
CALIFORNIA TUMOR TISSUE REGISTRY

LOS ANGELES COUNTY - UNIVERSITY OF SOUTHERN CALIFORNIA

PROTOCOL

FOR

MONTHLY STUDY SLIDES

MARCH 1986

TUMORS OF PERITONEUM, RETROPERITONEUM AND OMENTUM (II)

CONTRIBUTOR: William J. Thorpe, M. D.
Oxnard, California

MARCH 1986 - CASE NO. 1

TISSUE FROM: Retroperitoneum

ACC. NO. 25429

CLINICAL ABSTRACT:

History: A 35-year-old man was evaluated for a midline retroperitoneal mass. Repeated examination the previous five years had never revealed hypertension, nor was there hypertension on admission. He suffered for the past six months with steady pain in the midline of the lower abdomen. He had mild headache and sweating.

Radiograph: CT scan demonstrated a mass below the pancreatic head in the periaortic region. There was focal calcification, as well as central regions of decreased density.

SURGERY: (March 29, 1985)

At laparotomy a lemon-sized mass was found at the bifurcation of aorta and vena cava. The patient had a hypertensive crisis with blood pressure reaching 300+/200 and when the vascular pedicle was ligated dropping to near zero.

GROSS PATHOLOGY:

The specimen consisted of mass of fleshy, blue-brown tissue, slightly lobulated, measuring 7 x 6 x 5 cms. and weighing 60 gms. On cut section it was gray-white with tan areas, appeared compartmentalized and with focal hemorrhage.

CONTRIBUTOR: Jay M. Packer, M. D.
Monterey Park, California

MARCH 1986 - CASE NO. 2

TISSUE FROM: Small bowel

ACC. NO. 25510

CLINICAL ABSTRACT:

History: This 72-year-old male presented with several months' history of progressive anorexia, a 20 lb. weight loss, nausea, and hematemesis. His past medical history was only remarkable because of Parkinson's disease for 10+ years, and a ruptured appendix 50 years ago. He had been unemployed for the past 15 years, but previously worked as an upholsterer. He spent 3 years in Navy in the early 1940's, working in the Long Beach shipyards.

Radiographs: A small bowel series showed multiple dilated loops of bowel with air-fluid levels, suggestive of partial small bowel obstruction.

SURGERY: (August 5, 1985)

Exploratory laparotomy showed a small amount of ascitic fluid, multiple well-formed dense "fibrous adhesions", and a partial small bowel obstruction, which was resected with some difficulty.

GROSS PATHOLOGY:

Eight separate segments of bowel varying from 1.5 up to 19.5 cms. in length and 1.5 to 3.5 cms. in diameter were received. The serosal surfaces were tan-red and finely granular, with multiple foci of plaque-like thickening up to 9.5 cms. in greatest dimension and numerous adhesions between adjacent segments of tortuous bowel. The mucosal surfaces were tan-red, with a normal rugal pattern and no focal lesion.

CONTRIBUTOR: Arnold A. Channing, M. D.
Canoga Park, California

MARCH 1986 - CASE NO. 3

TISSUE FROM: Retroperitoneum

ACC. NO. 25611

CLINICAL ABSTRACT:

History: This 79-year-old hypertensive, acutely ill woman was admitted on January 2, 1986 complaining of pain in right upper quadrant, radiating to the right shoulder of one day duration. However, there had been complaints of back pain, right flank pain for a month or more. She had an arthritic hip for some time. She recently noticed an enlargement of her abdomen below the umbilicus, accompanied by vomiting, lasting two days. She was unable to eat, no diarrhea, and had bowel movements.

Past history revealed cancer of left breast with surgery in 1976. This was followed by lymphedema of the left arm with recurrent cellulitis for which she received intermittent antibiotic therapy. She is on hypertensive therapy.

Physical examination: Slight distention of the abdomen with tenderness in the right upper quadrant and throughout the abdomen. A 2-3 cm. mass was palpated just below the umbilicus, slightly tender, and appeared to be a non-reducible hernia.

Radiographs: Besides the findings of hypertensive cardiovascular disease, the colon xrays revealed diverticulosis, sliding esophageal hiatal hernia. There were multiple osteoblastic and questionable osteolytic lesions of the ribs. No abdominal mass was observed by the radiologist.

