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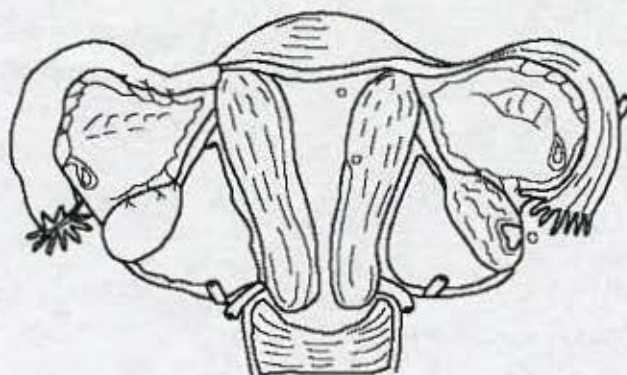


CALIFORNIA
TUMOR TISSUE REGISTRY

“GYNECOLOGIC PATHOLOGY”

Study Cases, Subscription A

April 2002



California Tumor Tissue Registry
c/o: Department of Pathology and Human Anatomy
Loma Linda University School of Medicine
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Loma Linda, California 92350
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FAX: (909) 558-0188
E-mail: cttr@linkline.com
Web page: www.cttr.org
Web site & Case of the Month: www.cttr.org

Target audience:

Practicing pathologists and pathology residents.

Goal:

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

Objectives:

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

Educational methods and media:

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

Principal faculty:

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

CME Credit:

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

Accreditation:

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

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

Case No. 1 - April 2002

Tissue from: Cervix

Accession #29369

Clinical Abstract:

After presenting with vaginal bleeding, this 51-year-old female was found to have a pedunculated polypoid cervical mass.

Gross Pathology:

The red-tan polypoid piece of tissue measured 4.6 x 2.7 x 2.2 cm and had a soft homogeneous cut surface.

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

Case No. 2 - April 2002

Tissue from: Cervix

Accession #29329

Clinical Abstract:

This 37-year-old female underwent a total hysterectomy with bilateral salpingo-oophorectomy. A presenting clinical history is not available.

Gross Pathology:

The uterus with bilateral adnexa weighed 137 grams. The cervical os was shaggy. The cervical parenchyma was indurated, with the induration almost circumferential and extending to the cervical-uterine body junction. On the portio vaginalis, extending onto the vaginal cuff, were numerous mucosal nodules, up to 0.4 cm in greatest diameter.

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

Case No. 3 - April 2002

Tissue from: Vaginal wall

Accession #29292

Clinical Abstract:

This 36-year-old female had chronic renal failure and had been on dialysis for approximately 6 years. She was gravida 1, with delivery by cesarean section. After 3 weeks of intermittent vaginal bleeding, she presented to the emergency department and was found to have a vaginal wall mass.

Gross Pathology:

A 115 gram white whorled nodule had been 'shelled out' from the vaginal wall and measured 8.2 x 7.5 x 5.3 cm.

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

Case No. 4 - April 2002

Tissue from: Uterus

Accession #29379

Clinical Abstract:

Because of post menopausal bleeding, this 64-year-old female underwent a hysterectomy with bilateral salpingo-oophorectomy.

Gross Pathology:

The uterus with attached adnexa weighed 215 grams. Within the 9.5 x 5.5 x 5.0 cm uterus was a friable soft pink-tan mass that filled and distended the uterine cavity and grossly replaced much of the thickness of the uterine wall.

Contributor: Pamela Boswell, D.O.
San Diego, CA

Case No. 5 - April 2002

Tissue from: Left ovary

Accession #29360

Clinical Abstract:

This 34-year-old female presented with back pain. Ultrasound showed a large complex, cystic mass in her left ovary.

Gross Pathology:

The 12.5 x 9.0 x 5.5 cm ovary contained a large cystic cavity filled with cheesy material and hair. A 6.5 x 5.5 x 4.0 cm solid region was yellow-tan, generally soft, but focally very hard.

Contributor: Susan Murakami, M.D.
Pasadena, CA

Case No. 6 - April 2002

Tissue from: Right ovary

Accession #29136

Clinical Abstract:

Following 18 months of heavy post menopausal bleeding, this 80-year-old female underwent a work-up which showed simple endometrial hyperplasia without atypia, an elevated CA-125 level, and a right adnexal mass on CT scan. She had not been on hormone replacement therapy.

Gross Pathology:

The right ovary weighed 166 grams and was completely replaced by a 9.0 x 8.0 x 4.5 cm soft, largely cystic pink-brown and tan neoplasm.

Contributor: Edward J. Kane, Jr., M.D.
San Diego, CA

Case No. 7 - April 2002

Tissue from: Left ovary

Accession #29307

Clinical Abstract:

During an uncomplicated third pregnancy, this 31-year-old female had a routine ultrasound that showed a complex left ovarian mass.

Gross Pathology:

The 5.8 x 5.4 x 4.0 cm cystic ovary exuded a thick yellow fluid on sectioning. The internal aspect of the cyst had papillary excrescences occupying about 70% of the surface.

Contributor: Ellen C. Ko, M.D.
Birmingham, AL

Case No. 8 - April 2002

Tissue from: Ovary

Accession #29344

Clinical Abstract:

This 49-year-old female presented with a large pelvic mass. She underwent a total hysterectomy with bilateral salpingo-oophorectomy.

Gross Pathology:

One ovary weighed 90 grams and measured 6.5 x .05 x 5.0 cm. The other ovary weighed 85 grams and measured 6.0 x 6.0 x 4.0 cm. Both ovarian masses had tan-yellow parenchyma with multiple cystic cavities and areas of hemorrhage and necrosis.

Contributor: Robert H. Zuch, M.D.
Baldwin Park, CA

Case No. 9 - April 2002

Tissue from: Left ovary

Accession #29339

Clinical Abstract:

During work-up for post-menopausal bleeding, this 71-year-old female was found to have a left ovarian mass.

Gross Pathology:

The 526 gram ovarian mass was 12.0 cm in greatest diameter.

Contributor: Edward J Kane, Jr., M.D.
San Diego, CA

Case No. 10 - April 2002

Tissue from: Left ovary

Accession #29306

Clinical Abstract:

After complaining of vague, intermittent left lower quadrant pain for three months, this 51-year-old female underwent a CT scan which revealed a complex adnexal mass.

Gross Pathology:

The smooth, oval ovarian mass measured 17.0 x 11.0 x 5.0 cm. The cut surface showed solid and cystic areas, the cystic areas filled with mucinous fluid.



CALIFORNIA
TUMOR TISSUE REGISTRY

GYNECOLOGIC PATHOLOGY

Minutes – Subscription A

April 2002



SUGGESTED READING (General Topics from Recent Literature):

- Cancer. The Emerging Molecular Biology. Ross, DW. *Hospital Practice* 2000; 35(1):63-71.
Genome Maintenance Mechanisms for Preventing Cancer. Hoeijmakers JHJ. *Nature* 2001; 411:366-374.
Fertility Options for Female Cancer Patients. Facts and Fiction. *Fertil Steril* 2001; 75(4):647-653.
The Significance of Psammomatous Calcifications on Cervical Smear. Nicklin JL, Perrin L, et al. *Gynecol Oncol* 2001; 83:6-9.
Human Papillomavirus Testing and Cervical Intraepithelial Neoplasia. Paraskevaidis E, Koliopoulos G, et al. *Obstet Gynecol* 2001; 98:833-836.

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Web site, Case of the Month and Monthly Case Diagnoses: www.cttr.org

FILE DIAGNOSES

CTTR Subscription A

April 2002

Case 1:

Adenosarcoma, cervix
T-83000, M-89603

Case 2:

Adenocarcinoma, endocervix
T-82000, M-81403

Case 3:

Leiomyosarcoma, vagina
T-81000, M-88903

Case 4:

Malignant mixed Müllerian tumor (MMMT, "carcinosarcoma"), uterus
T-82000, M-89503

Case 5:

Mature cystic teratoma ("dermoid cyst"), ovary
T-87000, M-90800

Case 6:

Granulosa cell tumor, adult type
T-87000, M-86201

Case 7:

Serous tumor of low malignant potential ("borderline serous tumor"), ovary
T-87000, M-84601

Case 8:

High grade adenocarcinoma (serous, clear cell and endometrioid patterns), ovary
T-87000, M-81403

Case 9:

Brenner tumor, ovary
T-87000, M-90003

Case 10:

