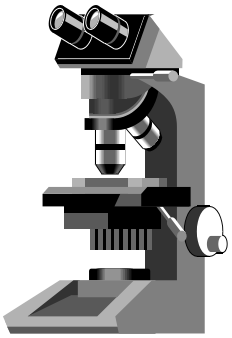
CALIFORNIA
TUMOR TISSUE REGISTRY

GENERAL PATHOLOGY

Minutes – Subscription A

October 2012



SUGGESTED READING (General Topics from Recent Literature):

Quaddus MR, Sung CJ, et al. The presence and location of epithelial implants and implants with epithelial proliferation may predict a higher risk of recurrence in serous borderline ovarian tumors. A Clinicopathologic Study of 188 Cases. *Hum Pathol* 2012; 43: 747-752.

Wallis MG, clements K, et al. The effect of DCIS grade on rate, type and time to recurrence after 15 years of follow-up of screen detected DCIS. *Br J Cancer* 2012; epub ahead of print.

Enriquez, ML, Baloch ZW, et al. CDX2 expression in columnar cell variant of papillary thyroid carcinoma. *Am J Clin Pathol* 2012; 137:722-726.

Aisner DL and Marshall BC. Molecular pathology of non-small cell lung cancer. A practical guide. *Am J Clin Pathol* 2012; 138:332-346.

Burnett-Hartman AN, Newcomb PA, et al. Colorectal endoscopy advanced adenomas, and sessile serrated polyps. Implications for proximal colon cancer. *Am J Gastroenterol* 2012; 107:1213-1219.

California Tumor Tissue Registry
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FILE DIAGNOSES

CTTR Subscription A October 2012

Case 1:

Serous cystadenoma, ovary
T-86921, M-90140

Case 2:

High grade serous adenocarcinoma with clear cell component, ovary
T-87000, M-84613

Case 3:

Gonadal stromal tumor c/w cellular thecoma, ovary
T-87000, M-85901

Case 4:

Mucinous borderline tumor, ovary
T-87000, M-84803

Case 5:

Carcinosarcoma (MMMT), uterus
T-82000, M-89803

Case 6:

Pleomorphic adenoma, parotid gland
T-55100, M-89400

Case 7:

Poorly differentiated malignant neoplasm with small blue cell features. Rule out Merkel cell tumor, plasmacytoma, lymphoma, others, lip
T-52000, M-80003

Case 8:

Microcystic adenexal carcinoma, scalp
T-Y0160, M-83903

Case 9:

Low grade liposarcoma with focal (<5%) low grade dedifferentiation, retroperitoneum
T-Y4600, M-88513

Case 10:

Hepatocellular carcinoma, liver
T-56000, M-81703

Fontana (Kaiser Permanente) - Serous cystadenoma
Hayward/Fremont (St. Rose Hospital) - Serous cystadenoma
Long Beach (Long Beach VA Hospital) - Serous cystadenoma (5); Papillary cyst adenoma (1)
Oakland (Alameda County Medical Center) - Serous cystadenoma (5)
Oxnard (St. John's Regional Medical Center) - Serous cystadenoma (2)
San Diego (Naval Medical Center) - Serous cystadenoma
Santa Barbara (Miramonte Laboratory) - Serous cystadenoma
Woodland Hills (Southern California Permanente Med Gp) - Serous cystadenoma
Arkansas (Associated Pathologists Laboratory) - Serous cystadenoma
Colorado (McKee Medical Center) - Serous cystadenofibroma
Delaware (Armed Forces Medical Examiner System) - Cystadenofibroma
Florida (The Pathology Group of NW Florida) - Serous cystadenofibroma
Georgia, Atlanta - Serous cystadenofibroma
Illinois (Heartland Regional Medical Center) - Serous cystadenoma
Illinois (Loyola University Medical Center) - Serous cystadenoma
Kansas (Peterson Laboratory Services, P.A.) - Serous cystadenoma
Massachusetts (Tufts Medical Center) - Serous cystadenoma
Massachusetts (University of Massachusetts Medical Center) - Serous cystadenoma
Minnesota (Fairview Ridges Hospital) - Serous cystadenoma
Missouri (Missouri Delta Medical Center) - Serous cystadenoma (2)
New York (Buffalo General Hospital) - Serous cystadenoma
New York (Erie County Medical Center) - Serous cystadenoma
New York (SUNY Downstate Medical Center) - Serous cystadenoma
Ohio (Cleveland Clinic) - Serous cystadenoma
Ohio, Union Town - Serous cystadenoma
Pennsylvania (Drexel University College of Medicine) - Multilobulated serocystic adenofibroma
Pennsylvania (Lehigh Valley Hospital) - Serous cystadenofibroma
South Carolina (Medical University of South Carolina) - Serous cystadenoma
Tennessee (Molecular Pathology Laboratory Network) - Benign serous cystadenoma
Texas, Crystal Beach - Hydrosalpinx
Texas, Lubbock - Serous cystadenofibroma
Washington (Seattle, VAMC) - Cystadenoma, serous
West Virginia (Greenbrier Valley Medical Center) - Serous cystadenoma
Wisconsin, Madison - Benign serous cystadenoma (cystadenofibroma)
Australia (Royal Hobart Hospital) - Benign serous cystadenoma, ovary
Australia (Royal Prince Alfred Hospital) - Benign serous cystadenoma
Australia (The Royal Women's Hospital) - Serous cystadenoma
Saudi Arabia (King Khalid University Hospital) - Ovarian serous cystadenoma
Japan (Asahi General Hospital) - Mucinous cystadenoma
Canada (Pasqua Hospital) - Serous cystadenoma
Ireland (Bon Secours Hospital) - Benign serous cystadenoma
Ireland (Kerry General Hospital) - Mucinus cystadenoma, endocervical phenotype
Japan (Asahi General Hospital) - Serous cystadenoma
Japan (Setagaya-Ku) - Mucinous cystadenoma
Japan (Wakayama Medical University) - Serous cystadenoma
Oman (Sultanate of Aziba) - Borderline serous cystadenoma
Puerto Rico (University of Puerto Rico) - Serous cystadenoma
Saudi Arabia (King Fahad Hospital Hofuf) - Serous cystadenoma, right ovarian mass

Case 1 - Diagnosis:

Serous cystadenoma, ovary
T-86921, M-90140

Case 1 - References:
Benign ovarian serous tumors: a re-evaluation and proposed reclassification of serous "cystadenomas" and "cystadenofibromas". *Gynecol Oncol* 2005; Feb;96(2): p395-401. Seidman JD; Mehrotra A.
Molecular genetic analysis of ovarian serous cystadenomas. *Lab Invest* 2004; Jun;84(6): p778-84. Cheng EJ; Kurman RJ, et al.
ThinPrep evaluation of fluid samples aspirated from cystic ovarian masses. *Diagn Cytopathol* 2004; May;30(5): p320-4. Lu D; Davila RM; Pinto KR; Lu DW.
Recurrent bilateral serous cystadenomas in a premenarchal girl: a case report and literature review. *J Pediatr Adolesc Gynecol 2010;* Feb;23(1): pe27-9. Barton SE; Kurek KC; Laufer MR.
Serous cystadenoma in communication with the pancreatic duct: an unusual radiologic and pathologic entity. *J Clin Gastroenterol* 2010; Jul;44(6): pe133-5. Berman L; Mitchell KA; Israel G; Salem RR.
Serous cystadenoma and ectopic pregnancy in the fallopian tube. *J Minim Invasive Gynecol* 2010; Sep-Oct;17(5): p653-5. Werlin L; Micha JP; Rushovich AM; Goldstein BH.

