winter Haven Hospital) - Signet cell adenocarcinoma
Georgia, Decatur - Adenocarcinoma with focal signet-ring features
Illinois (Evanston Northwestern Health Care) - Adenocarcinoid
Illinois (Heartland Regional Medical Center) - Adenocarcinoma, predominantly signet-ring cell type
Kansas (Coffeyville Regional Medical Center) - Adenocarcinoma with mucinous (signet-ring) component
Kansas, Manhattan - Signet-ring carcinoma
Kentucky (University of Louisville Hospital) - Signet-ring carcinoma
Maryland (Johns Hopkins Medical Institute) - Signet-ring adenocarcinoma with associated tubular adenoma with high-grade dysplasia (1); Adenocarcinoma {abundant extracellular mucin and prominent signet-ring cell} (1)
Maryland (National Naval Medical Center) - Signet-ring cell carcinoma, colon
Maryland (University of Maryland Medical Center) - Mucinous carcinoma
Michigan (Pathology Services of West Michigan) - Adenocarcinoma with signet-ring cells
New York (Nassau University Medical Center) - Mucinous adenocarcinoma
New York (State University of New York at Stony Brook) - Signet-ring cell carcinoma and mucinous adenocarcinoma
North Carolina (Wake Forest University School of Medicine) - Signet-ring cell carcinoma
North Carolina (Winston-Salem) - Invasive mucinous adenocarcinoma with signet-ring cell features (1); Adenocarcinoma arising in a tubulovillous adenoma, signet ring carcinoma (1)
Ohio (Medical College of Ohio) - Signet-ring cell adenocarcinoma
Pennsylvania (Allegheny General Hospital) - Poorly-differentiated adenocarcinoma
Pennsylvania (Conemaugh Memorial Medical Center) - Mucinous adenocarcinoma
Pennsylvania (Drexel University College of Medicine) - Invasive mucinous adenocarcinoma
Tennessee (East Tennessee State University) - Signet-ring adenocarcinoma, colon
Texas (Scott & White Memorial Hospital) - Signet-ring cell carcinoma
Texas, Lubbock - Signet-ring cell carcinoma
Texas, Sugarland - Signet-ring cell carcinoma
Washington, D.C. - Signet-ring cell carcinoma
Canada (University of Calgary, Foothills Hospital) - Mixed medullary and mucinous adenocarcinoma of colon
Canada (Woodstock General Hospital) - Adenocarcinoma with signet-ring component, colon
China (Sir Run Run Shaw Hospital) - Signet-ring cell carcinoma
Japan (Asahi General Hospital) - Well-differentiated adenocarcinoma with focal differentiation to signet-ring cell carcinoma
Japan (Hamamatsu University School of Medicine) - Signet-ring cell carcinoma > mucinous adenocarcinoma
Japan (Gunma University Hospital) - Goblet-cell carcinoid
Puerto Rico (University of Puerto Rico) - Poorly-differentiated adenocarcinoma, signet-ring cell type, arising from villous adenoma
Qatar, Doha - Poorly-differentiated carcinoma arising in a dysplastic tubular adenoma
Spain (Povisa) - Signet-ring cell carcinoma with intestinal and mucinous adenocarcinoma areas
The Netherlands, Amstelveen - Poorly-differentiated mucinous signet ring cell adenocarcinoma (1); Signet-ring cell carcinoma (1)

CASE 3 - Diagnosis:**Mucinous signet-ring adenocarcinoma, colon****T-67000, M-8490/3****Case 3 - References:**

- Goldstein NS, Long A, Kuan SF, Hart J: Colon Signet-Ring Cell Adenocarcinoma: Immunohistochemical Characterization And Comparison With Gastric And Typical Colon Adenocarcinomas. *Appl Immunohistochem Mol Morphol*, 2000 Sep; 8(3):183-8.
- Secco GB, Fardelli R, Campora E, et al: Primary Mucinous Adenocarcinomas And Signet-Ring Cell Carcinomas Of Colon And Rectum. *Oncology*, 1994 Jan-Feb; 51(1):30-4.
- Psathakis D, Schiedeck TH, Krug F, et al: Ordinary Colorectal Adenocarcinoma Versus Primary Colorectal Signet-Ring Cell Carcinoma: Study Matched For Age, Gender, Grade And Stage. *Dis Colon Rectum*, 1999 Dec; 42(12):1618-25.
- Okuno M, Ikehara T, Nagayama M, et al: Mucinous Colorectal Carcinoma: Clinical Pathology And Prognosis. *Am Surg*, 1988 Nov; 54(11):681-5. Review.