Transitional cell carcinoma, ovary
T-87000, M-80103

Bakersfield - Adenomyoma
Bay Area - Adenosarcoma (4)
Fontana (Kaiser Permanente) - Adenosarcoma
Hayward/Fremont - Atypical polypoid adenomyoma
Long Beach - Polypoid adenofibroma (9)
Monterey (Community Hospital of Monterey Peninsula) - Adenosarcoma
Monterey Park (Garfield Medical Center) - Adenosarcoma
Oakland (Kaiser Permanente) - Adenosarcoma
Orange (UCI Medical Center Residents) - Adenosarcoma
Riverside/Moreno Valley - Adenosarcoma (2)
San Diego (Naval Medical Center) - Carcinosarcoma of the cervix (1); Adenosarcoma (1)
Santa Barbara (Cottage Hospital) - Adenosarcoma
Santa Rosa (Santa Rosa Memorial Hospital) - Polypoid adenosarcoma (3)
Ventura (Unilab) - Adenosarcoma (1); Atypical polypoid adenomyoma (2)
Alabama (BMC Princeton) - Müllerian adenosarcoma
Alaska - Adenosarcoma, cervical
Arkansas (UAMS) - Adenosarcoma
Florida (Baptist Medical Center) - Cellular pseudosarcomatous fibroepithelial stromal polyp (1); Müllerian adenosarcoma (1); Adenomyoma (1); Adenosarcoma (2)
Florida (Munroe Regional Medical Center) - Adenosarcoma
Florida (Pathology Associates) - Endometrial stromal sarcoma
Florida (Winter Haven Hospital) - Adenosarcoma (2)
Illinois, Chicago - Atypical polypoid adenomyoma
Illinois (Du Page Pathology Associates) - Adenosarcoma
Illinois (Evanston Hospital) - Adenosarcoma
Illinois (Northwestern Memorial Hospital) - Adenosarcoma
Indiana (Fort Wayne) - Adenomyoma, cervix
Indiana (Howard Community Hospital) - Leiomyosarcoma, low grade
Louisiana (Louisiana State University Hospital) - Adenosarcoma
Maryland, Bethesda - Adenosarcoma (10)
Maryland (Johns Hopkins Hospital Residents) - Adenosarcoma
Maryland (University of Maryland) - Adenosarcoma
Massachusetts (Berkshire Medical Center) - Adenosarcoma (4); Malignant mixed Müllerian tumor (2)
Massachusetts (New England Medical Center Residents) - Adenosarcoma
Michigan (Oakwood Hospital) - Adenosarcoma
Michigan (St. Joseph Mercy Hospital) - Adenosarcoma
Mississippi, Gulfport - Adenosarcoma
Nebraska (Creighton University School of Medicine Residents) - Adenosarcoma
New Jersey (Overlook Hospital) - Adenosarcoma (homologous type) (4)
New York (Long Island Jewish Medical Center) - Müllerian adenosarcoma
New York (Nassau University Medical Center) - Cervical stromal sarcoma
New York (Stony Brook University Hospital Residents) - Adenosarcoma, cervix
North Carolina (Mountain Area Pathology) - Adenosarcoma
North Carolina (St. Joseph Hospital) - Adenosarcoma (5)
Oklahoma, Edmond - Atypical polypoid adenomyoma
Oklahoma, Tulsa - Adenosarcoma
Pennsylvania (Allegheny General Hospital) - Adenosarcoma
Pennsylvania (Lehigh Valley Hospital) - Müllerian adenosarcoma
Pennsylvania (Memorial Medical Center Residents) - Villoglandular adenocarcinoma
Texas, Lubbock - Heterologous mixed Müllerian tumor, malignant
Texas (Propath Services) - Adenosarcoma (2)
Texas (Scott & White Memorial Hospital) - Adenosarcoma
Texas, Victoria - Adenosarcoma, cervix
Washington, Steilacoom - Benign polyp
West Virginia (Greenbrier Valley Medical Center) - Adenosarcoma
Wisconsin, Madison - Polypoid adenosarcoma involving resection margin

Australia (North Queensland Pathology) - Adenosarcoma
Australia (Royal Prince Alfred Hospital) - Müllerian adenosarcoma
Canada (Foothills Medical Center) - Adenosarcoma
Ireland (St. James Hospital) - Adenosarcoma
Japan (Yamanashi, Japan) - Adenosarcoma (3); Adenosis (1)
Saudi Arabia (King Khalid University Hospital Study Group) - Adenomyoma (endometrial)

Case 1 - Diagnosis:

Adenosarcoma, cervix
T-83000, M-89603

Case 1 – References:

Garcia-Rostan y Perez GM, Troyas RG, et al. Müllerian Adenosarcoma of the Cervix. Differential Diagnosis, Histogenesis and - Review of the Literature. *Pathol Int* 1995; 45(11):890-894.
Hino A, Hirose T, Seki K, et al. Adenosarcoma of the Uterine Cervix Presenting as a Cervical Polyp. *Pathol Int* 1998; 48(8):649-652.
Kerner H and Lichtig C. Müllerian Adenosarcoma Presenting as Cervical Polyps. A Report of Seven Cases and Review of the Literature. *Obstet Gynecol* 1993; 81(5 pt1):655-659.

Case No. 2, Accession No. 29329

April 2002

Bakersfield - Adenocarcinoma of endocervix
Bav Area - Adenocarcinoma of endocervix (3); of columnar metaplasia ? deviated (1)
Fontana (Kaiser Permanente) - Adenocarcinoma
Hayward/Fremont - Invasive endocervical adenocarcinoma, minimum deviation type
Long Beach - Adenocarcinoma (9)
Monterey (Community Hospital of Monterey Peninsula) - Endocervical adenocarcinoma
Monterey Park (Garfield Medical Center) - Cervical adenocarcinoma
Oakland (Kaiser Permanente) - Adenocarcinoma, well-differentiated
Orange (UCI Medical Center Residents) - Adenocarcinoma
Riverside/Moreno Valley - Invasive adenosarcoma (1); Adenocarcinoma (? arising from atypical adenomyomatous polyp)
San Diego (Naval Medical Center) - Endocervical adenocarcinoma, minimal deviation subtype (1); Endocervical adenocarcinoma (1)
Santa Barbara (Cottage Hospital) - Endocervical adenocarcinoma
Santa Rosa (Santa Rosa Memorial Hospital) - Cervical adenocarcinoma with focal stromal atypia (rule out carcinosarcoma) (1); Endocervical adenocarcinoma (1); Endocervical adenocarcinoma, rule out carcinosarcoma (1)
Ventura (Unilab) - Endocervical adenocarcinoma (1); Minimal deviation adenocarcinoma (2)
Alabama (BMC Princeton) - Adenocarcinoma, cervix
Alaska - Adenocarcinoma, endocervical
Arkansas (UAMS) - Endocervical adenocarcinoma
Florida (Baptist Medical Center) - Minimal deviation adenocarcinoma vs. mesonephric carcinoma (1); Invasive endocervical adenocarcinoma (1); Minimal deviation adenocarcinoma (1); Adenocarcinoma (adenoma malignum) (1); Endocervical adenocarcinoma (1)
Florida (Munroe Regional Medical Center) - Endocervical adenocarcinoma
Florida (Pathology Associates) - Endometrial adenocarcinoma
Florida (Winter Haven Hospital) - Endocervical adenocarcinoma (1); Adenocarcinoma (1)
Illinois, Chicago - Minimal deviation adenocarcinoma
Illinois (Du Page Pathology Associates) - Well-differentiated endocervical adenocarcinoma (adenoma malignum)
Illinois (Evanston Hospital) - Minimal deviation adenocarcinoma (adenoma malignum)
Illinois (Northwestern Memorial Hospital) - Minimal deviation endometrial and endocervical type adenocarcinoma
Indiana (Fort Wayne) - Minimal deviation adenocarcinoma (adenoma malignum), uterine cervix
Indiana (Howard Community Hospital) - Adenocarcinoma (adenoma malignum)
Louisiana (Louisiana State University Hospital) - Minimal deviation adenocarcinoma
Maryland, Bethesda - Well-differentiated endocervical adenocarcinoma (10)
Maryland (Johns Hopkins Hospital Residents) - Invasive endocervical adenocarcinoma, adenoma malignum type
Maryland (University of Maryland) - Well-differentiated adenocarcinoma (definitely not adenoma malignum)
Massachusetts (Berkshire Medical Center) - Adenocarcinoma, well-differentiated endocervical

Massachusetts (New England Medical Center Residents) - Mucinous adenocarcinoma, invasive intestinal type with perineural invasion

Michigan (Oakwood Hospital) - Adenocarcinoma, endocervical variant

Michigan (St. Joseph Mercy Hospital) - Well-differentiated adenocarcinoma, adenoma malignum type

Mississippi, Gulfport - Well-differentiated adenocarcinoma

Nebraska (Creighton University School of Medicine Residents) - Adenocarcinoma cervix

New Jersey (Overlook Hospital) - Adenocarcinoma of cervix, well-differentiated (4)

New York (Long Island Jewish Medical Center) - Endocervical adenocarcinoma

New York (Nassau University Medical Center) - Cervical adenocarcinoma

New York (Stony Brook University Hospital Residents) - Well-differentiated mucinous adenocarcinoma ("adenoma malignum")

North Carolina (Mountain Area Pathology) - Well-differentiated endocervical adenocarcinoma (minimal deviation)

North Carolina (St. Joseph Hospital) - Endocervical adenocarcinoma (1); Mucinous adenocarcinoma (1); Endocervical adenocarcinoma (1); Adenoma malignum (1); Endocervical adenocarcinoma, well-differentiated (1)

Oklahoma, Edmond - Minimal deviation adenocarcinoma

Oklahoma, Tulsa - Adenocarcinoma, minimal deviation (adenoma malignum)

Pennsylvania (Allegheny General Hospital) - Adenocarcinoma, endocervical

Pennsylvania (Lehigh Valley Hospital) - Invasive cervical adenocarcinoma.