SURGERY: (January 4, 1986)

At surgery, a large multinodular tumor composed of nodules, each measuring 5-6 cms., was noted. They were all continuous and interconnected. No small or large bowel was involved. When the retroperitoneum was opened, the tumor extended from above the umbilicus to the iliac fossa with involvement of the bladder, which necessitated a partial cystectomy in its removal. It was necessary to remove the tumor in fragments. No metastases were found in the liver or other abdominal sites. The uterus, fallopian tubes and ovaries were found to be essentially normal.

GROSS PATHOLOGY:

The specimen consisted of multiple pieces of adipose tissue aggregating 1025 grams and the two largest pieces measuring together 15 x 14 x 9 cm. Two of the smaller pieces showed attached brown skeletal muscle. On sectioning the tissue was made up of lobules of well defined and pseudo encapsulated fatty tumor which showed varying degrees of grayish infiltration, induration and calcification. In some areas the surface had a gray-white, whorled fibroid appearance.

CONTRIBUTOR: John J. Gilrane, M. D.
Pasadena, California

MARCH 1986 - CASE NO. 4

TISSUE FROM: Small intestine

ACC. NO. 10592

CLINICAL ABSTRACT:

History: This 51-year-old woman was admitted to the hospital on January 23, 1956 with complaint of persistently recurring epigastric pain, associated with nausea and vomiting. She has had a known duodenal ulcer since 1939. She had come under the present surgeon 4 months before this admission. She had in the past an inadequate gastric resection (1949) with the development of a gastroduodenal ulcer, 3 x 3 x 3 cm., which had eroded into the body of the pancreas. In 1952, she had a ventral hernia repaired using wire mesh. On January 24, 1956, the gastro-enterostomy was taken down with resection of ileum with ileoileostomy and gastric resection with anterior gastrojejunostomy. The sections from the marginal ulcer showed no evidence of cancer.

She was readmitted on December 16, 1957 for transabdominal vagotomy, gastroenterostomy, and gastrostomy and biopsy of marginal ulcer. This was signed out as adenocarcinoma, marginal ulcer, at site of the anastomosis of jejunum and stomach.

Her last admission was on August 25, 1959, age 60, when surgery was performed for a small bowel obstruction.

Radiographs: Flat plate xrays of the abdomen showed dilated loops of small intestine with fluid levels, suggestive of obstruction.

SURGERY: (August 25, 1959)

At the time of surgery, a repair of a previous (1952) postoperative ventral hernia in a mid-abdominal right rectus incision was done where tantalum mesh had been used to close the defect, measuring about 15 cms. on each side. Apparently suture material had caught numerous loops of small intestine and intimately plastered the tantalum to the under surface of this area for the entire small intestine and the right half of the large intestine was one mass of adhesions. In addition to this there was a gristly type of carcinoma which appeared to spread submucosally along the layers of the loops of intestine and which further added to the adherence of the loops of bowel. The entire half of the abdomen was also involved in this process so that in reality the only free portion of the entire abdominal cavity was the left lower quadrant of the abdominal cavity. In this area very little abnormality was apparent other than dilated loops of small intestine. This necessitated a left rectus muscle-splitting incision in order to inspect the lower abdominal cavity. An attempt was made to separate the loops of bowel, in the course of which loops of bowel were perforated. These were repaired. A portion of small intestine which was badly involved in carcinoma and perforated at the time of surgery was resected and an end-to-end anastomosis was made. It was impossible to relieve the intestinal obstruction because of the extensive involvement of the intestine.

GROSS PATHOLOGY:

The specimen received was a linear segment of small intestine which measured 10 cms. in length in the fixed state and 4.5 cms. in circumference at one surgical margin by 5 cms. at the other. Approximately 1 cm. from one surgical margin, there were two ragged defects within the mucosal wall communicating with the exterior of the bowel, these respectively measuring 2.8 x 1 and 0.9 cms. in diameter and were contiguous. The mucosal surface showed patchy mucosal congestion but no evidence of ulceration or perforation aside from the two grossly described defects. The serosal aspect, however, presented coalescent and discrete cobbled grayish-white indurated surface of serosal neoplastic nodules. Cut sections disclosed that it was confined to the exterior aspect of the bowel and the surface of these coalescent nodules as well as the intervening bowel presented foci of hemorrhagic fibrinous exudation as well as gross contamination with small intestinal contents.