Escondido - Leiomyoma
Glendale - Mesenteric fibromatosis
Granada Hills - Fibroma
Sacramento (UC Davis Medical Center) - Leiomyoma
San Francisco (San Francisco General Hospital) - Leiomyoma
Florida (Munroe Regional Medical Center) - Solitary fibrous tumor
Florida (Winter Haven Hospital) - Mesenteric fibromatosis
Georgia, Decatur - Fibromatosis (desmoid tumor)
Illinois (Evanston Northwestern Health Care) - Intra-abdominal fibromatosis
Illinois (Heartland Regional Medical Center) - Fibromatosis
Kansas (Coffeyville Regional Medical Center) - Mesenteric fibromatosis
Kansas, Manhattan - Fibromatosis
Kentucky (University of Louisville Hospital) - Neurofibroma vs. mesenteric fibromatosis
Maryland (Johns Hopkins Medical Institute) - Fibromatosis (2)
Maryland (National Naval Medical Center) - Mesenteric fibromatosis/desmoid
Maryland (University of Maryland Medical Center) - Sclerosing mesenteritis
Michigan (Pathology Services of West Michigan) - Desmoid tumor
New York (Nassau University Medical Center) - Fibromatosis
New York (State University of New York at Stony Brook) - Fibromatosis
North Carolina (Wake Forest University School of Medicine) - Fibromatosis
North Carolina (Winston-Salem) - Mesenteric fibromatosis (1); Leiomyoma (1)
Ohio (Medical College of Ohio) - Mesenteric fibromatosis
Pennsylvania (Allegheny General Hospital) - Mesenteric fibromatosis
Pennsylvania (Conemaugh Memorial Medical Center) - Leiomyoma
Pennsylvania (Drexel University College of Medicine) - Fibromatosis
Tennessee (East Tennessee State University) - Desmoid tumor, jejunum
Texas (Scott & White Memorial Hospital) - Mesenteric fibromatosis
Texas, Lubbock - Extra-intestinal GIST
Texas, Sugarland - Desmoid fibromatosis
Washington, D.C. - Fibromatosis
Canada (University of Calgary, Foothills Hospital) - Mesenteric fibromatosis
Canada (Woodstock General Hospital) - Fibromatosis, jejunum
China (Sir Run Run Shaw Hospital) - Fibromatosis
Japan (Asahi General Hospital) - Mesenteric fibromatosis, small bowel
Japan (Hamamatsu University School of Medicine) - Desmoid tumor
Japan (Gunma University Hospital) - Intra-abdominal fibromatosis
Puerto Rico (University of Puerto Rico) - Mesenteric fibromatosis
Qatar, Doha - Mesenteric fibromatosis
Spain (Povisa) - Mesenteric fibromatosis-desmoid tumor
The Netherlands, Amstelveen - Solitary fibrous tumor (1); Intra-abdominal fibromatosis (1)

Case 4 - Diagnosis:**Mesenteric fibromatosis****T-65100, M-7610/0****Case 4 - References:**

Burke AP, Sobin LH, Shekitka KM, et al: Intra-Abdominal Fibromatosis: A Pathologic Analysis Of 130 Tumors With Comparison Of Clinical Subgroups. *Am J Surg Pathol*, 1990 Apr; 14(4):335-41.
 Rodriguez JA, Guarda LA, Rosai J: Mesenteric Fibromatosis With Involvement Of The Gastrointestinal Tract. A GIST Simulator: A Study Of 25 Cases. *Am J Clin Pathol*, 2004 Jan; 121(1):93-8.
 Pai SA, Zaveri SS: Intra-Abdominal Fibromatosis Of The Jejunum And Mesentery. *J Clin Pathol*, 2004 Oct; 57(10):1119.
 Yantiss RK, Spiro IJ, Compton CC, Rosenberg AE: Gastrointestinal Stromal Tumor Versus Intra-Abdominal Fibromatosis Of The Bowel Wall: A Clinically Important Differential Diagnosis. *Am J Surg Pathol*, 2000 Jul; 24(7):947-57.