Pennsylvania (Memorial Medical Center Residents) - Stromal sarcoma

Texas, Lubbock - Endocervical adenocarcinoma

Texas (ProPath Services) - Endocervical adenocarcinoma (2)

Texas (Scott & White Memorial Hospital) - Adenocarcinoma

Texas, Victoria - Cervical mucinous adenocarcinoma (mixed type, endocervix and intestinal) with invasion of vaginal cuff

Washington, Steilacoom - Endocervical adenocarcinoma

West Virginia (Greenbrier Valley Medical Center) - Adenocarcinoma, endocervix

Wisconsin, Madison - Adenoma malignum (minimal deviation adenocarcinoma)

Australia (North Queensland Pathology) - Endocervical adenocarcinoma, intestinal type

Australia (Royal Prince Alfred Hospital) - Minimal deviation adenocarcinoma (adenoma malignum)

Canada (Foothills Medical Center) - Endocervical adenocarcinoma

Ireland (St. James Hospital) - Adenocarcinoma ("adenoma malignum" areas)

Japan (Yamanashi, Japan) - Well-differentiated cervical adenocarcinoma (4)

Saudi Arabia (King Khalid University Hospital Study Group) - Endocervical adenocarcinoma (minimal deviation)

Case 2 - Diagnosis:

Adenocarcinoma, endocervix
T-82000, M-81403

Case 2 - References:

Jones MW and Lefkowitz M. Adenocarcinoma of the Uterine Cervix. A Clinicopathologic Study of 12 Cases. *Int J Gynecol Pathol* 1995; 14(3):223-229.

Liu S, Semenciw R, Mao Y, et al. Cervical Cancer. The Increasing Incidence of Adenocarcinoma and Adenosquamous Carcinoma in Younger Women. *CMAJ* 2001; 164(8):1151-1152.

Sasieni P and Adams J. Changing Rates of Adenocarcinoma and Adenosquamous Carcinoma of the Cervix in England. *Lancet* 2001; 357(9267):1490-1493.

Utsugi K, Shimizu Y, Akiyama F, et al. Is the Invasion Depth in Millimeters Valid to Determine the Prognosis of Early Invasive Cervical Adenocarcinoma? A Case of Recurrent FIGO Stage IA1 Cervical Adenocarcinoma. *Gynecol Oncol* 2001; 82(1):205-207.

Zaino RJ. Glandular Lesions of the Uterine Cervix. *Mod Pathol* 2000; 13(3):261-274.

Case No. 3, Accession No. 29292

April 2002

Bakersfield - Leiomyosarcoma

Bay Area - Leiomyosarcoma (4)

Fontana (Kaiser Permanente) - Leiomyosarcoma

Hayward/Fremont - Leiomyosarcoma

Long Beach - Leiomyosarcoma (9)

Monterey (Community Hospital of Monterey Peninsula) - Sarcoma, favor leiomyosarcoma

Monterey Park (Garfield Medical Center) - Leiomyosarcoma

Oakland (Kaiser Permanente) - Leiomyosarcoma
Orange (UCI Medical Center Residents) - Leiomyosarcoma
Riverside/Moreno Valley - Leiomyosarcoma (2)
San Diego (Naval Medical Center) - Leiomyosarcoma (2)
Santa Barbara (Cottage Hospital) - High grade sarcoma (possibly leiomyosarcoma)
Santa Rosa (Santa Rosa Memorial Hospital) - Leiomyosarcoma (3)
Ventura (Unilab) - Leiomyosarcoma (3)
Alabama (BMC Princeton) - Leiomyosarcoma, vagina
Alaska - Leiomyosarcoma
Arkansas (U/AMS) - Leiomyosarcoma
Florida (Baptist Medical Center) - Leiomyosarcoma, high grade (1); Leiomyosarcoma (4)
Florida (Munroe Regional Medical Center) - Leiomyosarcoma
Florida (Pathology Associates) - Leiomyosarcoma
Florida (Winter Haven Hospital) - Leiomyosarcoma (2)
Illinois, Chicago - Vaginal leiomyosarcoma
Illinois (Du Page Pathology Associates) - Leiomyosarcoma
Illinois (Evanston Hospital) - Leiomyosarcoma
Illinois (Northwestern Memorial Hospital) - Leiomyosarcoma
Indiana (Fort Wayne) - Leiomyosarcoma, vaginal wall
Indiana (Howard Community Hospital) - Leiomyosarcoma, high grade
Louisiana (Louisiana State University Hospital) - Leiomyosarcoma
Maryland, Bethesda - Leiomyosarcoma (10)
Maryland (Johns Hopkins Hospital Residents) - Leiomyosarcoma
Maryland (University of Maryland) - Leiomyosarcoma
Massachusetts (Berkshire Medical Center) - Leiomyosarcoma
Massachusetts (New England Medical Center Residents) - Leiomyosarcoma
Michigan (Oakwood Hospital) - Leiomyosarcoma
Michigan (St. Joseph Mercy Hospital) - Leiomyosarcoma
Mississippi, Gulfport - Leiomyosarcoma
Nebraska (Creighton University School of Medicine Residents) - Leiomyosarcoma
New Jersey (Overlook Hospital) - Leiomyosarcoma (4)
New York (Long Island Jewish Medical Center) - Leiomyosarcoma
New York (Nassau University Medical Center) - Leiomyosarcoma
New York (Stony Brook University Hospital Residents) - Leiomyosarcoma
North Carolina (Mountain Area Pathology) - Leiomyosarcoma
North Carolina (St. Joseph Hospital) - Leiomyosarcoma (4)
Oklahoma, Edmond - Leiomyosarcoma
Oklahoma, Tulsa - Leiomyosarcoma
Pennsylvania (Allegheny General Hospital) - Leiomyosarcoma
Pennsylvania (Lehigh Valley Hospital) - Leiomyosarcoma
Pennsylvania (Memorial Medical Center Residents) - Leiomyoma
Texas, Lubbock - Leiomyosarcoma
Texas (ProPath Services) - Leiomyosarcoma (2)
Texas (Scott & White Memorial Hospital) - Leiomyosarcoma
Texas, Victoria - Leiomyosarcoma, vagina
Washington, Steilacoom - Leiomyosarcoma
West Virginia (Greenbrier Valley Medical Center) - Leiomyosarcoma
Wisconsin, Madison - Leiomyosarcoma, high grade
Australia (North Queensland Pathology) - Leiomyosarcoma; differential diagnosis, fibrosarcoma
Australia (Royal Prince Alfred Hospital) - Leiomyosarcoma; differential diagnosis, malignant gastrointestinal stromal tumour if tumor is from the rectum
Canada (Foothills Medical Center) - Leiomyosarcoma
Ireland (St. James Hospital) - Leiomyosarcoma
Japan (Yamanashi, Japan) - Leiomyosarcoma (4)
Saudi Arabia (King Khalid University Hospital Study Group) - Leiomyosarcoma

Case 3 - Diagnosis:

Leiomyosarcoma, vagina

Case 3 - References:

- Curtin JP, Saigo P, Slucher B, et al. Soft-Tissue Sarcoma of the Vagina and Vulva. A Clinicopathologic Study. *Obstet Gynecol* 1995; 86(2):269-272.
- Peters WA III, Kumar NB, Anderson WA, et al. Primary Sarcoma of the Adult Vagina. A Clinicopathologic Study. *Obstet Gynecol* 1985; 65(5):699-704.
- Tavassoli FA and Norris HJ. Smooth Muscle Tumors of the Vagina. *Obstet Gynecol* 1979; 53(6):689-693.