Case No. 2, Accession No. 31451 **October 2012**

Fontana (Kaiser Permanente) - Mixed clear cell/endometrioid carcinoma
Hayward/Fremont (St. Rose Hospital) - Yolk sac tumor
Long Beach (Long Beach VA Hospital) - Adenocarcinoma with clear cell features (6)
Oakland (Alameda County Medical Center) - Poorly differentiated carcinoma (3); Clear cell carcinoma (1); Serous cell carcinoma, arising in teratoma (1)
Oxnard (St. John's Regional Medical Center) - Cystadenocarcinoma (1); Papillary serous adenocarcinoma mixed with clear cell carcinoma (1)
San Diego (Naval Medical Center) - High grade serous adenocarcinoma
Santa Barbara (Miramonte Laboratory) - Clear cell carcinoma
Woodland Hills (Southern California Permanente Med Gp) - Malignant Brenner tumor
Arkansas (Associated Pathologists Laboratory) - Clear cell endometrioid carcinoma
Colorado (McKee Medical Center) - Malignant Brenner tumor
Delaware (Armed Forces Medical Examiner System) - Poorly differentiated adenocarcinoma, favor endometrioid
Florida (The Pathology Group of NW Florida) - Poorly differentiated mucinous adenocarcinoma
Georgia, Atlanta - Adenocarcinoma, rule out metastasis
Illinois (Heartland Regional Medical Center) - Poorly differentiated endometrioid adenocarcinoma with clear cell component
Illinois (Loyola University Medical Center) - Clear cell carcinoma of the ovary
Kansas (Peterson Laboratory Services, P.A.) - Clear cell carcinoma
Massachusetts (Tufts Medical Center) - Mixed germ cell tumor with predominantly embryonal component
Massachusetts (University of Massachusetts Medical Center) - High grade serous carcinoma
Minnesota (Fairview Ridges Hospital) - Serous carcinoma, high grade
Missouri (Missouri Delta Medical Center) - Serous carcinoma (2)
New York (Buffalo General Hospital) - Mixed endometrioid and clear cell carcinoma
New York (Erie County Medical Center) - Adenocarcinoma
New York (SUNY Downstate Medical Center) - High grade carcinoma
Ohio (Cleveland Clinic) - Clear cell carcinoma
Ohio, Union Town - Serous ovarian carcinoma
Pennsylvania (Drexel University College of Medicine) - Papillary serous mixed carcinoma
Pennsylvania (Lehigh Valley Hospital) - Endometrioid cystadenocarcinoma
South Carolina (Medical University of South Carolina) - High grade carcinoma
Tennessee (Molecular Pathology Laboratory Network) - Serous adenocarcinoma
Texas, Crystal Beach - Ovary mesothelioma vs. adenocarcinoma
Texas, Lubbock - Poorly differentiated serous carcinoma
Washington (Seattle, VAMC) - Carcinoma, high grade
West Virginia Greenbrier Valley Medical Center) - Adenocarcinoma, NOS
Wisconsin, Madison - Ovarian carcinoma, clear cell type
Australia (Royal Hobart Hospital) - High grade serous carcinoma, ovary
Australia (Royal Prince Alfred Hospital) - High grade serous adenocarcinoma

Australia (The Royal Women's Hospital) - High grade carcinoma, favoring clear cell carcinoma
Saudi Arabia (King Khalid University Hospital) - Ovarian carcinoma, favor clear cells
Japan (Asahi General Hospital) - High grade serous carcinoma
Canada (Pasqua Hospital) - Poorly differentiated carcinoma
Ireland (Bon Secours Hospital) - Clear cell carcinoma
Ireland (Kerry General Hospital) - Mucinous adenocarcinoma
Japan (Asahi General Hospital) - Clear cell adenocarcinoma
Japan (Setagaya-Ku) - Endometrioid carcinoma
Japan (Wakayama Medical University) - Carcinosarcoma, homologous type
Oman (Sultanate of Aziba) - Adenocarcinoma/high grade serous carcinoma
Puerto Rico (University of Puerto Rico) - Clear cell carcinoma
Saudi Arabia (King Fahad Hospital Hofuf) - Serous (papillary) cystadenocarcinoma, left ovary

Case 2 - Diagnosis:

High grade serous adenocarcinoma with clear cell component, ovary
T-87000, M-84613

Case 2 - References:

Clinical and molecular differences between clear cell and papillary serous ovarian carcinoma. *J Surg Oncol* 2006; Apr 1;93(5): p379-86.

Eltabbakh GH; Mount SL; Beatty B; Simmons-Arnold L; Cooper K. Pelvic washing cytology in serous borderline tumors of the ovary using ThinPrep: are there cytologic clues to detecting tumor cells*? Diagn Cytopathol* 2004; May;30(5): p313-9. Sadeghi S; Ylagan LR.

Long-term follow-up and prognostic factor analysis in clear cell adenocarcinoma of the ovary. *J Surg Oncol* 2006; Aug 1;94(2): p138-43. Mizuno M; Kikkawa F; Shibata K; Kajiyama H; Ino K; Kawai M; Nagasaka T; Nomura S

Case No. 3, Accession No. 31416 October 2012

Fontana (Kaiser Permanente) - Granulosa cell tumor
Hayward/Fremont (St. Rose Hospital) - Granulosa cell tumor
Long Beach (Long Beach VA Hospital) - Granulosa cell tumor (6)
Oakland (Alameda County Medical Center) - Granulosa cell tumor, adult type
Oxnard (St. John's Regional Medical Center) - Transitional cell carcinoma (1); Adult granulose cell tumor (1)
San Diego (Naval Medical Center) - Adult granulosa cell tumor
Santa Barbara (Miramonte Laboratory) - Thecoma
Woodland Hills (Southern California Permanente Med Gp) - Cellular thecoma
Arkansas (Associated Pathologists Laboratory) - Cellular fibroma
Colorado (McKee Medical Center) - Cellular fibroma
Delaware (Armed Forces Medical Examiner System) - Adult granulosa cell tumor
Florida (The Pathology Group of NW Florida) - Granulosa cell tumor
Georgia, Atlanta - Adult granulosa cell tumor
Illinois (Heartland Regional Medical Center) - Cellular fibrothecoma (rule out diffuse granulosa cell tumor)
Illinois (Loyola University Medical Center) - Granulosa cell tumor
Kansas (Peterson Laboratory Services, P.A.) - Cellular fibroma
Massachusetts (Tufts Medical Center) - Juvenile granulosa cell tumor
Massachusetts (University of Massachusetts Medical Center) - Granulosa cell tumor
Minnesota (Fairview Ridges Hospital) - Adult granulosa cell tumor
Missouri (Missouri Delta Medical Center) - Thecoma (2)
New York (Buffalo General Hospital) - Adult granulosa cell tumor
New York (Erie County Medical Center) - Adult granulosa cell tumor
New York (SUNY Downstate Medical Center) - Granulosa cell tumor