CONTRIBUTOR: Alfred Lui, M. D.
San Pedro, California

MARCH 1986 - CASE NO. 5

TISSUE FROM: Omentum

ACC. NO. 25118

CLINICAL ABSTRACT:

History: This 61-year-old female was seen by her gynecologist who thought she had an ovarian mass. He noted on pelvic examination and abdominal ultrasound a large mass. CT-scan showed it coming from the right ovary. He did a laparotomy, expecting to find an ovarian mass.

SURGERY:

At surgery, a mass, measuring 21 x 15 x 14 cms., was found attached to the greater omentum by just a small vascular pedicle with no attachment to any of the surrounding organs. Pelvic organs were small and appeared atrophic and tumor was not at all related to the ovary, but attached to the greater omentum. Resection of omental tumor was performed.

GROSS PATHOLOGY:

The specimen received in pathology was labeled "cyst from the omentum" and consisted of somewhat gelatinous appearing, roughly oval, pink red segment of tissue which measured 21 x 15.5 x 4.5 cms. Cut section revealed a lobular tan brown parenchyma which exuded moderate amount of thin pink red fluid. The lesion was somewhat encapsulated with a covering of pale pink red and light blue fibrous tissue. Along the periphery were a few lobules of light yellow brown, apparently normal adipose tissue. Occasional small cystic spaces were noted on cut sections. No myxoid stringing was elicited.

CONTRIBUTOR: Isaac Varaprasathan, M. D.
Northridge, California

MARCH 1986 - CASE NO. 6

TISSUE FROM: Omentum

ACC. NO. 24933

CLINICAL ABSTRACT:

History: A 24-year-old Black man was admitted for frequency of urination, right leg edema, and an intra-abdominal mass. One month prior to admission, he was seen in the Emergency Room for an abdominal mass and urinary frequency, but was felt to have a muscle irregularity. He developed increasing urinary frequency and difficulty expressing urine. The day prior to admission he noted swelling of the right leg.

Physical examination: There was a large abdominal mass, right leg edema, and a left inguinal mass.

Radiograph: Intravenous pyelogram showed bilateral hydronephrosis. Venogram of the right leg showed an intact deep venous system, although the common femoral vein was incompletely visualized.

SURGERY: (June 13, 1983)

Initially an unsuccessful attempt was made to biopsy the left inguinal mass and a left nephrostomy tube was placed. At laparotomy, an omental mass measuring approximately 16 x 15 cms. was resected. Multiple peritoneal implants were noted, the largest one filling the retrovesical space.

GROSS PATHOLOGY:

The omental mass weighed 1950 grams and measured 20 x 16 x 13.5 cms. The surface was yellow to white and resembled the external surface of brain. The cut surface showed areas of yellow-white necrosis and hemorrhage, with a mucoid consistency. The remaining omentum showed multiple nodules measuring 0.5 - 2.0 cms.

CONTRIBUTOR: C. S. Small, M. D.
Loma Linda, California

MARCH 1986 - CASE NO. 7

TISSUE FROM: Omentum

ACC. NO. 19616

CLINICAL ABSTRACT:

History: A 68-year-old Caucasian male, building contractor, entered the hospital in April 1968 complaining of severe "boring" left upper quadrant pain. No nausea, fever, or vomiting nor a family history of a similar disease. A hemicolectomy was performed. The ascending colon was thickened. The serosa was gray and glazed.

He was readmitted at least 20 more times until October 1971, when he was placed in a rest home where he died on November 27, 1971.

GROSS PATHOLOGY: (Autopsy)

The entire peritoneum was pale gray, slightly nodular and thick. The omentum and mesentery were glazed and indurated, but contained no tumor nodules. Tissue submitted from omentum and ileum.

