



CALIFORNIA  
TUMOR TISSUE REGISTRY

*GYNECOLOGIC PATHOLOGY*

Minutes – Subscription A

May 2001



**SUGGESTED READING (General Topics from Recent Literature):**

Uterine Fibroids. Stewart EA. *The Lancet* 2001; 357:293-297.

Benign Cellular Changes in Pap Smears. Causes and Significance. *Acta Cytol* 2001; 45:5-8.

National Practice Patterns of Sentinel Lymph Node Dissection for Breast Carcinoma. *Am J Coll Surg* 2001; 192:453-458.

Adenosquamous and Squamous Carcinoma of the Colon and Upper Rectum. A Clinical and Histopathologic Study. *Dis Colon Rectum* 2001; 44:341-346.

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## **FILE DIAGNOSES**

**CTTR Subscription A**

**May 2001**

**Case 1:**

**Cellular Fibroma/Fibrothecoma, Ovary**

T-87000, M-88100

**Case 2:**

**Borderline Papillary Serous Tumor, Ovary**

T-87000, M-84600

**Case 3:**

**Papillary Serous Cystadenocarcinoma, Ovary**

T-87000, M-84413

**Case 4:**

**Clear Cell Carcinoma, Ovary**

T-87000, M-83103

**Case 5:**

**Malignant Mixed Mullerian Tumor (Carcinosarcoma with Heterologous Elements), Ovary**

T-87000, M-89503

**Case 6:**

**Malignant Germ Cell Tumor, Favor Dysgerminoma, Ovary**

T-87000, M-90603

**Case 7:**

**Immature Teratoma, Left Ovary**

T-87000, M-90803

**Case 8:**

**Endometrial Stromal Nodule, Uterus**

T-82000, M-03010

**Case 9:**

**Epithelioid Leiomyoma with Plexiform Features (“Plexiform Leiomyoma”), Uterus**

T-82000, M-88950

**Case 10:**

**Myxoid Leiomyosarcoma, Uterus**

T-82000, M-88903

Bakersfield - Cellular fibroma of low malignant potential  
Baldwin Park (Kaiser) - Thecoma (4)  
Bay Area - Sex cord stromal tumor, probably granulosa cell type (3)  
Irvine (UCI Medical Center Residents) - Fibrothecoma  
Long Beach (Lakewood Regional Medical Center) - Fibrothecoma (7)  
Monterey (Community Hospital of Monterey Peninsula) - Fibrosarcoma  
Mountain View (El Camino Pathology Group) - Fibrothecoma  
Oakland (Kaiser) - Thecoma (4)  
Riverside - Sclerosing stromal tumor  
Sacramento (UC Davis Medical Center) - Fibrothecoma  
San Diego (Naval Medical Center) - Fibrothecoma  
Santa Rosa (Memorial Hospital) - Thecoma (3)  
Ventura (Unilab) - Thecoma (2)  
Florida (Munroe Regional Medical Center) - Endometrial stromal sarcoma, low grade  
Florida (Winter Haven Hospital) - Stromal hyperplasia (1); Stromal sarcoma (1); Thecoma/fibroma (1)  
Indiana (Ft. Wayne) - Cellular fibroma, left ovary (mitotically active)  
Kansas (University of Kansas Medical Center) - Thecoma  
Kentucky (University of Louisville Residents) - Granulosa cell tumor  
Louisiana (Shreveport) - Thecoma, ovary  
Maryland (Johns Hopkins Hospital Residents) - Granulosa cell tumor  
Maryland (National Naval Medical Center) - Sarcoma arising in fibrothecoma (6); Endometrial stromal sarcoma (4)  
Maryland (Woodbine) - Malignant Brenner tumor (2)  
Maryland (University of Maryland Residents) - Thecoma, potentially malignant  
Massachusetts (Berkshire Medical Center) - Thecoma, unknown malignant potential vs. luteinized thecoma with sclerosing [illegible] vs. adult granulosa cell tumor  
Massachusetts (New England Medical Center Residents) - Fibrothecoma  
Michigan (Oakwood Hospital) - Granulosa cell tumor  
Michigan (St. Joseph Mercy Hospital) - Fibrothecoma (4)  
Mississippi (University of Mississippi Medical Center, Elderpath Group) - Lipoid cell tumor, NOS  
Nebraska (Creighton University) - Malignant sex cord tumor  
New Jersey (Overlook Hospital) - Ovarian fibroma (1); Endometrial stromal tumor, ? benign (3)  
New York (Beth Israel Medical Center Residents) - Thecoma  
New York (Long Island Jewish Medical Center) - Granulosa cell tumor  
New York SUNY Stony Brook University Hospital Residents) - Cellular fibroma  
North Carolina (WNC Pathology Group) - Thecoma (3)  
Oklahoma (Tulsa) - Granulosa cell tumor  
Washington (Madigan Army Medical Center) - Fibrothecoma  
Australia (North Queensland Pathology Group) - ? sclerosing stromal cell tumour. ? Fibrothecoma  
Australia (Royal Prince Alfred Hospital, Sydney) - Thecoma, NOS  
Canada (Foothills Hospital, Calgary) - Thecoma, luteinized  
Singapore - Granulosa cell tumour

**Case 1 - Diagnosis:**

**Cellular Fibroma/Fibrothecoma, Ovary**

T-87000, M-88100

Consultation: Para Chandrasoma, M.D., University of Southern California. "Cellular Fibroma with Mitotic Activity, Ovarian Stromal Neoplasm of Low Grade Malignancy."

**Case 1 – References:**

Prat J and Scully RE. Cellular Fibroma and Fibrosarcomas of the Ovary. A Comparative Clinicopathologic Analysis of Seventeen Cases. *Cancer* 1981; 47(11):2663-2670.

Scully RE, Young RH and Clement PB, Eds. Tumor of the Ovary, Maldeveloped Gonads, Fallopian Tube, and Broad Ligament. *Armed Forces of Pathology*, Washington, DC 1998; 194-196.

Troiano RN, Lazzarini KM, et al. Fibroma and Fibrothecoma of the Ovary. MR Imaging Findings. *Radiol* 1997; 204(3):795-798.