Escondido - Leiomyoma
Glendale - ? Myofibroblastic tumor vs fibromatosis
Granada Hills - Cellular leiomyoma
Sacramento (UC Davis Medical Center) - Desmoid
San Francisco (San Francisco General Hospital) - Myxoid leiomyoma
Florida (Munroe Regional Medical Center) - Leiomyoma
Florida (Winter Haven Hospital) - Low grade leiomyosarcoma
Georgia, Decatur - Fibromatosis
Illinois (Evanston Northwestern Health Care) - Myxoid leiomyosarcoma
Illinois (Heartland Regional Medical Center) - Fibromatosis
Kansas (Coffeyville Regional Medical Center) - Leiomyomatosis versus myofibroblastosis
Kansas, Manhattan - Leiomyosarcoma, low grade
Kentucky (University of Louisville Hospital) - Desmoid intra-abdominal fibromatosis
Maryland (Johns Hopkins Medical Institute) - Inflammatory myofibroblastic tumor (1); Myxoid spindle cell neoplasm {need further immunos; myxoid smooth muscle neoplasm vs IMT} (1)
Maryland (National Naval Medical Center) - Aggressive angiomyxoma/angiomyo-fibroblastoma
Maryland (University of Maryland Medical Center) - Fibromatosis
Michigan (Pathology Services of West Michigan) - Benign myofibroblastic tumor
New York (Nassau University Medical Center) - Leiomyomatosis
New York (State University of New York at Stony Brook) - Ganglioneuroma
North Carolina (Wake Forest University School of Medicine) - Inflammatory pseudotumor
North Carolina (Winston-Salem) - Inflammatory myofibroblastic tumor (1); Neurofibroma (1)
Ohio (Medical College of Ohio) - Low grade leiomyosarcoma
Pennsylvania (Allegheny General Hospital) - Fibromatosis
Pennsylvania (Conemaugh Memorial Medical Center) - Fibromatosis
Pennsylvania (Drexel University College of Medicine) - Leiomyoma
Tennessee (East Tennessee State University) - Myxofibroma, ileocecum
Texas (Scott & White Memorial Hospital) - Smooth muscle tumor of low malignant potential
Texas, Lubbock - Leiomyosarcoma
Texas, Sugarland - Inflammatory myofibroblastic tumor
Washington, D.C. - Leiomyosarcoma
Canada (University of Calgary, Foothills Hospital) - Leiomyosarcoma
Canada (Woodstock General Hospital) - Inflammatory myofibroblastic tumor, ileocolic tissue
China (Sir Run Run Shaw Hospital) - Myofibroblastoma
Japan (Asahi General Hospital) - Inflammatory fibroid polyp, ileocecal junction
Japan (Hamamatsu University School of Medicine) - Deep angiomyxoma
Japan (Gunma University Hospital) - Pelvic fibromatosis
Puerto Rico (University of Puerto Rico) - Leiomyoma
Qatar, Doha - Leiomyosarcoma, low grade
Spain (Povisa) - Inflammatory myofibroblastic tumor vs. fibromatosis
The Netherlands, Amstelveen - Myxoid leiomyosarcoma (1); Inflammatory myofibroblastic tumor (1)

Case 5 - Diagnosis:**Smooth muscle tumor of low malignant potential ("STUMP")****T-65900, M-8000/1****Case 5 - References:**

- Ranchod M, Kempson RL: Smooth Muscle Tumors Of The Gastrointestinal Tract And Retroperitoneum: Pathologic Analysis Of 100 Cases. *Cancer*, 1977 Jan; 39(1):255-62.
 Rangdaeng S, Truong LD: Comparative Immunohistochemical Staining For Desmin And Muscle-Specific Actin: A Study Of 576 Cases. *Am J Clin Pathol*, 1991 Jul; 96(1):32-45.
 Shapiro A, Ferenczy A, Turcotte R, et al: Uterine Smooth-Muscle Tumor Of Uncertain Malignant Potential Metastasizing To The Humerus As A High-Grade Leiomyosarcoma. *Gynecol Oncol*, 2004 Sep; 94(3):818-20.
 Weiss SW: Smooth Muscle Tumors Of Soft Tissues. *Adv Anat Pathol*, 2002 Nov; 9(6):351-9.
 Billings SD, Folpe AL, Weiss SW: Do Leiomyomas Of Deep Soft Tissue Exist? An Analysis Of Highly-Differentiated Smooth Muscle Tumors Of Deep Soft Tissue Supporting Two Distinct Subtypes. *Am J Surg Pathol*, 2001 Sep; 25(9): 1134-42.