Ohio (Cleveland Clinic) - Adult granulosa cell tumor
Ohio, Union Town - Granulosa cell tumor vs. undifferentiated carcinoma
Pennsylvania (Drexel University College of Medicine) - Adult granulosa cell carcinoma
Pennsylvania (Lehigh Valley Hospital) - Adult granulosa cell tumor
South Carolina (Medical University of South Carolina) - Granulosa cell tumor
Tennessee (Molecular Pathology Laboratory Network) - Adult granulosa cell tumor
Texas, Crystal Beach - Adult granulosa cell tumor
Texas, Lubbock - Granulosa cell tumor
Washington (Seattle, VAMC) - Granulosa cell tumor
West Virginia Greenbrier Valley Medical Center) - Endometrioid stromal sarcoma
Wisconsin, Madison - Adult granulosa cell tumor
Australia (Royal Hobart Hospital) - Adult granulosa cell tumor, ovary
Australia (Royal Prince Alfred Hospital) - Adult granulosa cell tumor
Australia (The Royal Women's Hospital) - Malignant ovarian sex cord stromal tumor favoring ovarian stromal sarcoma
Saudi Arabia (King Khalid University Hospital) - Granulosa cell tumor
Japan (Asahi General Hospital) - Sclerosing stromal tumor
Canada (Pasqua Hospital) - Granulosa cell tumor
Ireland (Bon Secours Hospital) - Thecoma
Ireland (Kerry General Hospital) - Granulosa cell tumor
Japan (Asahi General Hospital) - Sertoli-Leydig cell tumor
Japan (Setagaya-Ku) - Small cell carcinoma
Japan (Wakayama Medical University) - Granulosa cell tumor
Oman (Sultanate of Aziba) - Granulosa cell tumor
Puerto Rico (University of Puerto Rico) - Granulosa cell tumor
Saudi Arabia (King Fahad Hospital Hofuf) - Adult type granulosa cell tumor, diffuse type, left ovary

Case 3 - Diagnosis:

Gonadal stromal tumor c/w cellular thecoma, ovary
T-87000, M-85901

.**Director's note**: There is close similarity and possibly overlap with an adult granulosa cell tumor. (drc)

Case 3 - References:

Juvenile granulosa and theca cell tumor of the ovary as a rare cause of precocious puberty: case report and review of literature. *J Pediatr Adolesc Gynecol* 2010; Aug;23(4): pe127-31. Fleming NA; de Nanassy J; Lawrence S; Black AY.

Primary ovarian mucinous cystic tumor with prominent theca cell proliferation and focal granulosa cell tumor in its stroma: case report, literature review, and comparison with Sertoli-Leydig cell tumor with heterologous elements. *Int J Gynecol Pathol* 2010; May;29(3): p228-33. Staats PN; Coutts MA; Young RH.

Expression of adrenomedullin in human ovaries, ovarian sex cord-stromal tumors and cultured granulosa-luteal cells. *Gynecol Endocrinol* 2009; Feb;25(2): p96-103. Liu J; Butzow R; Hyden-Granskog C; Voutilainen R.

The morphologic and immunohistochemical spectrum of 16 cases of sclerosing stromal tumor of the ovary. *Indian J Pathol Microbiol* 2010; Oct-Dec;53(4): p658-60. Qureshi A; Raza A; Kayani N.

Luteinized adult granulosa cell tumor--a series of 9 cases: revisiting a rare variant of adult granulosa cell tumor. *Int J Gynecol Pathol* 2011; Sep;30(5): p452-9. Ganesan R; Hirschowitz L; Baltrusaityte I; McCluggage WG.

Malignant granulosa-theca cell tumor in a two-year-old Miniature Horse. *J Vet Diagn Invest* 2003; Jan;15(1): p60-3. Patrick DJ; Kiupel M; Gerber V; Carr EA.

Ovarian thecoma: clinicopathological analysis of 50 cases. *Ann Diagn Pathol* 2008; Feb;12(1): p12-6. Nocito AL; Sarancone S; Bacchi C; Tellez T.

Fontana (Kaiser Permanente) - Mucinous borderline tumor
Hayward/Fremont (St. Rose Hospital) - Mucinous borderline tumor, mucinous type
Long Beach (Long Beach VA Hospital) - Mucinous cystadenoma, borderline (5); Papillary mucinous cyst adenoma borderline, LMP) (1)
Oakland (Alameda County Medical Center) - Mucinous cystadenoma (5)
Oxnard (St. John's Regional Medical Center) - Mucinous cystadenoma (2)
San Diego (Naval Medical Center) - Mucinous borderline tumor, intestinal type
Santa Barbara (Miramonte Laboratory) - Mucinous cystadenoma
Woodland Hills (Southern California Permanente Med Gp) - Mucinous borderline tumor
Arkansas (Associated Pathologists Laboratory) - Mucinous cystadenoma
Colorado (McKee Medical Center) - Borderline mucinous cystadenoma
Delaware (Armed Forces Medical Examiner System) - Mucinous cystadenoma
Florida (The Pathology Group of NW Florida) - Low grade mucinous adenocarcinoma
Georgia, Atlanta - Mucinous cystadenocarcinoma, rule out metastasis
Illinois (Heartland Regional Medical Center) - Borderline mucinous cystadenoma
Illinois (Loyola University Medical Center) - Borderline mucinous tumor
Kansas (Peterson Laboratory Services, P.A.) - Mucinous carcinoma
Massachusetts (Tufts Medical Center) - Mucinous cystadenoma
Massachusetts (University of Massachusetts Medical Center) - Borderline mucinous tumor
Minnesota (Fairview Ridges Hospital) - Mucinous cystic tumor, borderline malignancy
Missouri (Missouri Delta Medical Center) - Mucinous cystadenoma (2)
New York (Buffalo General Hospital) - Mucinous cystadenoma
New York (Erie County Medical Center) - Intestinal type mucinous borderline tumor
New York (SUNY Downstate Medical Center) - Mucinous borderline tumor
Ohio (Cleveland Clinic) - Mucinous borderline tumor, predominantly intestinal type
Ohio, Union Town - Proliferating mucinous tumor
Pennsylvania (Drexel University College of Medicine) - Borderline mucinous tumor
Pennsylvania (Lehigh Valley Hospital) - Mucinous tumor of low malignant potential
South Carolina (Medical University of South Carolina) - Mucinous borderline tumor
Tennessee (Molecular Pathology Laboratory Network) - Mucinous cystadenoma
Texas, Crystal Beach - Mucinous cystadenoma, borderline
Texas, Lubbock - Mucinous cystadenoma
Washington (Seattle, VAMC) - Mucinous cystadenoma, borderline
West Virginia Greenbrier Valley Medical Center) - Borderline mucinous cystadenoma
Wisconsin, Madison - Borderline mucinous tumor
Australia (Royal Hobart Hospital) - Mucinous borderline tumor, ovary
Australia (Royal Prince Alfred Hospital) - Benign mucinous cystadenoma
Australia (The Royal Women's Hospital) - Borderline mucinous neoplasm
Saudi Arabia (King Khalid University Hospital) - Mucinous cystadenoma
Japan (Asahi General Hospital) - Intestinal type mucinous borderline tumor
Canada (Pasqua Hospital) - Mucinous borderline tumor
Ireland (Bon Secours Hospital) - Benign mucinous cystadenoma
Ireland (Kerry General Hospital) - Borderline mucinous tumor, endocervical phenotype
Japan (Asahi General Hospital) - Mucinous cystic tumor, borderline
Japan (Setagaya-Ku) - Mucinous cystadenoma, borderline
Japan (Wakayama Medical University) - Mucinous borderline tumor, intestinal type
Oman (Sultanate of Aziba) - Borderline mucinous cystadenoma
Puerto Rico (University of Puerto Rico) - Mucinous cystadenoma, rule out borderline
Saudi Arabia (King Fahad Hospital Hofuf) - Mucinous cystadenoma, right ovary