Dal Cin P, Pauwels P, et al. Fibrosarcoma Versus Cellular Fibroma of the Ovary. *Am J Surg Pathol* 1997; 21(1):52-59.

Choi YL, Kim HS, et al. Immunexpression of Inhibin Alpha Subunit, Inhibin/Activin BetaA Subunit and CD99 in Ovarian Tumors. *Arch Pathol Lab Med* 2000; 124(4):563-569.

## Case No. 2, Accession No. 28055

May 2001

Bakersfield - Serous cystadenocarcinoma of low malignant potential

Baldwin Park (Kaiser) - Serous borderline tumor (4)

Bay Area - Mucinous cystic tumor of borderline malignancy (3)

Irvine (UCI Medical Center Residents) - Papillary serous cystadenoma, borderline

Long Beach (Lakewood Regional Medical Center) - Mucinous papillary cyst adenocarcinoma of low malignant potential (7)

Monterey (Community Hospital of Monterey Peninsula) - Papillary serous cystadenoma

Mountain View (El Camino Pathology Group) - Serous borderline tumor

Oakland (Kaiser) - Serous tumor of low malignant potential (4)

Riverside - Mucinous cystadenocarcinoma

Sacramento (UC Davis Medical Center) - Papillary serous tumor of low malignant potential

San Diego (Naval Medical Center) - Serous papillary tumor of low malignant potential

Santa Rosa (Memorial Hospital) - Papillary serous tumor of uncertain malignant potential (3)

Ventura (Unilab) - Papillary serous cystadenoma (2)

Florida (Munroe Regional Medical Center) - Borderline papillary serous tumor

Florida (Winter Haven Hospital) - Papillary serous cystadenoma of low grade malignant potential (1); Serous tumor of borderline malignant potential (1); Borderline serous cystadenoma (1)

Indiana (Ft. Wayne) - Mucinous borderline tumor (endocervical type), ovary (low grade malignant potential)

Kansas (University of Kansas Medical Center) - Borderline mucinous tumor

Kentucky (University of Louisville Residents) - Serous papillary tumor of low malignant potential (atypically proliferating)

Louisiana (Shreveport) - Borderline serous cystadenoma, ovary

Maryland (Johns Hopkins Hospital Residents) - Borderline serous tumor of ovary

Maryland (National Naval Medical Center) - Serous borderline tumor (10)

Maryland (Woodbine) - Papillary mucinous cystadenocarcinoma of borderline malignancy (2)

Maryland (University of Maryland Residents) - Borderline seromucinous tumor

Massachusetts (Berkshire Medical Center) - Serous papillary cystadenoma of unknown malignant potential

Massachusetts (New England Medical Center Residents) - Papillary borderline serous tumor of the ovary

Michigan (Oakwood Hospital) - Serous borderline tumor

Michigan (St. Joseph Mercy Hospital) - Serous low malignant potential tumor (4)

Mississippi (University of Mississippi Medical Center, Elderpath Group) - Papillary mucinous cystadenocarcinoma

Nebraska (Creighton University) - Papillary mucinous cystadenocarcinoma

New Jersey (Overlook Hospital) - Serous tumor, low malignant potential (4)

New York (Beth Israel Medical Center Residents) - Mucinous cystadenoma with borderline malignancy

New York (Long Island Jewish Medical Center) - Papillary serous tumor, borderline

New York SUNY Stony Brook University Hospital Residents) - Serous neoplasm of low malignant potential, borderline

North Carolina (WNC Pathology Group) - Low malignant potential mucinous tumor (1); Serous tumor of low malignant potential (2)

Oklahoma (Tulsa) - Serous papillary cystadenoma, Gordalira type

Washington (Madigan Army Medical Center) - Borderline serous cystadenoma

Australia (North Queensland Pathology Group) - Borderline mucinous tumour

Australia (Royal Prince Alfred Hospital, Sydney) - Proliferating serous tumour (low malignant potential)

Canada (Foothills Hospital, Calgary) - Mucinous cystic tumor of borderline malignancy

Singapore - Borderline papillary serous tumor

## **Case 2 - Diagnosis:**

### **Borderline Papillary Serous Tumor, Ovary**

T-87000, M-84600

## **Case 2 - References:**

- Prat J. Ovarian Tumors of Borderline Malignancy (Tumors of Low Malignant Potential) A Critical Appraisal. *Adv Anat Pathol* 1999; 6(5):247-274.
- Caduff RF, Svoboda-Newman SM, et al. Comparison of Mutations of Ki-RAS and p53 Immunoreactivity in Borderline and Malignant Epithelial Ovarian Tumors. *Am J Surg Pathol* 1999; 23(3):323-328.
- Kennedy AW and Hart WR. Ovarian Papillary Serous Tumors of Low Malignant Potential (Serous Borderline Tumors). A Long Term Follow-Up Study, Including Patients with Microinvasion, Lymph Node Metastasis, and Transformation to Invasive Serous Carcinoma. *Cancer* 1996; 78(2):278-286.
- Ulbright TM and Roth LM. Common Epithelial Tumors of the Ovary. Proliferating and of Low Malignant Potential. *Semin Diagn Pathol* 1985; 2(1):2-15.
- Kurman RJ, Trindle CL, et al. The Behavior of Serous Tumors of Low Malignant Potential. Are They Ever Malignant? *Int J Gynecol Pathol* 1993; 12:120-127.