Escondido - Gastrointestinal stromal tumor
Glendale - GIST
Granada Hills - G.I. stromal tumor
Sacramento (UC Davis Medical Center) - GIST (gastrointestinal stromal tumor)
San Francisco (San Francisco General Hospital) - Gastrointestinal stromal tumor
Florida (Munroe Regional Medical Center) - GIST
Florida (Winter Haven Hospital) - GIST
Georgia, Decatur - Gastrointestinal stromal tumor
Illinois (Evanston Northwestern Health Care) - GIST
Illinois (Heartland Regional Medical Center) - GIST, low grade, malignant
Kansas (Coffeyville Regional Medical Center) - GIST
Kansas, Manhattan - Gastrointestinal stromal tumor, borderline malignancy
Kentucky (University of Louisville Hospital) - GIST
Maryland (Johns Hopkins Medical Institute) - Gastrointestinal stromal tumor {GIST} (2)
Maryland (National Naval Medical Center) - Gastrointestinal stromal tumor
Maryland (University of Maryland Medical Center) - GIST
Michigan (Pathology Services of West Michigan) - GIST
New York (Nassau University Medical Center) - GIST
New York (State University of New York at Stony Brook) - GIST
North Carolina (Wake Forest University School of Medicine) - Gastrointestinal stromal tumor
North Carolina (Winston-Salem) - Gastrointestinal stromal tumor {GIST} (2)
Ohio (Medical College of Ohio) - Gastrointestinal stromal tumor
Pennsylvania (Allegheny General Hospital) - Gastrointestinal stromal tumor
Pennsylvania (Conemaugh Memorial Medical Center) - GIST
Pennsylvania (Drexel University College of Medicine) - Gastrointestinal stromal tumor
Tennessee (East Tennessee State University) - Gastrointestinal stromal tumor, small bowel
Texas (Scott & White Memorial Hospital) - GIST
Texas, Lubbock - GIST
Texas, Sugarland - Gastrointestinal stromal sarcoma
Washington, D.C. - GIST
Canada (University of Calgary, Foothills Hospital) - GIST
Canada (Woodstock General Hospital) - Gastrointestinal stromal tumor, probably malignant, small bowel
China (Sir Run Run Shaw Hospital) - Gastrointestinal stromal tumor, malignant
Japan (Asahi General Hospital) - Gastrointestinal stromal tumor
Japan (Hamamatsu University School of Medicine) - GIST
Japan (Gunma University Hospital) - Gastrointestinal stromal tumor
Puerto Rico (University of Puerto Rico) - Gastrointestinal stromal tumor (GIST)
Qatar, Doha - Gastrointestinal stromal tumor
Spain (Povisa) - GIST
The Netherlands, Amstelveen - Gastrointestinal stromal tumor {GIST} (2)

Case 6 - Diagnosis:

Gastrointestinal stromal tumor (GIST), small bowel
T-64000, M-9610/3

Case 6 - References:

- Yantiss RK, Rosenberg AE, Selig MK, Nielsen GP: Gastrointestinal Stromal Tumors: An Ultrastructural Study. *Int J Surg Pathol*, 2002 Apr; 10(2):101-13.
- Fujimoto Y, Nakanishi Y, Yoshimura K, Shimoda T: Clinicopathologic Study Of Primary Malignant Gastrointestinal Stromal Tumors Of The Stomach With Special Reference To Prognostic Factors: Analysis Of Results In 140 Surgically Resected Patients. *Gastric Cancer*, 2003; 6(1):39-48.
- Miettinen M, Sobin LH, Sarlomo-Rikala M: Immunohistochemical Spectrum Of GISTs Of Different Sites And Their Differential Diagnosis With A Reference To CD117 (Kit). *Mod Pathol*, 2000 Oct; 13(10):1134-42.
- Dematteo RP, Heinrich MC, El-Rifai WM, Demetri G: Clinical Management Of Gastrointestinal Stromal Tumors: Before And After STI-571. *Hum Pathol*, 2002 May; 33(5):466-77.