Case 4 - Diagnosis:

Mucinous borderline tumor, ovary
T-87000, M-84803

Case 4 - References:

Mucinous borderline ovarian tumors: points of general agreement and persistent controversies regarding nomenclature, diagnostic criteria, and behavior. *Hum Pathol* 2004; Aug;35(8): p949-60. Ronnett BM; Kajdacsy-Balla A.

Mucinous tumors of the ovary: a clinicopathologic analysis of 75 borderline tumors (of intestinal type) and carcinomas. *Am J Surg Pathol* 2002; Feb;26(2): p139-52. Rodriguez IM; Prat J.

Pseudomyxoma peritonei arising from a mucinous borderline ovarian tumour: Case report and literature review. Aust N Z J. *Obstet Gynaecol* 2010; Aug;50(4): p399-403. Saluja M; Kenwright DN; Keating JP.

Ovarian intestinal-type mucinous borderline tumors: a nomenclature change is long overdue. *Int J Gynecol Pathol* 2010; Nov;29(6): p552-3; author reply 553-4. Kurman RJ; Ronnett BM.

Mullerian mucinous borderline tumors. *Hum Pathol* 2010;; Jan;41(1): p151; author reply 151-2. Rutgers JK.

Serous and mucinous borderline (low malignant potential) tumors of the ovary. *Am J Clin Pathol* 2005; Jun;123 Suppl:S13-57. Acs G.

Case No. 5, Accession No. 31393 October 2012

Fontana (Kaiser Permanente) - Carcinosarcoma
Hayward/Fremont (St. Rose Hospital) - Carcinosarcoma
Long Beach (Long Beach VA Hospital) - Malignant mixed Mullerian tumor (6)
Oakland (Alameda County Medical Center) - Carcinosarcoma (5)
Oxnard (St. John's Regional Medical Center) - Carcinosarcoma (1); MMMT (1)
San Diego (Naval Medical Center) - MMMT
Santa Barbara (Miramonte Laboratory) - Malignant mixed mullerian tumor
Woodland Hills (Southern California Permanente Med Gp) - Adenosarcoma
Arkansas (Associated Pathologists Laboratory) - Low grade endometrial stromal sarcoma
Colorado (McKee Medical Center) - Low grade stromal sarcoma
Delaware (Armed Forces Medical Examiner System) - Carcinosarcoma
Florida (The Pathology Group of NW Florida) - Malignant mixed mesodermal tumor
Georgia, Atlanta - Endometrioid adenocarcinoma
Illinois (Heartland Regional Medical Center) - Adenosarcoma
Illinois (Loyola University Medical Center) - Carcinosarcoma/MMMT
Kansas (Peterson Laboratory Services, P.A.) - Malignant mixed Mullerian tumor
Massachusetts (Tufts Medical Center) - Endometrial carcinoma, endometrioid type
Massachusetts (University of Massachusetts Medical Center) - Malignant mixed mullerian tumor
Minnesota (Fairview Ridges Hospital) - Malignant mixed Mullerian tumor
Missouri (Missouri Delta Medical Center) - Endometrial stromal sarcoma, low grade (1); Carcinosarcoma (1)
New York (Buffalo General Hospital) - Adenosarcoma
New York (Erie County Medical Center) - Carcinosarcoma (MMMT)
New York (SUNY Downstate Medical Center) - Endometrial stromal sarcoma with glandular elements
Ohio (Cleveland Clinic) - Carcinosarcoma (malignant mixed Mullerian tumor)
Ohio, Union Town - Carcinosarcoma
Pennsylvania (Drexel University College of Medicine) - Malignant mixed Mullerian tumor
Pennsylvania (Lehigh Valley Hospital) - Stromal sarcoma
South Carolina (Medical University of South Carolina) - Endometrial stromal sarcoma with Sertoli cell features
Tennessee (Molecular Pathology Laboratory Network) - Uterine tumor resembling ovarian sex-cord stromal tumor
Texas, Crystal Beach - Carcinosarcoma (endometrial-stromal)
Texas, Lubbock - Carcinosarcoma
Washington (Seattle, VAMC) - Malignant mixed Mullerian tumor
West Virginia Greenbrier Valley Medical Center) - Endometrioid stromal sarcoma
Wisconsin, Madison - Carcinosarcoma, uterus
Australia (Royal Hobart Hospital) - Carcinosarcoma (Mullerian mixed tumor)
Australia (Royal Prince Alfred Hospital) - Carcinosarcoma

Australia (The Royal Women's Hospital) - Malignant mixed Mullerian tumor
Saudi Arabia (King Khalid University Hospital) - Malignant mixed Mullerian tumor
Japan (Asahi General Hospital) - Adenosarcoma
Canada (Pasqua Hospital) - Endometrial stromal tumor with endometrioid glands
Ireland (Bon Secours Hospital) - Malignant mixed Mullerian tumor
Ireland (Kerry General Hospital) - Endometrial stromal sarcoma
Japan (Asahi General Hospital) - Carcinosarcoma
Japan (Setagaya-Ku) - Carcinosarcoma
Japan (Wakayama Medical University) - Carcinosarcoma, homologous type
Oman (Sultanate of Aziba) - Carcinosarcoma
Puerto Rico (University of Puerto Rico) - Carcinosarcoma/MMMT
Saudi Arabia (King Fahad Hospital Hofuf) - Carcinosarcoma (malignant mixed Mullerian tumor), uterine mass

Case 5 - Diagnosis:

Carcinosarcoma (MMMT), uterus
T-82000, M-89803

Case 5 - References:

Carcinosarcomas (malignant mullerian mixed tumors) of the uterus and ovary: a genetic study with special reference to histogenesis. *Int J Gynecol Pathol* 2003; Oct;22(4): p368-73. Jin Z; Ogata S, et al.