## **Case No. 3, Accession No. 28672**

**May 2001**

Bakersfield - Endometrioid carcinoma

Baldwin Park (Kaiser) - Endometrioid carcinoma (3); Well-differentiated endometrioid carcinoma (1)

Bay Area - Infiltrating serous papillary adenocarcinoma (3)

Irvine (UCI Medical Center Residents) - Papillary serous cystadenocarcinoma

Long Beach (Lakewood Regional Medical Center) - Papillary serous cyst adenocarcinoma (7)

Monterey (Community Hospital of Monterey Peninsula) - Papillary serous adenocarcinoma

Mountain View (El Camino Pathology Group) - Papillary serous cystadenocarcinoma

Oakland (Kaiser) - Serous carcinoma (4)

Riverside - Papillary serous cystadenocarcinoma

Sacramento (UC Davis Medical Center) - Endometrioid adenocarcinoma

San Diego (Naval Medical Center) - Papillary serous cystadenocarcinoma

Santa Rosa (Memorial Hospital) - Papillary serous cystadenocarcinoma (3)

Ventura (Unilab) - Papillary serous cystadenocarcinoma

Florida (Munroe Regional Medical Center) - Papillary serous carcinoma

Florida (Winter Haven Hospital) - Moderately differentiated papillary serous adenocarcinoma (3)

Indiana (Ft. Wayne) - Papillary serous cystadenocarcinoma, ovary

Kansas (University of Kansas Medical Center) - Serous cystadenocarcinoma, FIGO II, nuclear grade 2

Kentucky (University of Louisville Residents) - Serous adenocarcinoma, well to moderately differentiated

Louisiana (Shreveport) - Serous papillary carcinoma, ovary, invasive

Maryland (Johns Hopkins Hospital Residents) - Serous carcinoma

Maryland (National Naval Medical Center) - Serous papillary adenocarcinoma

Maryland (Woodbine) - Papillary serous cystadenocarcinoma of borderline malignancy (2)

Maryland (University of Maryland Residents) - Endometrioid carcinoma

Massachusetts (Berkshire Medical Center) - High grade papillary serous carcinoma

Massachusetts (New England Medical Center Residents) - Ovarian serous carcinoma, ? carcinosarcoma

Michigan (Oakwood Hospital) - Papillary serous carcinoma

Michigan (St. Joseph Mercy Hospital) - Well-differentiated serous carcinoma (4)

Mississippi (University of Mississippi Medical Center, Elderpath Group) - Papillary serous adenocarcinoma

Nebraska (Creighton University) - Serous cystadenocarcinoma

New Jersey (Overlook Hospital) - Papillary serous carcinoma (4)

New York (Beth Israel Medical Center Residents) - Mucinous cystadenocarcinoma

New York (Long Island Jewish Medical Center) - Serous cystadenocarcinoma

New York SUNY Stony Brook University Hospital Residents) - High grade serous carcinoma, consistent with primary

North Carolina (WNC Pathology Group) - Endometrioid adenocarcinoma

Oklahoma (Tulsa) - Endometrioid adenocarcinoma  
Washington (Madigan Army Medical Center) - Papillary serous cystadenocarcinoma  
Australia (North Queensland Pathology Group) - Serous carcinoma  
Australia (Royal Prince Alfred Hospital, Sydney) - Serous carcinoma  
Canada (Foothills Hospital, Calgary) - Endometrioid adenocarcinoma  
Singapore - Serous carcinoma

**Case 3 - Diagnosis:**

**Papillary Serous Cystadenocarcinoma, Ovary**  
 T-87000, M-84413

**Case 3 - References:**

Seoud M, Salem Z, et al. Papillary Serous Carcinoma of the Ovary Following Prolonged Tamoxifen Treatment. *Eur J Gynaecol Oncol* 1999; 20(3):237-239.  
 Ordonez NG. Role of Immunohistochemistry in Distinguishing Epithelial Peritoneal Mesotheliomas From Peritoneal and Ovarian Serous Carcinomas. *Am J Pathol* 1998; 22(10):1203-1214.  
 Costa MJ, Hansen CL, et al. Immunohistochemical Markers of Cell Cycle Control Applied to Ovarian and Primary Peritoneal Surface Epithelial Neoplasms. p21 WAF1/C1P1 Predicts Survival and Good Response to Platinum-Based Chemotherapy. *Hum Pathol* 1999; 30(6):640-660.  
 Geisler JP, Geisler HE, et al. What Staging Surgery Should Be Performed on Patients with Uterine Papillary Serous Carcinoma. *Gynecol Oncol* 1999; 74(3):465-467.

**Case No. 4, Accession No. 28276**

**May 2001**

Bakersfield - Endodermal sinus tumor (hepatoid type)  
Baldwin Park (Kaiser) - Clear cell carcinoma (4)  
Bay Area - Metastatic adenocarcinoma (1); Hepatoid variant of a yolk sac tumor (1); Hepatoid carcinoma (1); (? clear cell carcinoma)  
Irvine (UCI Medical Center Residents) - Clear cell carcinoma  
Long Beach (Lakewood Regional Medical Center) - Clear cell carcinoma (7)  
Monterey (Community Hospital of Monterey Peninsula) - Sertoli cell tumor, oxyphilic type  
Mountain View (El Camino Pathology Group) - Clear cell adenocarcinoma  
Oakland (Kaiser) - Oxyphilic variant of clear cell carcinoma (4)  
Riverside - Clear cell carcinoma  
Sacramento (UC Davis Medical Center) - Clear cell adenocarcinoma, tubular cystic pattern  
San Diego (Naval Medical Center) - Clear cell carcinoma – oxyphil type  
Santa Rosa (Memorial Hospital) - Clear cell carcinoma (3)  
Ventura (Unilab) - Yolk sac tumor (2)  
Florida (Munroe Regional Medical Center) - Clear cell carcinoma, oxyphilic type  
Florida (Winter Haven Hospital) - Moderately well-differentiated adenocarcinoma (clear cell type) (1); Clear cell adenocarcinoma (1); Adenocarcinoma (1)  
Indiana (Ft. Wayne) - Clear cell carcinoma with oxyphilic cells, ovary  
Kansas (University of Kansas Medical Center) - Clear cell adenocarcinoma, FIGO III  
Kentucky (University of Louisville Residents) - Clear cell adenocarcinoma  
Louisiana (Shreveport) - Clear cell carcinoma, ovary  
Maryland (Johns Hopkins Hospital Residents) - Favor clear cell adenocarcinoma with predominantly oxyphil features  
Maryland (National Naval Medical Center) - Clear cell carcinoma  
Maryland (Woodbine) - Clear cell carcinoma (2)  
Maryland (University of Maryland Residents) - Clear cell carcinoma, oncocytic variant  
Massachusetts (Berkshire Medical Center) - Mesonephric/clear cell carcinoma vs. hepatoid carcinoma  
Massachusetts (New England Medical Center Residents) - Clear cell carcinoma  
Michigan (Oakwood Hospital) - Clear cell carcinoma  
Michigan (St. Joseph Mercy Hospital) - Clear cell carcinoma, oxyphilic variant (4)