CONTRIBUTOR: Harold H. Brazil, M. D.
Fairfield, California

MARCH 1986 - CASE NO. 8

TISSUE FROM: Retroperitoneum

ACC. NO. 24835

CLINICAL ABSTRACT:

History: A 59-year-old Caucasian man noted intermittent epigastric discomfort for two years. The discomfort could occur at any time of day, but was most frequent following heavy meals. During the 2-3 months prior to admission, he noted anorexia upon arising and had lost 10 lbs. due to dieting. He took a diuretic for hypertension, diagnosed 4-5 years prior to admission. He denied nausea, vomiting, previous acute abdominal illness, fever, constipation, diarrhea, jaundice, and previous hepatic or biliary disease.

Physical examination: There was a large epigastric mass projecting to the left side of the abdomen.

Endoscopy: Esophagogastrosocopy showed a large retrogastric mass, with marked superficial erosion of the esophagogastric junction. No mucosal abnormality was identified.

Radiograph: Upper G.I. series showed marked anterior displacement of the stomach. Barium enema revealed extrinsic compression and deviation of the transverse colon. Abdominal CT scan showed a 17 x 14 cm. mass which compressed the stomach upward and the ligament of Treitz and transverse colon downward. The mass was round, circumscribed, and nonhomogeneous. It was not demarcated from the pancreas, although the pancreas was not otherwise abnormal. The biliary system was normal.

SURGERY: (February 11, 1983)

At operation, a well encapsulated mass appeared to arise from the mid-portion of the pancreas. A trocar placed in the mass did not drain fluid. The body and head of the pancreas contained multiple nodules. The mass was resected and nodes in the porta hepatis were biopsied.

GROSS PATHOLOGY:

Submitted was a mass weighing 2353 grams and measuring 18 x 15 x 10 cms. On cut section, the mass consisted of whorled, pink to white glistening fleshy tissue with regions of hemorrhagic necrosis and cystic degeneration. A lymph node from the superior pancreatic area had the same fleshy, pink-white appearance.

CONTRIBUTOR: Marthe Smith, M. D.
San Francisco, California

MARCH 1986 - CASE NO. 9

TISSUE FROM: Left cystic ovary
and pelvic peritoneum

ACC. NO. 17625

CLINICAL ABSTRACT:

History: A 37-year-old nulliparous woman had a two weeks' episode of abdominal pain and low-grade fever. She had no urinary symptoms, but had 1-2 days of diarrhea.

Physical examination: A mass filled the cul-de-sac and appeared separate from the uterus and rectum. The cervix was nulliparous and the uterus not enlarged.

SURGERY: (July 10, 1968)

At pelvic laparotomy, a large cystic mass occupied the cul-de-sac and was adherent to the rectum. A second cystic mass was adherent to the left tube and ovary. The perirectal mass was excised, and a left salpingo-oophorectomy was performed. (Unable to get surgeon's report)

GROSS PATHOLOGY:

"Left cyst, partial ovary" consisted of four tissues. One of these was tough and membranous with one rather shiny surface and the other having adherent chocolate material. It was 5 x 2.5 x 0.2 cms. with the formation of a circlet having a mouth of 2.4 cms. The second tissue appeared to be an enucleated mature corpus luteum, 3 x 2 x 1 cm. The other two tissues were irregular, multicystic structures, 6.4 x 8.5 x 4.3 cms. and 4.7 x 4.0 x 3.0 cms. Both were honeycomb with cystic spaces ranging from 0.1 to 3.0 cms. These had membranous white 1 to 3 mm. rubbery walls and contained clear watery fluid. All had a shiny lining. In one of two the cyst content was rather mucoid.

"Peritoneal cyst (uterus)" is a collapsed reddened cystic structure with attached adhesive tags, 3 cms. in reconstructed diameter. There was a rent in the wall which appeared to have incised edges over 1.3 cms. There was a single locule, a membranous rubbery wall, 1 to 2 mm. thick, and a shiny inner lining.

CONTRIBUTOR: Weldon K. Bullock, M. D.
Pasadena, California

MARCH 1986 - CASE NO. 10

TISSUE FROM: Peritoneal cavity

ACC. NO. 20912

CLINICAL ABSTRACT:

History: An 83 year old woman complained of intermittent pain with swelling in the right lower abdominal quadrant for two months. The pain was present after meals and prior to the movement of the bowels. The latter sometimes relieved the pain slightly, but the distress was more or less constant. She lost 6 lbs. in the two months prior to admission.