Early-stage carcinosarcoma of the uterus: the significance of lymph node count. *Int J Gynecol Cancer* 2007; Jan-Feb;17(1): p215-9. Temkin SM; Hellmann M; Lee YC; Abulafia O.

Endometrial polyps with atypical (bizarre) stromal cells. *Am J Surg Pathol* 2002; Apr;26(4): p505-9. Tai LH; Tavassoli FA.

Efficacy and safety of imatinib mesylate (Gleevec) and immunohistochemical expression of c-Kit and PDGFR-beta in a Gynecologic Oncology Group Phase Il Trial in women with recurrent or persistent carcinosarcomas of the uterus. *Gynecol Oncol* 2010; May;117(2): p248-54. Huh WK; Sill MW, et al.

Case No. 6, Accession No. 31368 October 2012

Fontana (Kaiser Permanente) - Pleomorphic adenoma
Hayward/Fremont (St. Rose Hospital) - Pleomorphic adenoma
Long Beach (Long Beach VA Hospital) - Pleomorphic adenoma (6)
Oakland (Alameda County Medical Center) - Pleomorphic adenoma (4); Myoepithelioma (1)
Oxnard (St. John's Regional Medical Center) - Pleomorphic adenoma (2)
San Diego (Naval Medical Center) - Pleomorphic adenoma
Santa Barbara (Miramonte Laboratory) - Pleomorphic adenoma
Woodland Hills (Southern California Permanente Med Gp) - Pleomorphic adenoma
Arkansas (Associated Pathologists Laboratory) - Pleomorphic adenoma
Colorado (McKee Medical Center) - Pleomorphic adenoma
Delaware (Armed Forces Medical Examiner System) - Pleomorphic adenoma
Florida (The Pathology Group of NW Florida) - Pleomorphic adenoma
Georgia, Atlanta - Pleomorphic adenoma
Illinois (Heartland Regional Medical Center) - Pleomorphic adenoma
Illinois (Loyola University Medical Center) - Pleomorphic adenoma
Kansas (Peterson Laboratory Services, P.A.) - Pleomorphic adenoma
Massachusetts (Tufts Medical Center) - Pleomorphic adenoma
Massachusetts (University of Massachusetts Medical Center) - Pleomorphic adenoma
Minnesota (Fairview Ridges Hospital) - Pleomorphic adenoma
Missouri (Missouri Delta Medical Center) - Pleomorphic adenoma (2)
New York (Buffalo General Hospital) - Pleomorphic adenoma
New York (Erie County Medical Center) - Mixed tumor (pleomorphic adenoma)
New York (SUNY Downstate Medical Center) - Pleomorphic adenoma
Ohio (Cleveland Clinic) - Pleomorphic adenoma
Ohio, Union Town - Pleomorphic adenoma

Pennsylvania (Drexel University College of Medicine) - Benign mixed tumor (pleomorphic adenoma)
Pennsylvania (Lehigh Valley Hospital) - Pleomorphic adenoma
South Carolina (Medical University of South Carolina) - Pleomorphic adenoma
Tennessee (Molecular Pathology Laboratory Network) - Pleomorphic adenoma
Texas, Crystal Beach - Mixed tumor
Texas, Lubbock - Pleomorphic adenoma
Washington (Seattle, VAMC) - Pleomorphic adenoma
West Virginia Greenbrier Valley Medical Center) - Pleomorphic adenoma
Wisconsin, Madison - Pleomorphic adenoma
Australia (Royal Hobart Hospital) - Pleomorphic adenoma, parotid
Australia (Royal Prince Alfred Hospital) - Pleomorphic adenoma
Australia (The Royal Women's Hospital) - Pleomorphic adenoma, parotid
Saudi Arabia (King Khalid University Hospital) - Pleomorphic adenoma
Japan (Asahi General Hospital) - Pleomorphic adenoma
Canada (Pasqua Hospital) - Pleomorphic adenoma
Ireland (Bon Secours Hospital) - Pleomorphic salivary adenoma
Ireland (Kerry General Hospital) - Pleomorphic salivary adenoma
Japan (Asahi General Hospital) - Pleomorphic adenoma
Japan (Setagaya-Ku) - Pleomorphic adenoma
Japan (Wakayama Medical University) - Pleomorphic adenoma
Oman (Sultanate of Aziba) - Pleomorphic adenoma
Puerto Rico (University of Puerto Rico) - Pleomorphic adenoma
Saudi Arabia (King Fahad Hospital Hofuf) - Pleomorphic adenoma, left parotid gland

Case 6 - Diagnosis:

Pleomorphic adenoma, parotid gland
T-55100, M-89400

Case 6 - References:

Fine-needle aspiration cytology: a reliable tool in the diagnosis of salivary gland lesions. *J Oral Pathol Med* 2012; Jan;41(1): p106-12. Singh Nanda KD; Mehta A; Nanda J.

Pleomorphic adenoma of the parotid gland: histopathologic analysis of the capsular characteristics of 218 tumors. *Head Neck* 2007; Aug;29(8): p751-7. Zbaren P; Stauffer E.

Pleomorphic adenoma of the salivary glands in children and adolescents.. *J Pediatr Surg* 2012; Apr;47(4): p715-9. Fu H; Wang J; Wang L; Zhang Z; He Y.

Parotidectomy: a 17-year institutional experience at a rural academic medical center. *Ann Otol Rhinol Laryngol* 2012; Feb;121(2): p100-3. Maddox PT; Paydarfar JA; Davies L.

Cyclin D1 and p16 expression in pleomorphic adenoma and carcinoma ex pleomorphic adenoma of the parotid gland. *Histopathology 2*007; Nov;51(5): p691-6. Patel RS; Rose B, et al.

Oestrogen receptor beta expression in pleomorphic adenomas of the parotid gland.. *J Clin Pathol* 2009; Sep;62(9): p789-93. Wong MH; Dobbins TA, et al.