Mississippi (University of Mississippi Medical Center, Elderpath Group) - Poorly differentiated serous carcinoma  
Nebraska (Creighton University) - Clear cell carcinoma, oxyphilic type  
New Jersey (Overlook Hospital) - Clear cell carcinoma (4)  
New York (Beth Israel Medical Center Residents) - Clear cell tumor  
New York (Long Island Jewish Medical Center) - Oxyphilic clear cell adenocarcinoma  
New York SUNY Stony Brook University Hospital Residents - Clear cell carcinoma  
North Carolina (WNC Pathology Group) - Clear cell carcinoma (3)  
Oklahoma (Tulsa) - Oxyphilic clear cell carcinoma  
Washington (Madigan Army Medical Center) - Clear cell carcinoma, oxyphilic type  
Australia (North Queensland Pathology Group) - Oxyphil variant of endometrioid adenocarcinoma  
Australia (Royal Prince Alfred Hospital, Sydney) - Clear cell carcinoma  
Canada (Foothills Hospital, Calgary) - Sertoli-Leydig tumor, intermediate differentiation  
Singapore - Hepatoid carcinoma

#### **Case 4 - Diagnosis:**

##### **Clear Cell Carcinoma, Ovary**

T-87000, M-83103

#### **Case 4 - References:**

Sugiyama T, Kamura T, et al. Clinical Characteristics of Clear Cell Carcinoma of the Ovary. A Distinct Histologic Type with Poor Prognosis and Resistance to Platinum-Based Chemotherapy. *Cancer* 2000; 88(11):2584-2589.  
 Tammela J, Geisler JP, et al. Clear Cell Carcinoma of the Ovary. Poor Prognosis Compared to Serous Carcinoma. *Eur J Gynaecol Oncol* 1998; 19(5):438-440.  
 Mikami Y, Hata S, Melamed J, et al. Basement Membrane Material in Ovarian Clear Cell Carcinoma. Correlation with Growth Pattern and Nuclear Grade. *Int J Gynecol Pathol* 1999; 18(1):52-57.  
 Koshiyama M, Fujii H, et al. Recurrent Clear Cell Carcinoma of the Ovary Changing into Producing Parathyroid Related protein (PTH-rP) with Hypercalcemia. *Eur J Obstet Gynecol Reprod Biol* 1999; 82(2):227-229.

#### **Case No. 5, Accession No. 28592**

**May 2001**

Bakersfield - Malignant mixed mesodermal tumor (heterologous)  
Baldwin Park (Kaiser) - MMMT (4)  
Bay Area - Malignant mixed mullerian tumor (carcinosarcoma) (3)  
Irvine (UCI Medical Center Residents) - MMMT (malignant mullerian mixed tumor)  
Long Beach (Lakewood Regional Medical Center) - Malignant mixed mullerian tumor with heterologous elements (7)  
Monterey (Community Hospital of Monterey Peninsula) - Poorly differentiated Sertoli Leydig cell tumor with heterologous elements  
Mountain View (El Camino Pathology Group) - Malignant mixed mullerian tumor with heterologous elements  
Oakland (Kaiser) - MMMT, heterologous type (4)  
Riverside - Adenosarcoma  
Sacramento (UC Davis Medical Center) - Carcinosarcoma  
San Diego (Naval Medical Center) - Carcinosarcoma  
Santa Rosa (Memorial Hospital) - Heterologous malignant mixed mullerian tumor (3)  
Ventura (Unilab) - Malignant mesodermal mixed tumor  
Florida (Munroe Regional Medical Center) - Malignant mesodermal mixed tumor, heterologous  
Florida (Winter Haven Hospital) - Malignant mixed mullerian tumor with heterologous elements (1); Teratocarcinoma (1); Malignant mixed mesodermal tumor  
Indiana (Ft. Wayne) - Mullerian carcinosarcoma, MMT, heterologous type, ovary  
Kansas (University of Kansas Medical Center) - MMMT, heterologous type  
Kentucky (University of Louisville Residents) - Carcinosarcoma with heterologous elements  
Louisiana (Shreveport) - Carcinosarcoma, ovary  
Maryland (Johns Hopkins Hospital Residents) - MMMT, malignant mixed mullerian tumor/carcinosarcoma  
Maryland (National Naval Medical Center) - MMMT with heterologous element (mixed mullerian mesodermal tumor)  
Maryland (Woodbine) - Carcinosarcoma (MMMT) (2)

Maryland (University of Maryland Residents) - Malignant mixed mullerian tumor, heterologous  
Massachusetts (Berkshire Medical Center) - Malignant mixed mullerian tumor with carcinoma and sarcoma  
Massachusetts (New England Medical Center Residents) - Carcinosarcoma (MMT with heterologous elements)  
Michigan (Oakwood Hospital) - Malignant mesodermal mixed tumor  
Michigan (St. Joseph Mercy Hospital) - Carcinosarcoma (MMMT) (4)  
Mississippi (University of Mississippi Medical Center, Elderpath Group) - Malignant mixed tumor  
Nebraska (Creighton University) - Malignant mixed mullerian (heterologous) tumor  
New Jersey (Overlook Hospital) - Malignant mixed mullerian tumor (4)  
New York (Beth Israel Medical Center Residents) - Malignant mixed mullerian tumor  
New York (Long Island Jewish Medical Center) - Malignant mixed mesodermal tumor  
New York SUNY Stony Brook University Hospital Residents) - Malignant mixed mullerian tumor with serous epithelial component  
North Carolina (WNC Pathology Group) - Mixed mullerian tumor (3)  
Oklahoma (Tulsa) - Undifferentiated carcinoma  
Washington (Madigan Army Medical Center) - Malignant mixed mullerian tumor  
Australia (North Queensland Pathology Group) - Carcinosarcoma with heterologous elements  
Australia (Royal Prince Alfred Hospital, Sydney) - Carcinosarcoma  
Canada (Foothills Hospital, Calgary) - Carcinosarcoma with heterologous elements (MMMT)  
Singapore - Malignant mixed mullerian tumor