Case No. 4, Accession No. 29379

April 2002

- Bakersfield - Moderately differentiated adenocarcinoma of endometrium
- Bay Area - Malignant mixed Müllerian tumor (4)
- Fontana (Kaiser Permanente) - Uterine, malignant mixed Müllerian tumor
- Havward/Fremont - Carcinosarcoma
- Long Beach - Malignant mixed Müllerian tumor (9)
- Monterey (Community Hospital of Monterey Peninsula) - Endometrioid carcinoma, grade 3
- Monterey Park (Garfield Medical Center) - Papillary adenocarcinoma
- Oakland (Kaiser Permanente) - Malignant mixed Müllerian tumor, homologous type
- Orange (UCI Medical Center Residents) - Carcinosarcoma
- Riverside/Moreno Valley - Carcinosarcoma vs. endometrioid carcinoma with sarcomatous features (1); Endometrioid adenocarcinoma with sarcomatoid pattern vs. carcinosarcoma (1)
- San Diego (Naval Medical Center) - Grade 3, endometrioid adenocarcinoma (1); Endometrioid type of endometrial adenocarcinoma (1)
- Santa Barbara (Cottage Hospital) - Carcinosarcoma, endometrium
- Santa Rosa (Santa Rosa Memorial Hospital) - Endometrial stromal sarcoma (2); Stromal sarcoma (1)
- Ventura (Unilab) - Carcinosarcoma (3)
- Alabama (BMC Princeton) - Adenocarcinoma, endometrium
- Alaska - Adenocarcinoma, endometrial
- Arkansas (UAMS) - Endometrial carcinoma, undifferentiated (small cell) type
- Florida (Baptist Medical Center) - Poorly differentiated adenocarcinoma with clear cell and small cell differentiation (1); Mixed Müllerian tumor, homologous type (2); Carcinosarcoma (homologous) (1); Mixed Müllerian tumor, homologous (1)
- Florida (Munroe Regional Medical Center) - Carcinosarcoma
- Florida (Pathology Associates) - Poorly differentiated clear cell carcinoma
- Florida (Winter Haven Hospital) - Carcinosarcoma (2)
- Illinois, Chicago - Carcinosarcoma
- Illinois (Du Page Pathology Associates) - Malignant mixed Müllerian tumor
- Illinois (Evanston Hospital) - Carcinosarcoma vs. adenocarcinoma with small cell component
- Illinois (Northwestern Memorial Hospital) - Adenocarcinoma
- Indiana (Fort Wayne) - Malignant mixed Müllerian neoplasm, homologous (carcinosarcoma), ovary
- Indiana (Howard Community Hospital) - Adenocarcinoma, with focal squamous metaplasia
- Louisiana (Louisiana State University Hospital) - Mixed Müllerian tumor, malignant
- Maryland, Bethesda - Malignant mixed mesodermal tumor (carcinosarcoma) (10)
- Maryland (Johns Hopkins Hospital Residents) - Favor endometrioid carcinoma with prominent spindle cell component vs. low grade homologous malignant mixed Müllerian tumor
- Maryland (University of Maryland) - Endometrioid carcinoma, grade 3 (focal Sertoli features)
- Massachusetts (Berkshire Medical Center) - Malignant mixed Müllerian tumor, papillary serous tumor
- Massachusetts (New England Medical Center Residents) - Poorly differentiated carcinoma
- Michigan (Oakwood Hospital) - Adenocarcinoma, endometrioid type
- Michigan (St. Joseph Mercy Hospital) - Endometrioid carcinoma (2), Malignant mixed Müllerian tumor (2)
- Mississippi, Gulfport - Malignant mixed Müllerian tumor, homologous
- Nebraska (Creighton University School of Medicine Residents) - Mixed malignant Müllerian tumor
- New Jersey (Overlook Hospital) - Malignant mixed Müllerian tumor (homologous type) (4)
- New York (Long Island Jewish Medical Center) - Poorly differentiated endometrial adenocarcinoma
- New York (Nassau University Medical Center) - Endometrioid adenocarcinoma
- New York (Stony Brook University Hospital Residents) - Uterine sex-cord like tumor
- North Carolina (Mountain Area Pathology) - Adenocarcinoma, endometrioid

North Carolina (St. Joseph Hospital) - Poorly differentiated endometrial adenocarcinoma (1); Endometrioid adenocarcinoma (FIGO 2-3) (1); Endometrioid adenocarcinoma, FIGO 3 (1); Endometrial adenocarcinoma (1); Endometrioid adenocarcinoma, poorly differentiated (1)

Oklahoma, Edmond - Endometrial adenocarcinoma Nuc 2 FIGO II

Oklahoma, Tulsa - Adenocarcinoma, poorly differentiated, grade 3

Pennsylvania (Allegheny General Hospital) - Carcinosarcoma

Pennsylvania (Lehigh Valley Hospital) - Mixed mesodermal Müllerian tumor

Pennsylvania (Memorial Medical Center Residents) - Adenosarcoma

Texas, Lubbock - Clear cell adenocarcinoma

Texas (ProPath Services) - Carcinosarcoma (1); Carcinosarcoma, homologous (1)

Texas (Scott & White Memorial Hospital) - Mixed Müllerian tumor with homologous elements

Texas, Victoria - Metaplastic carcinoma (sarcomatoid carcinoma), endometrium

Washington, Steilacoom - Endometrioid carcinoma

West Virginia (Greenbrier Valley Medical Center) - Adenocarcinoma, NOS

Wisconsin, Madison - Endometrial endometrioid adenocarcinoma with large component of undifferentiated (spindle) carcinoma and focal papillary features, grade 2-3

Australia (North Queensland Pathology) - Malignant mixed Müllerian tumour

Australia (Royal Prince Alfred Hospital) - Carcinosarcoma

Canada (Foothills Medical Center) - Poorly differentiated endometrioid adenocarcinoma

Ireland (St. James Hospital) - Adenocarcinoma (focal malignant mixed Müllerian tumor)

Japan (Yamanashi, Japan) - Endometrioid, adenocarcinoma, grade 2 (1); Poorly (1); Adenocarcinoma and small cell carcinoma (1); Carcinosarcoma (1)

Saudi Arabia (King Khalid University Hospital Study Group) - Carcinosarcoma

Case 4 - Diagnosis:

Malignant mixed Müllerian tumor (MMMT, "carcinosarcoma"), uterus
T-82000, M-89503

Case 4 - References:

Auerbach HE, LiVolsi VA and Merino MJ. Malignant Mixed Müllerian Tumors of the Uterus. An Immunohistochemical Study. *Int J Gynecol Pathol* 1988; 7(2):123-130.

Barwick KW and LiVolsi VA. Malignant Mixed Müllerian Tumors of the Uterus. A Clinicopathologic Assessment of 34 Cases. *Am J Surg Pathol* 1979; 3(2):125-135.

Gersell DJ, Duncan DA and Fulling KH. Malignant Mixed Tumor of the Uterus with Neuroectodermal Differentiation. *Int J Gynecol Pathol* 1989; 8(2):169-178.

Kempson RL and Hendrickson MR. Pure Mesenchymal Neoplasms of the Uterine Corpus. Selected Problems. *Semin Diag Pathol* 1988; 5(2):172-198.

Yaziji H and Gown AM. Immunohistochemical Analysis of Gynecologic Tumors. *Int J Gynecol Pathol* 2001; 20(1):64-78.

Case No. 5, Accession No. 29360

April 2002

Bakersfield - Mature teratoma

Bay Area - Mature cystic teratoma (4)

Fontana (Kaiser Permanente) - Mature cystic teratoma, dermoid cyst

Hayward/Fremont - Benign cystic teratoma

Long Beach - Benign cystic teratoma, dermoid type (9)

Monterey (Community Hospital of Monterey Peninsula) - Mature cystic teratoma

Monterey Park (Garfield Medical Center) - Cystic teratoma, benign

Oakland (Kaiser Permanente) - Mature cystic teratoma

Orange (UCI Medical Center Residents) - Benign cystic teratoma

Riverside/Moreno Valley - Mature cystic teratoma (1); Dermoid cyst (1)

San Diego (Naval Medical Center) - Dermoid cyst (1); Dermoid cyst, mature teratoma (1)

Santa Barbara (Cottage Hospital) - Benign cystic teratoma with nevus sebaceous

Santa Rosa (Santa Rosa Memorial Hospital) - Mature cystic teratoma, dermoid cyst (1); Benign cystic teratoma (dermoid cyst) (1); Dermoid cyst (1)

Ventura (Unilab) - Mature cystic teratoma (3)