Physical examination: There was a tender mass in the right lower quadrant.

SURGERY: (July 31, 1976)

A left salpingo-oophorectomy, parovarian cystectomy and cholecystectomy were performed. On entering the peritoneal cavity, there was an immediate escape of a tremendous amount of yellow-gelatin-like material. Part of this was attached to and stuck to the wall of the peritoneum. On further exploration, a large mass was found in the left lower pelvis.

GROSS PATHOLOGY:

Submitted was approximately 800 grams of mucinous, amorphous yellow-white tissue. The left ovary weighted 650 gms. and measured 15 x 15 x 10 cms. It contained multiple 0.5 - 0.8 cm. cystic spaces filled with myxomatous white material. The parovarian cyst measured 4 cms. in greatest dimension. The gallbladder showed a smooth mucosa and multiple stones.

Note: The abdominal mass noted clinically and on physical examination apparently was due to the large amount of "gelatinous" material that also caused the patient's pain.

CONTRIBUTOR: Roy L. Byrnes, M. D.
South Laguna, California

MARCH 1986 - CASE NO. 11

TISSUE FROM: Retroperitoneum

ACC. NO. 24495

CLINICAL ABSTRACT:

History: This 51 year old, previously well, nonhypertensive woman became aware of a mass in her abdomen shortly before an appropriate radiological work up (including CAT scan and IVP) displayed a very large mass unrelated to the kidney, ureter or bowel. It displaced rather than invaded adjacent structures.

Laboratory report: Routine work up was noncontributory.

SURGERY: (March 8, 1982)

A smooth cystic mass was removed from the retroperitoneum, anterior to the aorta, below the renal arteries. No hypertensive crisis was reported.

GROSS PATHOLOGY:

The specimen consisted of an opened cystic lesion in the collapsed state which weighed 290 grams and measured 10 x 7.5 x 4 cms. There remained a moderate amount of a thin chocolate liquid. The wall varied from 0.2 up to 1.4 cms. in thickness with the thickened portion covering an area of 5 x 5 cms. Sections are from the thick and thin sites.

CONTRIBUTOR: Theodore Tsuyuki, M. D.
Covina, California

MARCH 1986 - CASE NO. 12

TISSUE FROM: Retroperitoneum

ACC. NO. 17949

CLINICAL ABSTRACT:

History: This 74 year old woman's actual complaint for years was for symptoms produced by a hiatal hernia. Several years ago an abdominal mass was discovered that her physician thought was an ovarian tumor.

SURGERY: (March 13, 1969)

A large retroperitoneal tumor located in the cul-de-sac area was removed. The uterus small, atrophic and the ovaries were free and uninvolved.

GROSS PATHOLOGY:

The specimen consisted of a large, rubbery, nodular, mottled pink-tan to lavender, focally congested mass measuring up to 13 x 12 x 7 cms. The specimen appeared to be thinly encapsulated by thin opaque connective tissue which focally was torn. The cut surfaces revealed light tan, focally cystic tissue with areas of hemorrhage and a suggestion of fat necrosis. In the more solid portions, the tissue was fairly homogeneous, but in some areas, appeared a little friable and slightly nodular. Pieces of similar tissue aggregating to 5 cms. were also present within the container.

STUDY GROUP CASES
FOR
MARCH 1986

CASE NO. 1 - ACCESSION NO. 25429

LOS ANGELES: Pheochromocytoma - 12

SAN BERNARDINO (INLAND): Retroperitoneal paraganglioma - 8

SAN FRANCISCO: Pheochromocytoma (organ of Zuckerkandl) - 6

OHIO: Extra-adrenal paraganglioma - 5

INDIANA: Paraganglioma - 5

SEATTLE: Extra-adrenal paraganglioma - 8

LONG BEACH: Paraganglioma of organ of Zuckerkandl - 10

OAKLAND: Paraganglioma - 18

RENO: Extra-adrenal pheochromocytoma - 9

BAKERSFIELD: Pheochromocytoma - 4

FOLLOW-UP:

The patient was last seen in February 1986, at which time he felt well and was normotensive.