Escondido - Mucinous cystic neoplasm
Glendale - Mucinous cystadenocarcinoma
Granada Hills - Mucinous cystadenoma with chronic inflammation
Sacramento (UC Davis Medical Center) - Mucinous cystic neoplasm, borderline
San Francisco (San Francisco General Hospital) - Mucinous cystadenoma
Florida (Munroe Regional Medical Center) - Mucinous cystadenocarcinoma
Florida (Winter Haven Hospital) - Mucinous cystadenoma with carcinoma in-situ
Georgia, Decatur - Mucinous cystic neoplasm
Illinois (Evanston Northwestern Health Care) - Mucinous cystic neoplasm with borderline features
Illinois (Heartland Regional Medical Center) - Mucinous cystadenocarcinoma
Kansas (Coffeyville Regional Medical Center) - Adenocarcinoma arising in cyst; chronic sclerosing inflammation
Kansas, Manhattan - Mucinous cystic tumor
Kentucky (University of Louisville Hospital) - Mucinous adenocarcinoma with ovarian stroma plus sclerosing pancreatitis
Maryland (Johns Hopkins Medical Institute) - Mucinous cystic neoplasm with carcinoma in-situ (1); Mucinous cystadenoma with carcinoma in-situ {possible micro-invasion} (1)
Maryland (National Naval Medical Center) - Mucinous cystic neoplasia, malignant
Maryland (University of Maryland Medical Center) - Borderline mucinous tumor
Michigan (Pathology Services of West Michigan) - Mucinous cystic neoplasm
New York (Nassau University Medical Center) - Mucinous cyst adenoma
New York (State University of New York at Stony Brook) - Borderline mucinous cystadenoma
North Carolina (Wake Forest University School of Medicine) - Mucinous cystadenocarcinoma and chronic pancreatitis
North Carolina (Winston-Salem) - Borderline mucinous cystic neoplasm (1); Mucinous cystadenoma (1)
Ohio (Medical College of Ohio) - Mucinous cystadenocarcinoma
Pennsylvania (Allegheny General Hospital) - Mucinous cyst adenocarcinoma
Pennsylvania (Conemaugh Memorial Medical Center) - Mucinous cystadenoma
Pennsylvania (Drexel University College of Medicine) - Mucinous cystic neoplasm, malignant with micro-invasion
Tennessee (East Tennessee State University) - Mucinous cystadenoma with focus of mild dysplasia, pancreas
Texas (Scott & White Memorial Hospital) - Focal adenocarcinoma in a mucinous cystic tumor
Texas, Lubbock - Mucinous cyst
Texas, Sugarland - Borderline invasive cystic tumor
Washington, D.C. - Mucinous cystadenocarcinoma
Canada (University of Calgary, Foothills Hospital) - Mucinous cystic neoplasm with low grade dysplasia
Canada (Woodstock General Hospital) - Mucinous cystic neoplasm with sarcomatous stroma, pancreas
China (Sir Run Run Shaw Hospital) - Mucinous cystadenoma
Japan (Asahi General Hospital) - Mucinous cystic tumor, adenoma, pancreas
Japan (Hamamatsu University School of Medicine) - Mucinous cystadenoma
Japan (Gunma University Hospital) - Mucinous cystadenocarcinoma, non-invasive, pancreas
Puerto Rico (University of Puerto Rico) - Mucinous cystic neoplasm with area of atypical epithelial cells (in-situ mucinous cystadenocarcinoma?)
Qatar, Doha - Mucinous cystadenocarcinoma
Spain (Povisa) - Borderline mucinous tumor
The Netherlands, Amstelveen - Mucinous cystic neoplasm at least of borderline malignancy. An invasive adenocarcinoma cannot be ruled out (1); Mucinous cystadenoma with ovarian type stroma (1)

Case 7 - Diagnosis:**Pancreatic mucinous neoplasm with CIS and stromal micro-invasion****T-59000, M-8000/3, M-8010/2**

Outside Consultation: Michael Hendrickson, M.D. (Stanford Pathology Consultants): Pancreatic mucinous neoplasm with carcinoma in-situ and stromal micro-invasion.