Alabama (BMC Princeton) - Mature cystic teratoma

Alaska - Benign dermoid cyst, ovarian
Arkansas (UAMS) - Mature cystic teratoma
Florida (Baptist Medical Center) - Mature cystic teratoma (2); Mature teratoma, dermoid cyst (1); Dermoid cyst (2)
Florida (Munroe Regional Medical Center) - Dermoid cyst
Florida (Pathology Associates) - Dermoid cyst
Florida (Winter Haven Hospital) - Dermoid cyst (1); Benign cystic teratoma (1)
Illinois, Chicago - Mature teratoma with sebaceous differentiation
Illinois (Du Page Pathology Associates) - Mature cystic teratoma
Illinois (Evanston Hospital) - Mature cystic teratoma
Illinois (Northwestern Memorial Hospital) - Mature cystic teratoma
Indiana (Fort Wayne) - Adult cystic teratoma (dermoid cyst), left ovary
Indiana (Howard Community Hospital) - Teratoma with heterologous elements
Louisiana (Louisiana State University Hospital) - Dermoid cyst
Maryland, Bethesda - Mature cystic teratoma, dermoid cyst (10)
Maryland (Johns Hopkins Hospital Residents) - Mature cystic teratoma
Maryland (University of Maryland) - Benign solid teratoma
Massachusetts (Berkshire Medical Center) - Mature cystic teratoma
Massachusetts (New England Medical Center Residents) - Dermoid cyst (cystic mature teratoma)
Michigan (Oakwood Hospital) - Mature teratoma
Michigan (St. Joseph Mercy Hospital) - Dermoid cyst
Mississippi, Gulfport - Immature teratoma
Nebraska (Creighton University School of Medicine Residents) - Mature cystic teratoma (dermoid cyst)
New Jersey (Overlook Hospital) - Dermoid cyst (4)
New York (Long Island Jewish Medical Center) - Mature teratoma
New York (Nassau University Medical Center) - Mature cystic teratoma
New York (Stony Brook University Hospital Residents) - Mature cystic teratoma (in the slide provided no malignant component is present)
North Carolina (Mountain Area Pathology) - Dermoid cyst (mature cystic teratoma)
North Carolina (St. Joseph Hospital) - Dermoid cyst (5)
Oklahoma, Edmond - Mature teratoma
Oklahoma, Tulsa - Dermoid cyst
Pennsylvania (Allegheny General Hospital) - Benign cystic teratoma
Pennsylvania (Lehigh Valley Hospital) - Mature cystic teratoma
Pennsylvania (Memorial Medical Center Residents) - Teratoma
Texas, Lubbock - Dermoid cyst
Texas (Propath Services) - Benign cystic teratoma (1); Benign cystic teratoma, dermoid cyst (1)
Texas (Scott & White Memorial Hospital) - Mature teratoma
Texas, Victoria - Mature cystic teratoma (dermoid cyst), ovary
Washington, Steilacoom - Teratoma
West Virginia (Greenbrier Valley Medical Center) - Dermoid cyst
Wisconsin, Madison - Mature teratoma (skin, brain, ganglia, smooth muscle, cartilage)
Australia (North Queensland Pathology) - Dermoid cyst
Australia (Roval Prince Alfred Hospital) - Mature cystic teratoma
Canada (Foothills Medical Center) - Mature cystic teratoma
Ireland (St. James Hospital) - Mature cystic teratoma (dermoid)
Japan (Yamanashi, Japan) - Benign cystic teratoma (4)
Saudi Arabia (King Khalid University Hospital Study Group) - Benign cystic teratoma

Case 5 - Diagnosis:

Mature cystic teratoma ("dermoid cyst"), ovary
 T-87000, M-90800

Case 5 - References:

Anteby EY, Ron M, Revel A, Shimonovitz S, et al. Germ Cell Tumors of the Ovary Arising After Dermoid Cyst Resection. A Long Term Follow-Up Study. *Obstet Gynecol* 1994; 83(4):605-608.
 Comerci JT Jr, Licciardi F, Bergh PA, et al. Mature Cystic Teratoma. A Clinicopathologic Evaluation of 517 Cases and Review of the Literature. *Obstet Gynecol* 1994; 84(1):22-28.

Kawai M, Kano T, Kikkawa F, et al. Seven Tumor Markers in Benign and Malignant Germ Cell Tumors of the Ovary. *Obstet Gynecol* 1992; 45(3):248-253.
Pantoja E, Noy MA, Axtmayer RW, et al. Ovarian Dermoids and Their Complications. Comprehensive Historical Review. *Obstet Gynecol Surv* 1975; 30(1):1-20.

Case No. 6, Accession No. 29136

April 2002

Bakersfield - Granulosa cell tumor
Bay Area - Granulosa cell tumor (4)
Fontana (Kaiser Permanente) - Granulosa cell tumor
Hayward/Fremont - Granulosa cell tumor, adult type
Long Beach - Granulosa cell tumor (9)
Monterey (Community Hospital of Monterey Peninsula) - Endometrioid carcinoma vs. granulosa cell tumor, favor former
Monterey Park (Garfield Medical Center) - Granulosa cell tumor
Oakland (Kaiser Permanente) - Granulosa cell tumor
Orange (UCI Medical Center Residents) - Granulosa cell tumor
Riverside/Moreno Valley - Adult granulosa cell tumor (1); Granulosa cell tumor, adult type (1)
San Diego (Naval Medical Center) - Granulosa cell tumor (2)
Santa Barbara (Cottage Hospital) - Granulosa cell tumor
Santa Rosa (Santa Rosa Memorial Hospital) - Granulosa cell tumor (3)
Ventura (Unilab) - Granulosa cell tumor (3)
Alabama (BMC Princeton) - Granulosa cell tumor
Alaska - Granulosa cell tumor, ovarian
Arkansas (UAMS) - Granulosa cell tumor
Florida (Baptist Medical Center) - Granulosa cell tumor, diffuse (1); Solid/diffuse pattern (1); Granulosa cell tumor (3)
Florida (Munroe Regional Medical Center) - Granulosa cell tumor
Florida (Pathology Associates) - Stromal tumor, Leydig cell tumor, Sertoli Leydig cell tumor
Florida (Winter Haven Hospital) - Granulosa cell tumor (2)
Illinois, Chicago - Adult granulosa cell tumor
Illinois (Du Page Pathology Associates) - Granulosa cell tumor
Illinois (Evanston Hospital) - Granulosa cell tumor
Illinois (Northwestern Memorial Hospital) - Granulosa cell tumor
Indiana (Fort Wayne) - Granulosa cell tumor, right ovary
Indiana (Howard Community Hospital) - Granulosa cell tumor
Louisiana (Louisiana State University Hospital) - Granulosa cell tumor
Maryland, Bethesda - Granulosa cell tumor (10)
Maryland (Johns Hopkins Hospital Residents) - Granulosa cell tumor
Maryland (University of Maryland) - Granulosa cell tumor
Massachusetts (Berkshire Medical Center) - Adult granulosa cell tumor
Massachusetts (New England Medical Center Residents) - Granulosa cell tumor, diffuse type
Michigan (Oakwood Hospital) - Granulosa cell tumor
Michigan (St. Joseph Mercy Hospital) - Granulosa cell tumor
Mississippi, Gulfport - Granulosa cell tumor
Nebraska (Creighton University School of Medicine Residents) - Adult granulosa cell tumor
New Jersey (Overlook Hospital) - Adult granulosa cell tumor (4)
New York (Long Island Jewish Medical Center) - Granulosa cell tumor
New York (Nassau University Medical Center) - Granulosa cell tumor
New York (Stony Brook University Hospital Residents) - Granulosa cell tumor, adult type
North Carolina (Mountain Area Pathology) - Granulosa cell tumor
North Carolina (St. Joseph Hospital) - Granulosa cell tumor (5)
Oklahoma, Edmond - Granulosa cell tumor
Oklahoma, Tulsa - Granulosa cell tumor
Pennsylvania (Allegheny General Hospital) - Granulosa cell tumor
Pennsylvania (Lehigh Valley Hospital) - Granulosa cell tumor
Pennsylvania (Memorial Medical Center Residents) - Leydig cell tumor
Texas, Lubbock - Granulosa cell tumor

Texas (ProPath Services) - Granulosa cell tumor (2)
Texas (Scott & White Memorial Hospital) - Granulosa cell tumor
Texas, Victoria - Granulosa cell tumor, ovary
Washington, Steilacoom - Favor granulosa cell carcinoma
West Virginia (Greenbrier Valley Medical Center) - Granulosa cell tumor
Wisconsin, Madison - Adult granulosa cell tumor
Australia (North Queensland Pathology) - Granulosa cell tumour
Australia (Royal Prince Alfred Hospital) - Poorly differentiated granulosa cell tumour
Canada (Foothills Medical Center) - Adult granulosa cell tumor
Ireland (St. James Hospital) - Granulosa cell tumour
Japan (Yamanashi, Japan) - Granulosa cell tumor, adult type (4)
Saudi Arabia (King Khalid University Hospital Study Group) - Granulosa cell tumour

Case 6 - Diagnosis:

Granulosa cell tumor, adult type
 T-87000, M-86201

Case 6 - References:

Costa MJ, DeRose P, Roth LM, et al. Immunohistochemical Phenotype of Ovarian Granulosa Cell Tumors. Absence of Epithelial Membrane Antigen Has Diagnostic Value. *Hum Pathol* 1994; 25(1):60-66.
 Costa MJ, Walls J, Ames P and Roth LM. Transformation in Recurrent Ovarian Granulosa Cell Tumors. Ki67 (MIB-1) and p53 Immunohistochemistry Demonstrates a Possible Molecular Basis for the Poor Histopathologic Prediction of Clinical Behavior. *Hum Pathol* 1996; 27(3):274-281.
 Fox H, Agrawal K and Langley FA. A Clinicopathologic Study of 92 Cases of Granulosa Cell Tumors of the Ovary with Special Reference to the Factors Influencing Prognosis. *Cancer* 1975; 35(1):231-241.
 Kurman RJ, Goebelsmann U and Taylor CR. Steroid Localization in Granulosa Theca Tumors of the Ovary. *Cancer* 1979; 43(6):2377-2384.
 Otis CN, Powell JL, Barbuto D, et al. Intermediate Filamentous Proteins in Adult Granulosa Cell Tumors. An Immunohistochemical Study of 25 Cases. *Am J of Surg Pathol* 1992; 16(10):962-968.