#### **Case 5 - Diagnosis:**

#### **Malignant Mixed Mullerian Tumor (Carcinosarcoma with Heterologous Elements), Ovary**

T-87000, M-89503

#### **Case 5 - References:**

Rebischung C, Pautier P, et al. Alpha-Fetoprotein Production by a Malignant Mixed Mullerian Tumor of the Ovary *Gynecol Oncol* 2000; 77(1):203-205.  
 Sood AK, Sorosky JI, Gelder MS, et al. Primary Ovarian Sarcoma. Analysis of Prognostic Variables and the Role of Surgical Cyto Reduction. *Cancer* 1998; 82(9):1731-1737.  
 Boucher D. Morphologic Prognostic Factors of Malignant Mixed Mullerian Tumors of the Ovary. A Clinicopathologic Study of 15 Cases. *Int J Gynecol Pathol* 1994; 13(1):22-28.  
 Piura B, Rabinovich A, et al. Primary Sarcoma of the Ovary. Report of Five Cases and Review of the Literature. *Eur J Gynaecol Oncol* 1998; 19(3):257-261.

#### **Case No. 6, Accession No. 28134**

**May 2001**

Bakersfield - Endodermal sinus tumor  
Baldwin Park (Kaiser) - Poorly preserved stained ? germ cell tumor (2)  
Bay Area - Germ cell tumor, dysgerminoma (2); Malignant granulosa cell tumor (1)  
Irvine (UCI Medical Center Residents) - Mixed germ cell tumor (6) vs. juvenile granulosa cell tumor (2)  
Long Beach (Lakewood Regional Medical Center) - Germ cell tumor (7)  
Monterey (Community Hospital of Monterey Peninsula) - Clear cell carcinoma, oxyphilic type  
Mountain View (El Camino Pathology Group) - Juvenile granulosa cell tumor  
Oakland (Kaiser) - Embryonal carcinoma (2); Undifferentiated carcinoma (2)  
Riverside - Poorly differentiated adenocarcinoma  
Sacramento (UC Davis Medical Center) - Mixed germ cell tumor  
San Diego (Naval Medical Center) - Mixed germ cell tumor (9); Poorly differentiated adenocarcinoma (2)  
Santa Rosa (Memorial Hospital) - Malignant tumor, probable carcinoma (1); Malignant tumor, favor carcinoma (1); Malignant tumor, rule out undifferentiated clear cell carcinoma (1)  
Ventura (Unilab) - Undifferentiated carcinoma (2)  
Florida (Munroe Regional Medical Center) - Granulosa cell tumor  
Florida (Winter Haven Hospital) - Embryonal carcinoma (1); Malignant granulosa, theca cell tumor (1); Dysgerminoma (1)  
Indiana (Ft. Wayne) - Sertoli-Leydig tumor, right ovary  
Kansas (University of Kansas Medical Center) - Dysgerminoma vs. mixed germ cell tumor



Kentucky (University of Louisville Residents) - Sertoli-Leydig cell tumor, poorly differentiated  
Louisiana (Shreveport) - Poorly differentiated carcinoma, ovary  
Maryland (Johns Hopkins Hospital Residents) - Ovarian small cell carcinoma with large cells with abundant dense cytoplasm, was this patient hypercalcemic ?  
Maryland (National Naval Medical Center) - Malignant germ cell tumor (? yolk sac)  
Maryland (Woodbine) - Undifferentiated carcinoma (1); Metastatic breast carcinoma (1)  
Maryland (University of Maryland Residents) - Juvenile granulosa cell tumor  
Massachusetts (Berkshire Medical Center) - Embryonal carcinoma  
Massachusetts (New England Medical Center Residents) - Yolk sac tumor  
Michigan (Oakwood Hospital) - Mixed germ cell tumor  
Michigan (St. Joseph Mercy Hospital) - Dysgerminoma (2); Malignant germ cell tumor, unclassified (2)  
Mississippi (University of Mississippi Medical Center, Elderpath Group) - Embryonal carcinoma  
Nebraska (Creighton University) - Small cell carcinoma  
New Jersey (Overlook Hospital) - Malignant tumor, NOS (4)  
New York (Beth Israel Medical Center Residents) - Germ cell tumor, embryonal carcinoma  
New York (Long Island Jewish Medical Center) - Mixed germ cell tumor ( ? gonadoblastoma)  
New York SUNY Stony Brook University Hospital Residents) - Malignant mixed germ cell tumor  
North Carolina (WNC Pathology Group) - Germ cell tumor, ? choriocarcinoma (1) Germ cell tumor (1); Choriocarcinoma (1)  
Oklahoma (Tulsa) - Malignant sex cord stromal tumor  
Washington (Madigan Army Medical Center) - Malignant germ cell tumor, favor yolk sac  
Australia (North Queensland Pathology Group) - ? poorly differentiated clear cell carcinoma  
Australia (Royal Prince Alfred Hospital, Sydney) - Juvenile granulosa cell tumor  
Canada (Foothills Hospital, Calgary) - Juvenile granulosa cell tumor  
Singapore - Metastatic poorly differentiated adenocarcinoma

#### **Case 6 - Diagnosis:**

#### **Malignant Germ Cell Tumor, Favor Dysgerminoma, Ovary**

T-87000, M-90603

#### **Case 6 - References:**

Ayhan A, Bildirici I, et al. Pure Dysgerminoma of the Ovary. A Review of 45 Well Staged Cases. *Eur J Gynaecol Oncol*. 2000; 21(1):98-101.  
 Studzinski Z, Kalinski S, et al. (Successful Pregnancy After Conservative Surgery and Chemotherapy for Dysgerminoma of the Ovary: Case Report). *Ginek Pol* 1999; 70(8):553-557. (Polish)  
 Bekaii-Saab T, Einhorn LH, et al. Late Relapse of Ovarian Dysgerminoma. Case Report and Literature Review. *Gynecol Oncol* 1999; 72(1):111-112.  
 Tanoguchi K, Sasano H, Yabuki N, et al. Immunohistochemical and Two Parameter Flow Cytometric Studies of DNA Topoisomerase II Human Alpha in Epithelial Ovarian Carcinoma and Germ Cell Tumor. *Mod Pathol* 1998; 11(2):186-193.  
 Susnerwala SS, Pande SC, et al. Dysgerminoma of the Ovary. Review of 27 Cases. *J Surg Oncol* 1991; 46(1):43-47.  
 Zaghloul MS and Khattab TY. Dysgerminoma of the Ovary. Good Prognosis Even in Advanced Stages. *Int J Radiat Oncol Biol Phys* 1992; 24(1):161-165.