Case 7 - References:

- Chu QD, Khushalani N, Javle MM, et al: Should Adjuvant Therapy Remain The Standard Of Care For Patients With Resected Adenocarcinoma Of The Pancreas. *Ann Surg Oncol*, 2003 Jun; 10(5):539-45. Review.
 Raffee P, Ho SB, Bresalier RS, et al: Characterization Of The Cytokeratins Of Human Colonic, Pancreatic, And Gastric Adenocarcinoma Cell Lines. *Pancreas*, 1992; 7(2):123-31.
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Case No. 8 - Accession No. 29950

March, 2005

Escondido - Hepatocellular carcinoma, fibrolamellar variant
Glendale - Sclerosing HCC
Granada Hills - Hepatocellular carcinoma
Sacramento (UC Davis Medical Center) - Hepatocellular carcinoma
San Francisco (San Francisco General Hospital) - Fibrolamellar hepatic cell carcinoma
Florida (Munroe Regional Medical Center) - Hepatocellular carcinoma
Florida (Winter Haven Hospital) - Hepatoma
Georgia, Decatur - Hepatocellular carcinoma
Illinois (Evanston Northwestern Health Care) - Hepatocellular carcinoma
Illinois (Heartland Regional Medical Center) - Fibrolamellar hepatocellular carcinoma; cirrhosis
Kansas (Coffeyville Regional Medical Center) - Hepatocarcinoma
Kansas, Manhattan - Hepatocellular carcinoma, scirrhus type
Kentucky (University of Louisville Hospital) - Hepatocellular carcinoma, sclerosing type vs. fibrolamellar carcinoma
Maryland (Johns Hopkins Medical Institute) - Hepatocellular carcinoma, moderately-differentiated (1); Hepatocellular carcinoma {sclerotic variant} (1)
Maryland (National Naval Medical Center) - Hepatocellular carcinoma (arising in cirrhosis)
Maryland (University of Maryland Medical Center) - Hepatocellular carcinoma
Michigan (Pathology Services of West Michigan) - Hepatocellular carcinoma
New York (Nassau University Medical Center) - Hepatocellular carcinoma
New York (State University of New York at Stony Brook) - Fibrolamellar hepatocellular carcinoma
North Carolina (Wake Forest University School of Medicine) - Scirrhus hepatocellular carcinoma
North Carolina (Winston-Salem) - Hepatocellular carcinoma (2)
Ohio (Medical College of Ohio) - Hepatocellular carcinoma, fibrolamellar variant
Pennsylvania (Allegheny General Hospital) - Hepatocellular carcinoma
Pennsylvania (Conemaugh Memorial Medical Center) - Hepatocellular carcinoma
Pennsylvania (Drexel University College of Medicine) - Hepatocellular carcinoma
Tennessee (East Tennessee State University) - Hepatocellular adenocarcinoma, liver
Texas (Scott & White Memorial Hospital) - Hepatocellular carcinoma (?Fibrolamellar)
Texas, Lubbock - Hepatocellular carcinoma
Texas, Sugarland - Hepatocellular carcinoma
Washington, D.C. - Hepatocellular carcinoma, cirrhosis
Canada (University of Calgary, Foothills Hospital) - Hepatocellular carcinoma
Canada (Woodstock General Hospital) - Sclerotic hepatocellular carcinoma arising in cirrhotic liver
China (Sir Run Run Shaw Hospital) - Hepatocellular carcinoma
Japan (Asahi General Hospital) - Liver cirrhosis, micronodular type, and hepatocellular carcinoma, hepatectomy
Japan (Hamamatsu University School of Medicine) - Hepatocellular carcinoma with liver cirrhosis
Japan (Gunma University Hospital) - Hepatocellular carcinoma
Puerto Rico (University of Puerto Rico) - Liver cell carcinoma (hepatocellular carcinoma)
Qatar, Doha - Hepatocellular carcinoma, moderately-differentiated
Spain (Povisa) - Liver cell carcinoma
The Netherlands, Amstelveen - Hepatocellular carcinoma (1); Fibrolamellar carcinoma (1)

Case 8 - Diagnosis:

Hepatocellular carcinoma, liver
T-56000, M-8170/3

Case 8 - References:

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Seitz G, Zimmermann A, Friess H, Buchler MW: Adult-Type Hepatocellular Carcinoma In The Center Of A Fibrolamellar Hepatocellular Carcinoma. *Hum Pathol*, 2002 Jul; 33(7):765-9.