Case No. 7, Accession No. 29307

April 2002

Bakersfield - Endometrioid cystadenocarcinoma of low malignant potential
Bay Area - Serous papillary cystic tumor of borderline malignancy (2); Serous cystadenofibroma (1); Serous papillary cyst adenocarcinoma (1)
Fontana (Kaiser Permanente) - Borderline serous tumor
Hayward/Fremont - Proliferating serous tumor (low malignant potential serous carcinoma)
Long Beach - Serous papillary cystadenocarcinoma of low malignant potential (9)
Monterey (Community Hospital of Monterey Peninsula) - Papillary serous tumor, borderline
Monterey Park (Garfield Medical Center) - Serous borderline tumor
Oakland (Kaiser Permanente) - Borderline mucinous tumor
Orange (UCI Medical Center Residents) - Serous cystadenoma, low malignant potential
Riverside/Moreno Valley - Borderline serous tumor (1); Serous papillary tumor of borderline malignancy (1)
San Diego (Naval Medical Center) - Serous borderline tumor (2)
Santa Barbara (Cottage Hospital) - Serous tumor of low malignant potential
Santa Rosa (Santa Rosa Memorial Hospital) - Serous tumor of uncertain (borderline) malignant potential (1); Papillary serous tumor of borderline histology (1); Serous tumor of uncertain malignant potential (1);
Ventura (Unilab) - Mucinous papillary tumor of borderline malignancy (1); Serous papillary cystic tumor of borderline malignancy (2)
Alabama (BMC Princeton) - Borderline mucinous tumor
Alaska - Borderline serous papillary cystadenoma, ovary
Arkansas (UAMS) - Borderline serous tumor
Florida (Baptist Medical Center) - Atypical proliferative (borderline) serous tumor (1); Papillary serous tumor, "borderline" (2); Papillary serous cyst adenoma, (borderline) (1); Combined mucinous/serous papillary cystic neoplasm, borderline (1)
Florida (Munroe Regional Medical Center) - Borderline papillary serous tumor
Florida (Pathology Associates) - Papillary serous carcinoma of low malignant potential
Florida (Winter Haven Hospital) - Papillary serous tumor of borderline malignant potential (2)

Illinois, Chicago - Atypical proliferative serous tumor
Illinois (Du Page Pathology Associates) - Serous papillary carcinoma of low malignant potential
Illinois (Evanston Hospital) - Serous borderline tumor
Illinois (Northwestern Memorial Hospital) - Borderline cystadenoma
Indiana (Fort Wayne) - Borderline proliferative seromucinous neoplasm, left ovary
Indiana (Howard Community Hospital) - Borderline papillary serous tumor
Louisiana (Louisiana State University Hospital) - Borderline serous cystadenoma, low malignant potential
Maryland, Bethesda - Serous tumor of low malignant potential (10)
Maryland (Johns Hopkins Hospital Residents) - Atypical proliferative (borderline) seromucinous tumor
Maryland (University of Maryland) - Seromucinous tumor with focal microinvasion
Massachusetts (Berkshire Medical Center) - Borderline papillary serous tumor
Massachusetts (New England Medical Center Residents) - Serous papillary cystadenoma, borderline
Michigan (Oakwood Hospital) - Borderline seromucinous tumor
Michigan (St. Joseph Mercy Hospital) - Serous low malignant potential tumor
Mississippi, Gulfport - Mucinous cystic tumor of borderline malignancy
Nebraska (Creighton University School of Medicine Residents) - Borderline cystic serous adenoma
New Jersey (Overlook Hospital) - Serous tumor, low malignant potential (4)
New York (Long Island Jewish Medical Center) - Papillary serous tumor, borderline
New York (Nassau University Medical Center) - Serous papillary cystic tumor, borderline
New York (Stony Brook University Hospital Residents) - Serous borderline tumor of the ovary
North Carolina (Mountain Area Pathology) - Serous tumor of low malignant potential
North Carolina (St. Joseph Hospital) - Serous tumor of low malignant potential (2); Borderline serous tumor (1); Borderline serous tumor, low malignant tumor (1); Mucinous cystadenoma of low malignant potential (1)
Oklahoma, Edmond - Borderline serous tumor
Oklahoma, Tulsa - Serous papillary cystadenoma, borderline type
Pennsylvania (Allegheny General Hospital) - Borderline carcinoma
Pennsylvania (Lehigh Valley Hospital) - Serous papillary tumor of low malignant potential
Pennsylvania (Memorial Medical Center Residents) - Papillary cystadenoma
Texas, Lubbock - Borderline papillary serous tumor
Texas (ProPath Services) - Serous tumor of low malignant potential (2)
Texas (Scott & White Memorial Hospital) - Mucinous cystadenoma of low malignant potential
Texas, Victoria - Borderline serous papillary tumor, ovary
Washington, Steilacoom - Borderline tumor (serous cystadenoma of low malignant potential)
West Virginia (Greenbrier Valley Medical Center) - Proliferating mucinous tumor
Wisconsin, Madison - Seromucinous tumor of low malignant potential (borderline tumor)
Australia (North Queensland Pathology) - Borderline malignant or proliferative serous tumour
Australia (Royal Prince Alfred Hospital) - Proliferating (borderline/low malignant potential) serous ovarian tumour
Canada (Foothills Medical Center) - Atypically proliferating endocervical type mucinous tumor
Ireland (St. James Hospital) - Papillary cystadenoma with gestational effect, rule out borderline
Japan (Yamanashi, Japan) - Serous cystadenocarcinoma, borderline (4)
Saudi Arabia (King Khalid University Hospital Study Group) - Serous cystadenoma of borderline malignancy

Case 7 - Diagnosis:

Serous tumor of low malignant potential ("borderline serous tumor"), ovary
 T-87000, M-84601

Case 7 - References:

- Bell DA and Scully RE. Ovarian Serous Borderline Tumors with Stromal Microinvasion. A Report of 21 Cases. *Hum Pathol* 1990; 21(4):397-403.
 Bell DA and Scully RE. Benign Borderline Serous Lesions of the Peritoneum in Women. *Pathol Annu* 1989; 24(Pt2):1-21.
 Bostwick DG, Tazelaar HD, Ballon SC et al. Ovarian Epithelial Tumors of Borderline Malignancy. A Clinical and Pathologic Study. *Cancer* 1986; 58(9):2052-2065.
 Kurman RJ and Trimble CL. The Behavior of Serous Tumors of Low Malignant Potential. Are They Ever Malignant? *Int J Gynecol Pathol* 1993; 12(2):120-127.