#### **Case No. 7, Accession No. 28945**

**May 2001**

Bakersfield - Immature teratoma, grade 2  
Baldwin Park (Kaiser) - Immature teratoma (4)  
Bay Area - Cystic teratoma with immature elements (3)  
Irvine (UCI Medical Center Residents) - Immature teratoma  
Long Beach (Lakewood Regional Medical Center) - Immature teratoma (7)  
Monterey (Community Hospital of Monterey Peninsula) - Immature teratoma  
Mountain View (El Camino Pathology Group) - Immature teratoma, grade 1  
Oakland (Kaiser) - Immature teratoma (4)  
Riverside - Mature teratoma  
Sacramento (UC Davis Medical Center) - Immature teratoma, grade I

San Diego (Naval Medical Center) - Immature teratoma, grade 3  
Santa Rosa (Memorial Hospital) - Immature teratoma, grade II (3)  
Ventura (Unilab) - Immature teratoma  
Florida (Munroe Regional Medical Center) - Teratoma with immature elements  
Florida (Winter Haven Hospital) - Dermoid teratoma (1); Teratoma (1); Immature teratoma (1)  
Indiana (Ft. Wayne) - Immature solid/cystic teratoma, left ovary  
Kansas (University of Kansas Medical Center) - Immature teratoma  
Kentucky (University of Louisville Residents) - Immature teratoma, grade 2  
Louisiana (Shreveport) - Immature teratoma, ovary  
Maryland (Johns Hopkins Hospital Residents) - Teratoma with immature foci  
Maryland (National Naval Medical Center) - Immature teratoma  
Maryland (Woodbine) - Teratoma, mature and immature (2)  
Maryland (University of Maryland Residents) - Immature teratoma  
Massachusetts (Berkshire Medical Center) - Immature teratoma  
Massachusetts (New England Medical Center Residents) - Immature teratoma  
Michigan (Oakwood Hospital) - Immature teratoma  
Michigan (St. Joseph Mercy Hospital) - Immature teratoma, grade 1 (4)  
Mississippi (University of Mississippi Medical Center, Elderpath Group) - Teratocarcinoma, grade 2  
Nebraska (Creighton University) - Mature teratoma  
New Jersey (Overlook Hospital) - Immature teratoma, grade 1 (2)  
New York (Beth Israel Medical Center Residents) - Immature teratoma  
New York (Long Island Jewish Medical Center) - Teratoma with immature neuroepithelium  
New York SUNY Stony Brook University Hospital Residents) - Immature teratoma, high grade  
North Carolina (WNC Pathology Group) - Mature cystic teratoma (3)  
Oklahoma (Tulsa) - Immature teratoma  
Washington (Madigan Army Medical Center) - Immature teratoma  
Australia (North Queensland Pathology Group) - Teratoma  
Australia (Royal Prince Alfred Hospital, Sydney) - High grade immature teratoma  
Canada (Foothills Hospital, Calgary) - Immature teratoma  
Singapore - Immature teratoma

#### **Case 7 - Diagnosis:**

##### **Immature Teratoma, Left Ovary**

T-87000, M-90803

#### **Case 7 - References:**

Calder CJ, Light AM and Rollason TP. Immature Ovarian Teratoma with Mature Peritoneal Metastatic Deposits Showing Glial, Epithelial, and Endometrioid Differentiation. A Case Report and Review of the Literature. *Int J Gynecol Pathol* 1994; 13:279-282.  
 O'Connor DM and Norris HJ. The Influence of Grade on the Outcome of Stage I Ovarian Immature (Malignant) Teratomas and the Reproducibility of Grading. *Int J Gynecol Pathol* 1994; 13(4):283-289.  
 Cushing B, Giller R, et al. Surgical Resection Alone is Effective Treatment for Ovarian Immature Teratoma in Children and Adolescents. A Report of the Pediatric Oncology Group and the Children's Cancer Group. *Am J Obstet Gynecol* 1999; 181(2):353-358.  
 Heifetz SA, Cushing B, et al. Immature Teratomas in Children. Pathologic Considerations. A Report from the Combined Pediatric Oncology Group/Children's Cancer Group. *Am J Surg Pathol* 1999; 23(9):1160-1162.  
 Busmanis I and Tay SK. Recurrent Immature Teratoma. Lack of Correlation Between Serum Level and Immunohistochemical Detection of Serum Alpha-Fetoprotein. *Pathol* 1998; 30(2):227.

#### **Case No. 8, Accession No. 28158**

**May 2001**

Bakersfield - Endometrial stromal nodule  
Baldwin Park (Kaiser) - Endometrial stromal nodule vs. stromal sarcoma (2); Stromal nodule (1)  
Bay Area - Endometrial stromal tumor (low grade sarcoma) (3)