Case No. 7, Accession No. 17827 October 2012

Fontana (Kaiser Permanente) - Plasmacytoma
Hayward/Fremont (St. Rose Hospital) - ML, plasmacytoid, consistent with Maltoma
Long Beach (Long Beach VA Hospital) - Adenocarcinoma (4); Myoepithelioma (2)
Oakland (Alameda County Medical Center) - Granular cell tumor (4); Monomorphic adenoma (1)
Oxnard (St. John's Regional Medical Center) - Oncocytoma (1); Plasma cell lesion vs. myoepithelial lesion (1)
San Diego (Naval Medical Center) - Myoepithelioma plasmacytoid variant
Santa Barbara (Miramonte Laboratory) - Polymorphous low-grade adenocarcinoma
Woodland Hills (Southern California Permanente Med Gp) - Poorly differentiated adenocarcinoma with signet ring cell features
Arkansas (Associated Pathologists Laboratory) - Plasmacytoma

Colorado (McKee Medical Center) - Lymphoma
Delaware (Armed Forces Medical Examiner System) - Merkel cell carcinoma
Florida (The Pathology Group of NW Florida) - Malignant with plasmacytoid features
Georgia, Atlanta - Lymphoepithelial carcinoma
Illinois (Heartland Regional Medical Center) - Poorly differentiated carcinoma
Illinois (Loyola University Medical Center) - Plasmacytoid myoepithelioma
Kansas (Peterson Laboratory Services, P.A.) - Granulocytic sarcoma
Massachusetts (Tufts Medical Center) - Merkel cell carcinoma
Massachusetts (University of Massachusetts Medical Center) - Acinic cell carcinoma
Minnesota (Fairview Ridges Hospital) - Hematopoietic malignancy, granulocytic sarcoma
Missouri (Missouri Delta Medical Center) - Lymphoma (plasmacytoid features) (1); Malignant lymphoma (1)
New York (Buffalo General Hospital) - Myoepithelioma
New York (Erie County Medical Center) - Malignant tumor, favor acinic cell
New York (SUNY Downstate Medical Center) - Plasmablastic lymphoma
Ohio (Cleveland Clinic) - Plasmablastic lymphoma
Ohio, Union Town - Acinic cell carcinoma
Pennsylvania (Drexel University College of Medicine) - Poorly differential malignancy, rule out Merkel cell carcinoma
Pennsylvania (Lehigh Valley Hospital) - Large cell lymphoma
South Carolina (Medical University of South Carolina) - Myoepithelioma
Tennessee (Molecular Pathology Laboratory Network) - Merkel cell carcinoma
Texas, Crystal Beach - Plasmacytoma
Texas, Lubbock - Mucoepidermoid carcinoma
Washington (Seattle, VAMC) - Carcinoma consistent with scattered mucous secreting cell, high grade mucoepidermoid
West Virginia Greenbrier Valley Medical Center) - Plasmacytoma
Wisconsin, Madison - Small blue cell tumor (Merkel cell carcinoma, lymphoma/leukemia)
Australia (Royal Hobart Hospital) - Cellular tumor with plasmacytoid features (melanoma, myeloma, other)
Australia (Royal Prince Alfred Hospital) - Undifferentiated malignant neoplasm, query high grade mucoepidermoid carcinoma
Australia (The Royal Women's Hospital) - Epithelioid malignant tumor, favoring Merkel cell carcinoma
Saudi Arabia (King Khalid University Hospital) - Myoepithelioma (epithelioid variant)
Japan (Asahi General Hospital) - Myoepithelioma
Canada (Pasqua Hospital) - Merkle cell tumor
Ireland (Bon Secours Hospital) - Acinic cell carcinoma
Ireland (Kerry General Hospital) - Myoepithelial carcinoma
Japan (Asahi General Hospital) - Squamous cell carcinoma
Japan (Setagaya-Ku) - Small cell carcinoma
Japan (Wakayama Medical University) - Extramedullary plasmacytoma
Oman (Sultanate of Aziba) - High grade neoplasm DD; Plasmacytoma blastic variant ; Non-Hodgkin lymphoma; Poorly differentiated carcinoma; Malignant melanoma
Puerto Rico (University of Puerto Rico) - Merkel cell carcinoma/lymphoma/plasmacytoma/melanoma
Saudi Arabia (King Fahad Hospital Hofuf) - Poorly differentiated malignancy compatible with diffuse large cell non-Hodgkin's lymphoma, lower lip

Case 7 - Diagnosis:

Poorly differentiated malignant neoplasm with small blue cell features. R/O Merkel cell tumor, plasmacytoma, lymphoma, others, lip

T-52000, M-80003

Case 7 - References:
Lip cancer: incidence, trends, histology and survival: 1970-2006;. *Br J Dermatol* 2010; May;162(5): p1103-9. Czerninski R; Zini A; Sgan-Cohen HD.
Merkel cell carcinoma on the upper lip of a 100-year-old woman. *J Nihon Med Sch* 2010; Aug;77(4): p214-7. Kitta E; Murakami M; Miyazato H; Akimoto M; Hyakusoku H.
Merkel cell carcinoma demographics, morphology, and survival based on 3870 cases: a population based study. *J Cutan Pathol* 2010; Jan;37(1): p20-7. Albores-Saavedra J; Batich K, et al.
Small cell carcinoma of the submandibular gland: a rare small round blue cell tumor. *Am J Otolaryngol* 2007; Mar-Apr;28(2): p118-21. Walters DM; Little SC; Hessler RB; Gourin CG
Primitive small cell tumor with epithelial, gangliocytic, neuroendocrine, and mesenchymal differentiation: report of 2 cases. *Int J Surg Pathol* 2007; Oct;15(4): p429-36. Michal M; Kazakov DV; Sima R; Vanecek T.
The pathology of extrapulmonary small cell carcinoma. *Semin Oncol* 2007; Feb;34(1): p30-8. Frazier SR; Kaplan PA; Loy TS.

Case No. 8, Accession No. 31502 October 2012

Fontana (Kaiser Permanente) - Microcystic adnexal carcinoma
Hayward/Fremont (St. Rose Hospital) - Microcystic adenexal carcinoma
Long Beach (Long Beach VA Hospital) - Microcystic adenexal carcinoma (5); Syringoid carcinoma (1)
Oakland (Alameda County Medical Center) - Microcystic adenexal carcinoma (5)
Oxnard (St. John's Regional Medical Center) - Sweat gland carcinoma (1); Microcystic adnexal carcinoma (1)
San Diego (Naval Medical Center) - Microcystic adenxal carcinoma
Santa Barbara (Miramonte Laboratory) - Microcystic adnexal carcinoma
Woodland Hills (Southern California Permanente Med Gp) - Polymorphous low grade adenocarcinoma
Arkansas (Associated Pathologists Laboratory) - Desmoplastic trichoepithelioma
Colorado (McKee Medical Center) - Sclerosing sweat duct carcinoma
Delaware (Armed Forces Medical Examiner System) - Melanoma
Georgia, Atlanta - Microcystic adenexal carcinoma
Illinois (Heartland Regional Medical Center) - Microcystic adnexal carcinoma (sclerosing sweat gland carcinoma)
Illinois (Loyola University Medical Center) - Desmoplastic microcystic adnexal carcinoma
Kansas (Peterson Laboratory Services, P.A.) - Microcystic adnexal carcinoma
Massachusetts (Tufts Medical Center) - Microcystic adnexal carcinoma
Massachusetts (University of Massachusetts Medical Center) - Microcystic adnexal carcinoma
Minnesota (Fairview Ridges Hospital) - Microcystic adnexal carcinoma
Missouri (Missouri Delta Medical Center) - Microcystic adnexal tumor (2)
New York (Buffalo General Hospital) - Microcystic adnexal carcinoma
New York (Erie County Medical Center) - Desmoplastc melanoma
New York (SUNY Downstate Medical Center) - Sclerosing sweat duct carcinoma
Ohio (Cleveland Clinic) - Microcystic adnexal carcinoma
Ohio, Union Town - Sclerosing sweat duct carcinoma
Pennsylvania (Drexel University College of Medicine) - Moerpheaform basal cell carcinoma
Pennsylvania (Lehigh Valley Hospital) - Sclerosing sweat duct carcinoma
South Carolina (Medical University of South Carolina) - Microcystic adnexal carcinoma
Texas, Crystal Beach - Trichoepithelioma
Texas, Lubbock - Metastatic adenocarcinoma
Washington (Seattle, VAMC) - Carcinoma consistent with microductal growth pattern
West Virginia Greenbrier Valley Medical Center) - Dermoplastic melanoma
Wisconsin, Madison - Sweat gland carcinoma
Australia (Royal Hobart Hospital) - Microcystic adnexal carcinoma