Bakersfield - Endometrioid carcinoma of ovary
Bay Area - Serous papillary adenocarcinoma (4); (? endometrioid features)
Fontana (Kaiser Permanente) - Serous carcinoma
Hayward/Fremont - Serous carcinoma, high grade
Long Beach - Serous papillary adenocarcinoma (9)
Monterey (Community Hospital of Monterey Peninsula) - Papillary serous tumor, grade 3
Monterey Park (Garfield Medical Center) - Serous carcinoma (invasive)
Oakland (Kaiser Permanente) - Serous adenocarcinoma, moderately differentiated
Orange (UCI Medical Center Residents) - Serous papillary cystadenocarcinoma
Riverside/Moreno Valley - Papillary serous carcinoma of the ovary (1); Serous papillary carcinoma (1)
San Diego (Naval Medical Center) - Serous papillary cystadenocarcinoma (1); Serous papillary adenocarcinoma (1)
Santa Barbara (Cottage Hospital) - Poorly differentiated serous carcinoma, ovary
Santa Rosa (Santa Rosa Memorial Hospital) - Papillary serous cystadenocarcinoma (3)
Ventura (Unilab) - Serous papillary adenocarcinoma.(3)
Alabama (BMC Princeton) - Serous adenocarcinoma, ovary
Alaska - Clear cell carcinoma, oxyphil cell type, ovary
Arkansas (UAMS) - Papillary serous carcinoma
Florida (Baptist Medical Center) - Endometrioid adenocarcinoma (1); Adenocarcinoma, favor endometrioid type vs. serous cystadenocarcinoma (1); Clear cell carcinoma ("hobnail" type) (1); Adenocarcinoma, endometrioid (1); Adenocarcinoma, endometrioid vs. papillary serous (1)
Florida (Munroe Regional Medical Center) - Borderline papillary serous tumor consistent with stromal invasion and micropapillary carcinoma
Florida (Pathology Associates) - Papillary serous carcinoma
Florida (Winter Haven Hospital) - Papillary serous cystadenocarcinoma (1); Serous cystadenocarcinoma (1)
Illinois, Chicago - Serous carcinoma
Illinois (Du Page Pathology Associates) - Endometrioid carcinoma, moderately differentiated
Illinois (Evanston Hospital) - Serous carcinoma
Illinois (Northwestern Memorial Hospital) - Endometrial ovarian carcinoma with serous and clear cell features
Indiana (Fort Wayne) - Endometrioid carcinoma, ovary
Indiana (Howard Community Hospital) - Papillary serous adenocarcinoma
Louisiana (Louisiana State University Hospital) - Serous cystadenocarcinoma (invasive)
Maryland, Bethesda - Microinvasive carcinoma consistent with mixed endometrioid and serous patterns (2); Invasive carcinoma consistent with endometrioid and serous patterns (5); Invasive endometrioid carcinoma (3)
Maryland (Johns Hopkins Hospital Residents) - Serous carcinoma
Maryland (University of Maryland) - Serous carcinoma
Massachusetts (Berkshire Medical Center) - Malignant serous papillary adenocarcinoma of ovary
Massachusetts (New England Medical Center Residents) - Serous cystadenocarcinoma
Michigan (Oakwood Hospital) - Papillary serous carcinoma
Michigan (St. Joseph Mercy Hospital) - Serous carcinoma (2); Transitional carcinoma (2)
Mississippi, Gulfport - Serous papillary carcinoma
Nebraska (Creighton University School of Medicine Residents) - Invasive serous cystadenocarcinoma
New Jersey (Overlook Hospital) - Serous adenocarcinoma (3); Endometrioid cancer (1)
New York (Long Island Jewish Medical Center) - Papillary serous adenocarcinoma
New York (Nassau University Medical Center) - Endometrioid carcinoma
New York (Stony Brook University Hospital Residents) - High grade serous ovarian carcinoma
North Carolina (Mountain Area Pathology) - Papillary serous carcinoma
North Carolina (St. Joseph Hospital) - Serous carcinoma (3); Serous cystadenocarcinoma, high grade (1); Serous carcinoma, high grade (1)
Oklahoma, Edmond - Serous carcinoma
Oklahoma, Tulsa - Endometrioid carcinoma
Pennsylvania (Allegheny General Hospital) - Papillary serous carcinoma
Pennsylvania (Lehigh Valley Hospital) - Serous papillary carcinoma
Pennsylvania (Memorial Medical Center Residents) - Granulosa cell tumor
Texas, Lubbock - Papillary serous carcinoma
Texas (ProPath Services) - High grade papillary serous adenocarcinoma (2)
Texas (Scott & White Memorial Hospital) - Mucinous cystadenocarcinoma

Texas, Victoria - Poorly differentiated invasive adenocarcinoma, endometrioid type, ovary
Washington, Steilacoom - Serous papillary carcinoma
West Virginia (Greenbrier Valley Medical Center) - Adenocarcinoma, endometrioid
Wisconsin, Madison - Serous cystadenocarcinoma, grade I
Australia (North Queensland Pathology) - High grade adenocarcinoma, ? endometrioid, ? serous
Australia (Royal Prince Alfred Hospital) - High grade serous carcinoma
Canada (Foothills Medical Center) - Serous carcinoma
Ireland (St. James Hospital) - Adenocarcinoma (serous, clear cell and endometrioid areas)
Japan (Yamanashi, Japan) - Serous cystadenocarcinoma (3); Clear cell carcinoma (1)
Saudi Arabia (King Khalid University Hospital Study Group) - Ovarian serous carcinoma

Case 8 - Diagnosis:

High grade adenocarcinoma (serous, clear cell and endometrioid patterns), ovary
T-87000, M-81403

Case 8 - References:

Czernobilsky B. Endometrioid Neoplasia of the Ovary. A Reappraisal. *Int J Gynecol Pathol* 1982; 1(2):203-210.
Dvoretzky PM, Richard KA, Angel C, et al. Distribution of Disease at Autopsy in 100 Women with Ovarian Cancer. *Hum Pathol* 1988; 19(1):57-63.
Marsoni S, Torri V, Valsecchi MG, et al. Prognostic Factors in Advanced Epithelial Ovarian Cancer. *Bret J Cancer* 1990; 62(3):444-450.
Werness BA, Eltabbakh GH. Familial Ovarian Cancer and Early Ovarian Cancer. Biologic, Pathologic and Clinical Features. *Int J Gynecol Pathol* 2001; 20(1):48-63.

Case No. 9, Accession No. 29339

April 2002

Bakersfield - Proliferating Brenner tumor
Bay Area - Brenner tumor (4)
Fontana (Kaiser Permanente) - Brenner tumor, benign
Hayward/Fremont - Brenner (transitional cell) tumor
Long Beach - Brenner tumor (9)
Monterey (Community Hospital of Monterey Peninsula) - Brenner tumor
Monterey Park (Garfield Medical Center) - Proliferating Brenner tumor
Oakland (Kaiser Permanente) - Brenner tumor
Orange (UCI Medical Center Residents) - Brenner tumor
Riverside/Moreno Valley - Brenner tumor (2)
San Diego (Naval Medical Center) - Brenner tumor (2)
Santa Barbara (Cottage Hospital) - Brenner tumor
Santa Rosa (Santa Rosa Memorial Hospital) - Brenner tumor (3)
Ventura (Unilab) - Brenner tumor (3)
Alabama (BMC Princeton) - Brenner tumor
Alaska - Benign Brenner tumor, ovary
Arkansas (UAMS) - Brenner tumor
Florida (Baptist Medical Center) - Brenner tumor (5)
Florida (Munroe Regional Medical Center) - Ovarian fibroma consistent with Brenner tumor
Florida (Pathology Associates) - Brenner tumor
Florida (Winter Haven Hospital) - Brenner tumor (2)
Illinois, Chicago - Atypical proliferative transitional cell tumors
Illinois (Du Page Pathology Associates) - Atypically proliferating Brenner tumor
Illinois (Evanston Hospital) - Brenner tumor
Illinois (Northwestern Memorial Hospital) - Brenner tumor
Indiana (Fort Wayne) - Proliferating Brenner tumor, left ovary
Indiana (Howard Community Hospital) - Brenner tumor
Louisiana (Louisiana State University Hospital) - Brenner tumor
Maryland, Bethesda - Brenner tumor (10)
Maryland (Johns Hopkins Hospital Residents) - Benign Brenner tumor
Maryland (University of Maryland) - Brenner tumor consistent with hormonally active stroma

Massachusetts (Berkshire Medical Center) - Brenner tumor
Massachusetts (New England Medical Center Residents) - Brenner tumor, benign (transitional cell tumor)
Michigan (Oakwood Hospital) - Brenner tumor
Michigan (St. Joseph Mercy Hospital) - Brenner tumor
Mississippi, Gulfport - Malignant Brenner tumor
Nebraska (Creighton University School of Medicine Residents) - Brenner tumor
New Jersey (Overlook Hospital) - Brenner tumor (4)
New York (Long Island Jewish Medical Center) - Brenner tumor
New York (Nassau University Medical Center) - Brenner tumor, borderline
New York (Stony Brook University Hospital Residents) - Brenner tumor, ovary
North Carolina (Mountain Area Pathology) - Brenner tumor
North Carolina (St. Joseph Hospital) - Brenner tumor (5)
Oklahoma, Edmond - Brenner tumor
Oklahoma, Tulsa - Brenner tumor
Pennsylvania (Allegheny General Hospital) - Brenner tumor
Pennsylvania (Lehigh Valley Hospital) - Benign Brenner tumor
Pennsylvania (Memorial Medical Center Residents) - Malignant Brenner tumor
Texas, Lubbock - Brenner tumor
Texas (ProPath Services) - Benign Brenner tumor (2)
Texas (Scott & White Memorial Hospital) - Brenner tumor
Texas, Victoria - Proliferating Brenner tumor, ovary
Washington, Steilacoom - Brenner tumor
West Virginia (Greenbrier Valley Medical Center) - Transitional cell tumor (Brenner) proliferating
Wisconsin, Madison - Transitional cell tumor (Brenner)
Australia (North Queensland Pathology) - Benign Brenner tumour
Australia (Royal Prince Alfred Hospital) - Benign transitional cell adenofibroma (Brenner tumour)
Canada (Foothills Medical Center) - Brenner tumor
Ireland (St. James Hospital) - Carcinoma, undifferentiated (? neuroendocrine, ? basaloid, ? solid)
Japan (Yamanashi, Japan) - Brenner tumor, benign (4)
Saudi Arabia (King Khalid University Hospital Study Group) - Brenner tumour