El-Serag HB, Davila JA: Is Fibrolamellar Carcinoma Different From Hepatocellular Carcinoma? A US Population-Based Study. *Hepatology*, 2004 Mar; 39(3):798-803.

Case No. 9 - Accession No. 29940

March, 2005

Escondido - Anaplastic large cell lymphoma
Glendale - High grade B-cell lymphoma
Granada Hills - Large B-cell lymphoma
Sacramento (UC Davis Medical Center) - B-cell lymphoma (diffuse, large B-cell)
San Francisco (San Francisco General Hospital) - Large B-cell lymphoma
Florida (Munroe Regional Medical Center) - Large B-cell lymphoma
Florida (Winter Haven Hospital) - B-cell lymphoma
Georgia, Decatur - Diffuse large B-cell lymphoma
Illinois (Evanston Northwestern Health Care) - Diffuse large B-cell lymphoma
Illinois (Heartland Regional Medical Center) - Malignant lymphoma, diffuse, large B-cell
Kansas (Coffeyville Regional Medical Center) - Malignant lymphoma, large B-cell
Kansas, Manhattan - Diffuse large B-cell lymphoma
Kentucky (University of Louisville Hospital) - Diffuse large B-cell lymphoma
Maryland (Johns Hopkins Medical Institute) - Diffuse large B-cell lymphoma (2)
Maryland (National Naval Medical Center) - Diffuse large B-cell lymphoma
Maryland (University of Maryland Medical Center) - Diffuse large B-cell lymphoma
Michigan (Pathology Services of West Michigan) - Lymphoma, large B-cell type
New York (Nassau University Medical Center) - Large cell malignant lymphoma
New York (State University of New York at Stony Brook) - Large B-cell lymphoma
North Carolina (Wake Forest University School of Medicine) - Diffuse large B-cell lymphoma
North Carolina (Winston-Salem) - Diffuse large B-cell lymphoma (2)
Ohio (Medical College of Ohio) - Diffuse large B-cell lymphoma
Pennsylvania (Allegheny General Hospital) - Large B-cell lymphoma
Pennsylvania (Conemaugh Memorial Medical Center) - Large cell B-cell lymphoma
Pennsylvania (Drexel University College of Medicine) - Diffuse large B-cell lymphoma
Tennessee (East Tennessee State University) - Diffuse large B-cell lymphoma, colon
Texas (Scott & White Memorial Hospital) - Diffuse large B-cell lymphoma
Texas, Lubbock - Malignant lymphoma, large cell, B-cell type
Texas, Sugarland - Malignant lymphoma (diffuse large B-cell type)
Washington, D.C. - Malignant lymphoma, large B-cell, diffuse
Canada (University of Calgary, Foothills Hospital) - Diffuse large B-cell lymphoma
Canada (Woodstock General Hospital) - Diffuse large B-cell lymphoma, colon
China (Sir Run Run Shaw Hospital) - MALT lymphoma
Japan (Asahi General Hospital) - Diffuse large B-cell lymphoma, rectum
Japan (Hamamatsu University School of Medicine) - Diffuse large B-cell lymphoma
Japan (Gunma University Hospital) - Diffuse large B-cell lymphoma
Puerto Rico (University of Puerto Rico) - Diffuse large B-cell lymphoma
Qatar, Doha - Large B-cell lymphoma
Spain (Povisa) - Diffuse large B-cell lymphoma
The Netherlands, Amstelveen - Diffuse large B-cell Non-Hodgkin's lymphoma of the colon (1); Diffuse large cell B-cell lymphoma (1)

Case 9 - Diagnosis:

**Diffuse large B-cell lymphoma, colon
T-67000, M-9590/3**

Case 9 - References:

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Isaacson PG: Gastrointestinal Lymphomas Of T- And B-Cell Types. *Mod Pathol*, 1999 Feb; 12(2):151-8. Review.

Barth TF, Bentz M, Dohner H, Moller P: Molecular Aspects Of B-Cell Lymphomas Of The Gastrointestinal Tract. *Clin Lymphoma*, 2001 Jun; 2(1):57-64. Review.
Barth TF, Dohner H, Moller P, Bentz M: Chromosomal Aberrations In Lymphomas Of The Gastrointestinal Tract. *Leuk Lymphoma*, 1999 Dec; 36(1-2):25-32. Review.