Australia (Royal Prince Alfred Hospital) - Microcystic adnexal carcinoma
Australia (The Royal Women's Hospital) - Tissue has been mostly cut out but there are features suggestive of syringoma
Saudi Arabia (King Khalid University Hospital) - Carcinoma, favor eccrine origin
Japan (Asahi General Hospital) - Microcystic adnexal carcinoma
Canada (Pasqua Hospital) - Microcystic adnexal carcinoma
Ireland (Bon Secours Hospital) - Microcystic adnexal carcinoma
Ireland (Kerry General Hospital) - Microcystic adnexal carcinoma
Japan (Asahi General Hospital) - Metastatic adenocarcinoma
Japan (Setagaya-Ku) - Microcystic adnexal carcinoma
Japan (Wakayama Medical University) - Desmoplastic trichoepithelioma
Puerto Rico (University of Puerto Rico) - Malignant adnexal tumor/microcystic adnexal carcinoma
Saudi Arabia (King Fahad Hospital Hofuf) - Desmoplastic melanoma, scalp

Case 8 - Diagnosis:

Microcystic adnexal carcinoma, scalp
T-Y0160, M-83903

Case 8 - References:

Microcystic adnexal carcinoma: report of seven cases including one with lung metastasis. *Dermatology* 2006; 212(3): p221-8. Gabillot-Carre M; Weill F, et al.

Microcystic adnexal carcinoma (MAC) of the scalp with extensive pilar differentiation. *Dermatol Surg* 2002; Jun;28(6): p536-9. Callahan EF; Vidimos AT; Bergfeld WF.

Squamoid eccrine ductal carcinoma": an unusual low-grade case with follicular differentiation. Are these tumors squamoid variants of microcystic adnexal carcinoma? *Am J Dermatopathol* 2009; Dec;31(8): p849-52. Kavand S; Cassarino DS.

Microcystic adnexal carcinoma: the first reported congenital case. *Pediatr Dermatol* 2011; Jan-Feb;28(1): p35-8 Smart DR; Taintor AR, et al.

Eosinophils as a clue to the diagnosis of microcystic adnexal carcinoma. *J Cutan Pathol* 2011; Nov;38(11): p849, 850-2 McCalmont TH; Ye J.

An immunohistochemical panel to differentiate metastatic breast carcinoma to skin from primary sweat gland carcinomas with a review of the literature.. *Arch Pathol Lab Med* 2011; Aug;135(8): p975-83. Rollins-Raval M; Chivukula M; Tseng GC; Jukic D; Dabbs DJ.

Case No. 9, Accession No. 31444 October 2012

Fontana (Kaiser Permanente) - Liposarcoma
Hayward/Fremont (St. Rose Hospital) - Liposarcoma, pleomorphic type
Long Beach (Long Beach VA Hospital) - Well-differentiated liposarcoma (6)
Oakland (Alameda County Medical Center) - Low grade liposarcoma (5)
Oxnard (St. John's Regional Medical Center) - Angiomyolipoma vs. liposarcoma (1)
San Diego (Naval Medical Center) - ALN/WDL
Santa Barbara (Miramonte Laboratory) - Myxoid liposarcoma
Woodland Hills (Southern California Permanente Med Gp) - Well-differentiated liposarcoma
Arkansas (Associated Pathologists Laboratory) - Myxoid liposarcoma
Colorado (McKee Medical Center) - Dedifferentiated liposarcoma
Delaware (Armed Forces Medical Examiner System) - Well-differentiated liposarcoma
Florida (The Pathology Group of NW Florida) - Liposarcoma
Georgia, Atlanta - Well-differentiated lipsarcoma
Illinois (Heartland Regional Medical Center) - Liposarcoma, well-differentiated
Illinois (Loyola University Medical Center) - Pleomorphic liposarcoma
Kansas (Peterson Laboratory Services, P.A.) - Pleomorphic liposarcoma
Massachusetts (Tufts Medical Center) - Myxoid liposarcoma

Massachusetts (University of Massachusetts Medical Center) - Well-differentiated liposarcoma
Minnesota (Fairview Ridges Hospital) - Well-differentiated liposarcoma
Missouri (Missouri Delta Medical Center) - Liposarcoma (2)
New York (Buffalo General Hospital) - Liposarcoma
New York (Erie County Medical Center) - Liposarcoma
New York (SUNY Downstate Medical Center) - Well-differentiated liposarcoma
Ohio (Cleveland Clinic) - Pleomorphic liposarcoma
Ohio, Union Town - Myxoid malignant fibrous histiocytoma
Pennsylvania (Drexel University College of Medicine) - Myxoid/round-cell liposarcoma
Pennsylvania (Lehigh Valley Hospital) - Well-differentiated liposarcoma
South Carolina (Medical University of South Carolina) - Myxoid liposarcoma
Tennessee (Molecular Pathology Laboratory Network) - Well-differentiated liposarcoma
Texas, Crystal Beach - Liposarcoma
Texas, Lubbock - Myxoid liposarcoma
Washington (Seattle, VAMC) - Pleomorphic myxoid stromal neoplasm, misnamed well-differentiated liposarcoma
West Virginia Greenbrier Valley Medical Center) - Liposarcoma
Wisconsin, Madison - Liposarcoma
Australia (Royal Hobart Hospital) - Well-differentiated lipsarcoma with low grade dedifferentiation
Australia (Royal Prince Alfred Hospital) - Sclerosing liposarcoma
Australia (The Royal Women's Hospital) - No clinical history is supplied, features favoring well-differentiated liposarcoma/atypical lipomatous tumor
Saudi Arabia (King Khalid University Hospital) - Liposarcoma
Japan (Asahi General Hospital) - Well-differentiated liposarcoma
Canada (Pasqua Hospital) - Liposarcoma
Ireland (Bon Secours Hospital) - Pleomorphic liposarcoma
Ireland (Kerry General Hospital) - Sclerosing well-differentiated liposarcoma
Japan (Asahi General Hospital) - Liposarcoma
Japan (Setagaya-Ku) - Liposarcoma
Japan (Wakayama Medical University) - Liposarcoma
Oman (Sultanate of Aziba) - Liposarcoma
Puerto Rico (University of Puerto Rico) - Pleomorphic liposarcoma
Saudi Arabia (King Fahad Hospital Hofuf) - Well-differentiated liposarcoma, sclerosing type, retroperitoneal mass

Case 9 - Diagnosis:

Low grade liposarcoma with focal (<5%) low grade dedifferentiation, retroperitoneum
T-Y4600, M-88513

Case 9 - References:

Dedifferentiated liposarcoma of the retro-peritoneum: histologically low-grade type. *Indian J Pathol Microbiol* 2010; Apr-Jun;53(2): p353-5. Parakh RS; Zawar MP; Gadgil PA; Kaujalagi NS.