Irvine (UCI Medical Center Residents) - Endometrial stromal sarcoma, low grade  
Long Beach (Lakewood Regional Medical Center) - Endometrial stromal nodule (7)  
Monterey (Community Hospital of Monterey Peninsula) - Stromal nodule  
Mountain View (El Camino Pathology Group) - Low grade stromal sarcoma  
Oakland (Kaiser) - Endometrial stromal nodule (4)  
Riverside - Benign stromal tumor  
Sacramento (UC Davis Medical Center) - Endometrial stromal nodule  
San Diego (Naval Medical Center) - Endometrial stromal nodule (6); Endometrial stromal sarcoma, low grade (5)  
Santa Rosa (Memorial Hospital) - Endometrial stromal sarcoma, low grade (3)  
Ventura (Unilab) - Endometrial stromal nodule (2)  
Florida (Munroe Regional Medical Center) - Endometrial stromal nodule  
Florida (Winter Haven Hospital) - Plexiform leiomyoma (1); Stromal nodule (1); Cellular leiomyoma (1)  
Indiana (Ft. Wayne) - Endometrial stromal nodule, myometrium  
Kansas (University of Kansas Medical Center) - Low grade endometrial stromal sarcoma  
Kentucky (University of Louisville Residents) - Endometrial stromal nodule  
Louisiana (Shreveport) - Low grade stromal sarcoma, uterus  
Maryland (Johns Hopkins Hospital Residents) - Favor endometrial stromal nodule  
Maryland (National Naval Medical Center) - Endometrial stromal nodule  
Maryland (Woodbine) - Endometrial stromal sarcoma (2)  
Maryland (University of Maryland Residents) - Stromal nodule  
Massachusetts (Berkshire Medical Center) - Low grade stromal sarcoma  
Massachusetts (New England Medical Center Residents) - Low grade stromal sarcoma  
Michigan (Oakwood Hospital) - Endometrial stromal nodule  
Michigan (St. Joseph Mercy Hospital) - Low grade stromal sarcoma (4)  
Mississippi (University of Mississippi Medical Center, Elderpath Group) - Uterine sex cord-like tumor  
Nebraska (Creighton University) - Stromal tumor  
New Jersey (Overlook Hospital) - Benign endometrial stromal tumor (4)  
New York (Beth Israel Medical Center Residents) - Carcinoid tumor  
New York (Long Island Jewish Medical Center) - Low grade endometrial stromal tumor  
New York SUNY Stony Brook University Hospital Residents) - Stromal nodule  
North Carolina (WNC Pathology Group) - Stromal nodule (3)  
Oklahoma (Tulsa) - Endometrial stromal sarcoma, low grade  
Washington (Madigan Army Medical Center) - Endometrial stromal sarcoma, low grade  
Australia (North Queensland Pathology Group) - Stromal sarcoma  
Australia (Royal Prince Alfred Hospital, Sydney) - Low grade endometrial stromal sarcoma  
Canada (Foothills Hospital, Calgary) - Endometrial stromal nodule  
Singapore - Endometrial stromal sarcoma

#### **Case 8 - Diagnosis:**

##### **Endometrial Stromal Nodule, Uterus**

T-82000, M-03010

#### **Case 8 – References:**

- Oliva E, Young RH, et al. Myxoid and Fibrous Endometrial Stromal Tumors of the Uterus. A Report of 10 Cases. *Int J Gynecol Pathol* 1999; 18(4):310-319.
- Lloreta J and Prat J. Ultrastructure of an Endometrial Stromal Nodule with Skeletal Muscle. *Ultrastruct Pathol* 1993; 17(3-4):405-410.
- Lloreta J and Prat J. Endometrial Stromal Nodule with Smooth and Skeletal Muscle Components Simulating Sarcoma. *Int J Gynecol Pathol* 1992; 11(4):293-298.
- Chang KL, Crabtree GS, et al. Primary Uterine Endometrial Stromal Neoplasms. A Clinicopathologic Study of 117 Cases. *Am J Surg Pathol* 1990; 14(5):415-438.
- Zamecnik M and Michal M. Endometrial Stromal Nodule with Retiform Sex-Cord-Like Differentiation. *Pathol Res Pract* 1998; 194(6):449-453.

Case No. 9, Accession No. 28260

May 2001

Bakersfield - Epithelioid leiomyoma  
Baldwin Park (Kaiser) - Leiomyoma with degeneration (1); Leiomyoma (3)  
Bay Area - Leiomyoma (3)  
Irvine (UCI Medical Center Residents) - Epithelioid leiomyoma  
Long Beach (Lakewood Regional Medical Center) - Leiomyoma (7)  
Monterey (Community Hospital of Monterey Peninsula) - Leiomyoma  
Mountain View (El Camino Pathology Group) - Plexiform leiomyoma with infarction  
Oakland (Kaiser) - Leiomyoma (4)  
Riverside - Stromal tumor  
Sacramento (UC Davis Medical Center) - Leiomyoma, myxoid/vascular  
San Diego (Naval Medical Center) - Epithelioid leiomyoma of plexiform type  
Santa Rosa (Memorial Hospital) - Leiomyoma (3)  
Ventura (Unilab) - Plexiform epithelioid leiomyoma (2)  
Florida (Munroe Regional Medical Center) - Leiomyoma with hyalinization  
Florida (Winter Haven Hospital) - Cellular leiomyoma (1); Symplasmic leiomyoma (1); Plexiform leiomyoma (1)  
Indiana (Ft. Wayne) - Epithelioid leiomyoma (plexiform type), uterus  
Kansas (University of Kansas Medical Center) - Plexiform leiomyoma  
Kentucky (University of Louisville Residents) - Stromomyoma  
Louisiana (Shreveport) - Leiomyoma, uterus  
Maryland (Johns Hopkins Hospital Residents) - Myxoid leiomyoma  
Maryland (National Naval Medical Center) - Leiomyoma (9); Epithelioid leiomyoma (1)  
Maryland (Woodbine) - Leiomyoma (2)  
Maryland (University of Maryland Residents) - Plexiform leiomyoma  
Massachusetts (Berkshire Medical Center) - Smooth muscle tumor of unknown malignant potential  
Massachusetts (New England Medical Center Residents) - Leiomyoma (plexiform tumor)  
Michigan (Oakwood Hospital) - Leiomyoma  
Michigan (St. Joseph Mercy Hospital) - Myxoid leiomyoma (4)  
Mississippi (University of Mississippi Medical Center, Elderpath Group) - Plexiform leiomyoma  
Nebraska (Creighton University) - Leiomyoma  
New Jersey (Overlook Hospital) - Benign leiomyoma (4)  
New York (Beth Israel Medical Center Residents) - Leiomyoma  
New York (Long Island Jewish Medical Center) - Leiomyoma (plexiform)  
New York SUNY Stony Brook University Hospital Residents) - Leiomyoma  
North Carolina (WNC Pathology Group) - Leiomyoma with degenerative changes (1); Leiomyoma (2)  
Oklahoma (Tulsa) - Plexiform leiomyoma  
Washington (Madigan Army Medical Center) - Leiomyoma  
Australia (North Queensland Pathology Group) - Uterine sex cord like tumour  
Australia (Royal Prince Alfred Hospital, Sydney) - Benign epithelioid smooth muscle tumour (plexiform variant)  
Canada (Foothills Hospital, Calgary) - Leiomyoma with sex cord-like areas  
Singapore - Epithelioid leiomyoma