Case 9 - Diagnosis:

Brenner tumor, ovary
 T-87000, M-90003

Case 9 – References:

- Austin RM and Norris HJ. Malignant Brenner Tumor and Transitional Cell Carcinoma of the Ovary. A Comparison. *Int Natl J Obstet Gynecol* 1987; 6(1):29-39.
 Santini D, Gelli MC, Mazzaleni G, et al. Brenner Tumor of the Ovary. A Correlative Histologic Histochemical and Ultrastructural Investigation. *Hum Pathol* 1989; 20(8):787-795.
 Seldenrijk CA, Willig AP, and Baak JP. Malignant Brenner Tumor. A Histologic, Morphometrical, Immunohistochemical and Ultrastructural Study. *Cancer* 1986; 58(3):754-760.
 Woodruff JD, Dietrich D, Genadry R, et al. Proliferative and Malignant Brenner Tumors. Review of 47 Cases. *Am J of Obstet and Gyn* 1981; 141(2):118-125.
 Roth LM, Gersell DJ and Ulbright TM. Ovarian Brenner Tumors and Transitional Cell Carcinoma. Recent Developments. *Int J Gynecol Pathol* 1993; 12(2):128-133.
 Hampton HL, Huffman HT, and Meeks GR. Extraovarian Brenner Tumor. *Obstet Gynecol* 1992; 79(5 Pt2):844-846.

Case No. 10, Accession No. 29306

April 2002

Bakersfield - Cystadenocarcinoma of ovary
Bay Area - Neuroendocrine carcinoma (2); Sertoli-Leydig cell tumor, intermediate grade (1); Endometrioid adenocarcinoma (1)
Fontana (Kaiser Permanente) - Small cell carcinoma
Hayward/Fremont - Poorly differentiated carcinoma (endometrioid vs. high grade mucinous)
Long Beach - Poorly differentiated carcinoma (9)
Monterey (Community Hospital of Monterey Peninsula) - Carcinoma, undifferentiated
Monterey Park (Garfield Medical Center) - High grade neuroendocrine carcinoma

Oakland (Kaiser Permanente) - Poorly differentiated carcinoma
Orange (UCI Medical Center Residents) - Undifferentiated carcinoma
Riverside/Moreno Valley - Non-small cell neuroendocrine carcinoma vs. transitional cell carcinoma (1); Transitional cell carcinoma, ovary (1)
San Diego (Naval Medical Center) - Transitional cell carcinoma (2)
Santa Barbara (Cottage Hospital) - Poorly differentiated carcinoma involving ovary (by history)
Santa Rosa (Santa Rosa Memorial Hospital) - High grade cystadenocarcinoma (1); Papillary serous cystadenocarcinoma (2)
Ventura (Unilab) - Undifferentiated carcinoma (3)
Alabama (BMC Princeton) - Krukenburg tumor
Alaska - Neuroendocrine carcinoma, ovary
Arkansas (UAMS) - Transitional cell carcinoma, ovary
Florida (Baptist Medical Center) - Sertoli-Leydig cell tumor of intermediate differentiation (1); High grade carcinoma, NOS (1); Carcinosarcoma (MMM) (1); High grade adenocarcinoma, transitional and glandular (1); Adenocarcinoma, high grade, favor endometrioid (1)
Florida (Munroe Regional Medical Center) - Poorly differentiated papillary serous carcinoma
Florida (Pathology Associates) - Poorly differentiated serous carcinoma
Florida (Winter Haven Hospital) - Adenocarcinoma (2)
Illinois, Chicago - Undifferentiated carcinoma
Illinois (Du Page Pathology Associates) - Undifferentiated carcinoma
Illinois (Evanston Hospital) - Neuroendocrine carcinoma
Illinois (Northwestern Memorial Hospital) - Small cell carcinoma
Indiana (Fort Wayne) - Transitional cell carcinoma, left ovary
Indiana (Howard Community Hospital) - Undifferentiated carcinoma
Louisiana (Louisiana State University Hospital) - Large cell neuroendocrine carcinoma
Maryland, Bethesda - Poorly differentiated adenocarcinoma (5); Undifferentiated adenocarcinoma (5)
Maryland (Johns Hopkins Hospital Residents) - Poorly differentiated carcinoma (? neuroendocrine features, ? clear cell features) would also perform inhibin immunostain to rule out sex cord differentiation
Maryland (University of Maryland) - Undifferentiated carcinoma
Massachusetts (Berkshire Medical Center) - Malignant neuroendocrine tumor
Massachusetts (New England Medical Center Residents) - Serous cystadenocarcinoma, high grade; differential diagnosis, carcinoma with neuroendocrine differentiation (non-small cell neuroendocrine type, undifferentiated carcinoma)
Michigan (Oakwood Hospital) - Transitional cell carcinoma
Michigan (St. Joseph Mercy Hospital) - Poorly differentiated carcinoma, serous vs. endometrioid type (3); Malignant mixed Mullerian tumor (1)
Mississippi, Gulfport - Poorly differentiated adenocarcinoma with focal signet ring cells, rule out metastatic
Nebraska (Creighton University School of Medicine Residents) - Small cell carcinoma, ovary
New Jersey (Overlook Hospital) - Undifferentiated carcinoma (intermediate small cell type) (2); NOS (2)
New York (Long Island Jewish Medical Center) - Poorly differentiated carcinoma, require neuroendocrine markers to rule out small cell carcinoma
New York (Nassau University Medical Center) - Transitional cell carcinoma
New York (Stony Brook University Hospital Residents) - Neuroendocrine carcinoma, ovary
North Carolina (Mountain Area Pathology) - Small cell carcinoma
North Carolina (St. Joseph Hospital) - Small cell carcinoma, neuroendocrine type (1); Small cell undifferentiated carcinoma (2); Neuroendocrine carcinoma, non-small cell (1); Poorly differentiated carcinoma, small cell features (1)
Oklahoma, Edmond - Small cell carcinoma
Oklahoma, Tulsa - Endometrioid carcinoma
Pennsylvania (Allegheny General Hospital) - Poorly differentiated carcinoma
Pennsylvania (Lehigh Valley Hospital) - Small cell carcinoma
Pennsylvania (Memorial Medical Center Residents) - Mucinous cystadenoma
Texas, Lubbock - Papillary serous carcinoma
Texas (ProPath Services) - High grade papillary serous adenocarcinoma (2)
Texas (Scott & White Memorial Hospital) - Malignant surface ovarian carcinoma
Texas, Victoria - Poorly differentiated malignant with neuroendocrine features (carcinoid – primary vs. secondary), ovary
Washington, Steilacoom - Poorly differentiated carcinoma, favor serous carcinoma
West Virginia (Greenbrier Valley Medical Center) - Undifferentiated carcinoma
Wisconsin, Madison - Undifferentiated carcinoma, grade 3, involving ovary
Australia (North Queensland Pathology) - Adenocarcinoma, ? type, ? metastatic
Australia (Royal Prince Alfred Hospital) - Poorly differentiated carcinoma (? endometrioid) with neuroendocrine features

Canada (Foothills Medical Center) - Poorly differentiated endometrioid adenocarcinoma

Ireland (St. James Hospital) - No answer

Japan (Yamanashi, Japan) - Undifferentiated carcinoma (2); Transitional cell carcinoma (1); Sertoli cell tumor (1)

Saudi Arabia (King Khalid University Hospital Study Group) - Transitional cell carcinoma

Case 10 - Diagnosis:

Transitional cell carcinoma, ovary

T-87000, M-80103

Consultation: Robert H. Young, M.D., Massachusetts General Hospital. "Transitional Cell Carcinoma."

Case 10 - References:

Gersell DJ. Primary Ovarian Transitional Cell Carcinoma. Diagnostic and Prognostic Considerations. *Am J Clin Pathol* 1990; - 93(4):586-588.

Roth LM, Gersell DJ and Ulbright TM. Ovarian Brenner Tumors and Transitional Cell Carcinoma. Recent Developments. *Int Natl J Gynecol Pathol* 1993; 12(2):128-133.

Silva EG, Robey-Cafferty SS, Smith TL, et al. Ovarian Carcinoma with Transitional Cell Carcinoma Pattern. *Am J Clin Pathol* 1990; 93(4):457-465.