Case No. - 10 Accession No. 29852

March, 2005

Escondido - Ewing's sarcoma
Glendale - ? lymphoma
Granada Hills - Natural killer lymphoma
San Francisco (San Francisco General Hospital) - Ewing's sarcoma
Florida (Munroe Regional Medical Center) - Desmoplastic small round cell tumor
Florida (Winter Haven Hospital) - Rule out mesothelioma
Georgia, Decatur - Poorly-differentiated neuroendocrine (small cell) carcinoma
Illinois (Evanston Northwestern Health Care) - Anaplastic large cell lymphoma – null cell phenotype
Illinois (Heartland Regional Medical Center) - Anaplastic malignant neoplasm, possibly of neuroendocrine origin
Kansas (Coffeyville Regional Medical Center) - Malignant lymphoma, large T-cell
Kansas, Manhattan - Metastatic neuroendocrine carcinoma
Kentucky (University of Louisville Hospital) - Poorly-differentiated neuroendocrine carcinoma vs. poorly-differentiated sarcoma
Maryland (Johns Hopkins Medical Institute) - Alveolar soft part sarcoma (1); Primitive neuroectodermal tumor {PNET} (1)
Maryland (National Naval Medical Center) - Clear cell sarcoma of soft parts (10); Desmoplastic small round cell tumor (1)
Maryland (University of Maryland Medical Center) - Alveolar soft part sarcoma
Michigan (Pathology Services of West Michigan) - Undifferentiated malignant neoplasm
New York (Nassau University Medical Center) - NK/T cell lymphoma
New York (State University of New York at Stony Brook) - Paraganglioma
North Carolina (Wake Forest University School of Medicine) - Poorly-differentiated neoplasm of uncertain type
North Carolina (Winston-Salem) - NK cell lymphoma (1); Large cell neuroendocrine carcinoma (1)
Ohio (Medical College of Ohio) - Alveolar rhabdomyosarcoma
Pennsylvania (Allegheny General Hospital) - Small blue cell tumor, possible PNET
Pennsylvania (Conemaugh Memorial Medical Center) - Multiple myeloma
Pennsylvania (Drexel University College of Medicine) - Poorly-differentiated carcinoma with neuroendocrine differentiation
Tennessee (East Tennessee State University) - Natural killer cell lymphoma, small bowel
Texas (Scott & White Memorial Hospital) - Neuroendocrine carcinoma
Texas, Lubbock - Immunoblastic T-cell lymphoma
Texas, Sugarland - Granulocytic sarcoma
Washington, D.C. - PNET
Canada (University of Calgary, Foothills Hospital) - NK cell lymphoma, extranodal
Canada (Woodstock General Hospital) - Sarcoma, NOS (possibly rhabdomyosarcoma, neuroblastoma, cannot exclude melanoma), small bowel
China (Sir Run Run Shaw Hospital) - Fibrosarcoma, well-differentiated
Japan (Asahi General Hospital) - Rhabdomyosarcoma, alveolar type, small intestine
Japan (Hamamatsu University School of Medicine) - Poorly-differentiated neuroendocrine carcinoma
Japan (Gunma University Hospital) - Undifferentiated carcinoma
Puerto Rico (University of Puerto Rico) - Neuroendocrine tumor (2); NK lymphoma (4)
Qatar, Doha - Non-Hodgkin's lymphoma, NK type
Spain (Povisa) - Malignant neuroendocrine tumor
The Netherlands, Amstelveen - Extra-osseous plasmacytoma (1); Melanoma

Case 10 - Diagnosis:

**Poorly-differentiated malignant neoplasm suggestive of neuroendocrine origin, small bowel
T-64000, M-8000/3**

Outside Consultation: Allen Gown, M.D.(PhenoPath Laboratories): Poorly-differentiated malignant neoplasm (based on 22 immunostains!).

Case 10 - References:

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Shiiki S: Undifferentiated Carcinoma (Endocrine Cell Carcinoma) Of The Colon. *Nippon Rinsho*, 2004 May; 62(5):979-82.
Luh JY, Han ES, Simmons JR, Whitehead RP: Poorly-Differentiated Colon Carcinoma With Neuroendocrine Features Presenting With Hypercalcemia And Cutaneous Metastases: Case Report And Review Of The Literature. *Am J Clin Oncol*, 2002 Apr; 25(2):160-3.