### **Case 9 - Diagnosis:**

**Epithelioid Leiomyoma with Plexiform Features (“Plexiform Leiomyoma”), Uterus**  
 T-82000, M-88950

### **Case 9 – References:**

- Bell SW, Kempson RL, et al. Problematic Uterine Smooth Muscle Neoplasms. A Clinicopathologic Study of 213 Cases. *Am J Surg Pathol* 1994; 18(6):535-558.  
 Schoenmakers EF, Kools F, et al. Physical Mapping of Chromosome 12q Breakpoints in Lipoma, Pleomorphic Salivary Gland Adenoma, Uterine Leiomyoma, and Myxoid Liposarcoma. *Genomics* 1994; 15:20(2):210-222.  
 Downes KA and Hart WR. Bizarre Leiomyomas of the Uterus. A Comprehensive Pathologic Study of 24 Cases with Long Term Follow-Up. *Am J Surg Pathol* 1997; 21(11):1261-1270.  
 Doss BJ, Wanek SM, et al. Ovarian Leiomyomas. Clinicopathologic Features in Fifteen Cases. *Int J Gynecol Pathol* 1999; 18(1):63-68.

Nagel H, Brinck U, et al. Plexiform Leiomyoma of the Uterus in a Patient with Breast Carcinoma. Case Report and Review of the Literature. *Pathol* 1999; 31(3):292-294.

**Case No. 10, Accession No. 28172**

**May 2001**

Bakersfield - Leiomyosarcoma

Baldwin Park (Kaiser) - Leiomyosarcoma vs. stromal sarcoma (1); Myxoid leiomyosarcoma (2); Stromal sarcoma/leiomyosarcoma, myxoid (1)

Bay Area - Leiomyosarcoma (3)

Irvine (UCI Medical Center Residents) - Leiomyosarcoma, high grade

Long Beach (Lakewood Regional Medical Center) - Leiomyosarcoma (7)

Monterey (Community Hospital of Monterey Peninsula) - Leiomyosarcoma

Mountain View (El Camino Pathology Group) - Epithelioid leiomyosarcoma

Oakland (Kaiser) - Leiomyosarcoma (4)

Riverside - Leiomyosarcoma

Sacramento (UC Davis Medical Center) - Leiomyosarcoma

San Diego (Naval Medical Center) - Myxoid leiomyosarcoma

Santa Rosa (Memorial Hospital) - Leiomyosarcoma (3)

Ventura (Unilab) - Leiomyosarcoma (2)

Florida (Munroe Regional Medical Center) - Leiomyosarcoma vs. STUMP

Florida (Winter Haven Hospital) - Leiomyosarcoma (3)

Indiana (Ft. Wayne) - Myxoid leiomyosarcoma, uterus

Kansas (University of Kansas Medical Center) - Leiomyosarcoma

Kentucky (University of Louisville Residents) - Leiomyosarcoma, epithelioid type

Louisiana (Shreveport) - Leiomyosarcoma, uterus

Maryland (Johns Hopkins Hospital Residents) - Leiomyosarcoma

Maryland (National Naval Medical Center) - High grade sarcoma (leiomyosarcoma vs. stromal sarcoma (7); leiomyosarcoma (2); High grade endometrial stromal sarcoma (1)

Maryland (Woodbine) - Epithelioid leiomyosarcoma (2)

Maryland (University of Maryland Residents) - Leiomyosarcoma

Massachusetts (Berkshire Medical Center) - Leiomyosarcoma

Massachusetts (New England Medical Center Residents) - Myxoid leiomyosarcoma

Michigan (Oakwood Hospital) - Leiomyosarcoma

Michigan (St. Joseph Mercy Hospital) - Leiomyosarcoma (4)

Mississippi (University of Mississippi Medical Center, Elderpath Group) - Smooth muscle tumor, borderline

Nebraska (Creighton University) - Leiomyosarcoma

New Jersey (Overlook Hospital) - Leiomyosarcoma (4)

New York (Beth Israel Medical Center Residents) - Leiomyosarcoma

New York (Long Island Jewish Medical Center) - Epithelioid leiomyosarcoma

New York SUNY Stony Brook University Hospital Residents) - Myxoid leiomyosarcoma

North Carolina (WNC Pathology Group) - Leiomyosarcoma (3)

Oklahoma (Tulsa) - Leiomyosarcoma

Washington (Madigan Army Medical Center) - Leiomyosarcoma

Australia (North Queensland Pathology Group) - Leiomyosarcoma

Australia (Royal Prince Alfred Hospital, Sydney) - Myxoid leiomyosarcoma

Canada (Foothills Hospital, Calgary) - Leiomyosarcoma

Singapore - Leiomyosarcoma

**Case 10 - Diagnosis:**

**Myxoid Leiomyosarcoma, Uterus**

T-82000, M-88903

Case 10 - References:

- Mittal K, Popiolek D, et al. Uterine Myxoid Leiomyosarcoma Within a Leiomyoma. *Hum Pathol* 2000; 31(3):398-40.
- Schneider D and Halperin R. Myxoid Leiomyosarcoma of the Uterus with Unusual Malignant Histologic Pattern. A Case Report. *Gynecol Oncol* 1995; 59(1):156-158.
- Jones MW and Norris HJ. Clinicopathologic Study of 28 Uterine Leiomyosarcomas with Metastasis. *Int J Gynecol Pathol* 1995; 14(3):243-249.
- Toki N, Kashimura M, et al. Myxoid Leiomyosarcoma of the Uterus. Report of a Case with Cytologic Findings. *Acta Cytol* 2000; 44(3):415-419.