Intussusception secondary to metastasis from a low-grade retroperitoneal liposarcoma. *Am Surg* 2004; Sep;70(9): p775-8. Monjazeb A; Stanton C; Levine EA.

Liposarcomas with mixed well-differentiated and pleomorphic features: a clinicopathologic study of 12 cases. *Am J Surg Pathol* 2010; Jun;34(6): p837-43. Boland JM; Weiss SW; Oliveira AM; Erickson-Johnson ML; Folpe AL.

Surgical management of primary and recurrent retroperitoneal liposarcoma. *Br J Surg* 2005; Feb;92(2): p246-52. Neuhaus SJ; Barry P; Clark MA; Hayes AJ; Fisher C; Thomas JM.

Why do patients with low-grade soft tissue sarcoma die? *Ann Surg Oncol* 2008; Dec;15(12): p3550-60. Canter RJ; Qin LX, et al.

Grading of soft tissue sarcomas: the challenge of providing precise information in an imprecise world. *Histopathology* 2006; Jan;48(1): p42-50. Deyrup AT; Weiss SW.

Fontana (Kaiser Permanente) - Hepatocellular carcinoma
Hayward/Fremont (St. Rose Hospital) - Heptatocellular carcinoma with fatty change
Long Beach (Long Beach VA Hospital) - Well-differentiated hepatocellular carcinoma (1); Hepatocellular carcinoma (1)
Oakland (Alameda County Medical Center) - Hepatocellular carcinoma (3); Well-differentiated hepatocellular carcinoma (1); Low grade hepatocellular carcinoma (1)
Oxnard (St. John's Regional Medical Center) - Hepatocellular carcinoma
San Diego (Naval Medical Center) - Hepatocellular carcinoma
Santa Barbara (Miramonte Laboratory) - Fibrolammelar hepatocellular carcinoma
Woodland Hills (Southern California Permanente Med Gp) - Hepatocellular adenocarcinoma
Arkansas (Associated Pathologists Laboratory) - Hepatocellular carcinoma with fatty change
Colorado (McKee Medical Center) - Hepatocellular carcinoma
Delaware (Armed Forces Medical Examiner System) - Hepatocellular carcinoma
Florida (The Pathology Group of NW Florida) - Hepatocellular carcinoma
Georgia, Atlanta - Hepatocellular carcinoma
Illinois (Heartland Regional Medical Center) - Hepatocellular carcinoma
Illinois (Loyola University Medical Center) - Hepatocellular carcinoma, clear cell type
Kansas (Peterson Laboratory Services, P.A.) - Hepatocellular carcinoma, clear cell type
Massachusetts (Tufts Medical Center) - Well-differentiated heptocellular carcinoma with clear cell change
Massachusetts (University of Massachusetts Medical Center) - Hepatocellular carcinoma
Minnesota (Fairview Ridges Hospital) - Hepatocellular carcinoma
Missouri (Missouri Delta Medical Center) - Hepatoma, (hepatocellular carcinoma) (1); Hepatocellular carcinoma, clear cell variant (1)
New York (Buffalo General Hospital) - Hepatocellular crcinoma
New York (Erie County Medical Center) - Hepatocellular carcinoma
New York (SUNY Downstate Medical Center) - Hepatocellular carcinoma
Ohio (Cleveland Clinic) - Well-differentiated hepatocellular carcinoma
Ohio, Union Town - Hepatocellular carcinoma
Pennsylvania (Drexel University College of Medicine) - Hepatocellular carcinoma
Pennsylvania (Lehigh Valley Hospital) - Hepatocellular carcinoma
South Carolina (Medical University of South Carolina) - Hepatocellular carcinoma
Tennessee (Molecular Pathology Laboratory Network) - Hepatocellular carcinoma
Texas, Crystal Beach - Hepatocellular carcinoma
Texas, Lubbock - Hepatocellular carcinoma
Washington (Seattle, VAMC) - Hepatocellular carcinoma
West Virginia Greenbrier Valley Medical Center) - Hepatocellular carcinoma
Wisconsin, Madison - Hepatocellular carcinoma
Australia (Royal Hobart Hospital) - Well-differentiated hepatocellular carcinoma
Australia (Royal Prince Alfred Hospital) - Hepatocellular carcinoma
Australia (The Royal Women's Hospital) - No clinical history is supplied, features favoring angiomyolipoma of liver
Saudi Arabia (King Khalid University Hospital) - Hepatocellular carcinoma
Japan (Asahi General Hospital) - Hepatocellular carcinoma
Canada (Pasqua Hospital) - Hepatocellular carcinoma
Ireland (Bon Secours Hospital) - Hepatocellular carcinoma
Ireland (Kerry General Hospital) - Hepatocellular carcinoma
Japan (Asahi General Hospital) - Hepatocellular carcinoma
Japan (Setagaya-Ku) - Hepatocellular carcinoma
Japan (Wakayama Medical University) - Well-differentiated hepatocellular carcinoma
Oman (Sultanate of Aziba) - Hepatocellular carcinoma
Puerto Rico (University of Puerto Rico) - Hepatocellular carcinoma
Saudi Arabia (King Fahad Hospital Hofuf) - Focal nodular hyperplasia, liver mass

Case 10 - Diagnosis:

Hepatocellular carcinoma, liver
T-56000, M-81703

Case 10 - References:

Diagnosis of hepatocellular carcinoma by fine needle aspiration cytology. Cellular features. *Acta Cytol* 2003; Jul-Aug;47(4): p581-9. Soyuer I; Ekinci C; Kaya M; Genc Y; Bahar K.

Hepatocellular carcinoma: pathology and liver biopsy. Dig Dis 2009; 27(2): p102-8. Kalinski T; Roessner A.

Role of alcohol in liver carcinogenesis. *Semin Liver Dis* 2009; May;29(2): p222-32. McKillop IH; Schrum LW.

Liver transplantation for hepatocellular carcinoma: a survey of practices.. *J Clin Gastroenterol* 2006; Aug;40(7): p643-7. Van Kleek EJ; Schwartz JM; Rayhill SC; Rosen HR; Cotler SJ.

Liver pathology in obesity. *Semin Liver Dis* 2004; Nov;24(4): p363-70. Suriawinata A; Fiel M.