FILE DAGNOSIS:

Pheochromocytoma, retroperitoneum

cross-file

Paraganglioma, retroperitoneum

REFERENCES:

Lack, E. E., Cubilla, A. L., Woodruff, J. M., et.al.: Extra-adrenal Paragangliomas of the Retroperitoneum. Am. J. Surg. Path. 4:109-120, 1980.

LOS ANGELES: Mesothelioma, malignant - 12

SAN BERNARDINO (INLAND): Diffuse malignant mesothelioma - 8

SAN FRANCISCO: Mesothelioma - 6

OHIO: Malignant mesothelioma - 5

INDIANA: Malignant mesothelioma - 4

SEATTLE: Mesothelioma - 8

LONG BEACH: Diffuse mesothelioma - 10

OAKLAND: Mesothelioma - 18

RENO: Malignant mesothelioma - 9

BAKERSFIELD: Mesothelioma, epithelial - 4

FOLLOW-UP:

Despite (or perhaps due to) the combined heroic efforts of various oncologist, acupuncturists, and barristers, the patient progressively deteriorated and expired on September 10, 1985. No autopsy was performed.

SPECIAL STAINS:

PAS - Not epithelial mucin.

FILE DIAGNOSIS:

Mesothelioma, peritoneum

REFERENCES:

Vogelzang, N. J., et. al.: Malignant Mesothelioma: The University of Minnesota Experience (clinicopathological study of 31 cases). Cancer 53 (3): 377-383, 1984.

LOS ANGELES: Liposarcoma with areas of metastatic carcinoma - 12

SAN BERNARDINO (INLAND): Carcinoma of breast metastatic to well differentiated fibrosing liposarcoma of retroperitoneum - 8

SAN FRANCISCO: Carcinoma of breast metastatic to a well differentiated liposarcoma - 6

OHIO: Metastatic adenocarcinoma - 5

INDIANA: Metastatic carcinoma - 4

SEATTLE: Metastatic breast carcinoma in well differentiated liposarcoma - 8

LONG BEACH: Metastatic breast carcinoma to liposarcoma - 10

OAKLAND: Metastatic breast - 17; liposarcoma - 1

RENO: Metastatic breast carcinoma - 9

BAKERSFIELD: Rhabdomyosarcoma - 1; anaplastic carcinoma - 1; metastatic carcinoma - 2

FOLLOW-UP:

The patient again presented in January 1986 with abdominal pain. A 1025 gm. retroperitoneal tumor, interpreted as metastatic breast carcinoma in a well differentiated liposarcoma, was removed at surgery. The patient expired 21 days postoperatively.

FILE DIAGNOSIS:

Breast carcinoma metastatic to liposarcoma, retroperitoneum

REFERENCES:

Evans, H. L.: Liposarcoma - A study of 55 cases with a reassessment of its classification. Cancer 3:507-523, 1979.

Balen, J. W. and Thorney, D.: Liposarcomas. A Histogenic Approach to the Classification of Adipose Tissue Neoplasms. Am. J. Surg. Pathol. 8: 3-18, 1984.

CASE NO. 4 - ACCESSION NO. 10592

MARCH 1986

LOS ANGELES: Malignant mesothelioma, tubulopapillary variant - 12

SAN BERNARDINO (INLAND): Malignant mesothelioma - 8

SAN FRANCISCO: Mesothelioma - 3; metastatic adenocarcinoma - 3

OHIO: Papillary carcinoma - 3; malignant mesothelioma - 2

INDIANA: Mesothelioma - 4

SEATTLE: Mesothelioma - 8

LONG BEACH: Diffuse mesothelioma - 10

OAKLAND: Mesothelioma - 18

RENO: Mesothelioma - 5; carcinoma - 4

BAKERSFIELD: Mesothelioma - 4

FOLLOW-UP:

The patient expired on the second postoperative day. Autopsy was not performed.

FILE DIAGNOSIS:

Mesothelioma, peritoneum

REFERENCE:

Vogelzang, N.J., et. al: Malignant Mesothelioma: The University of Minnesota Experience (clinicopathological study of 31 cases) Cancer 53(3): 377-383, 1984.

MARCH 1986

LOS ANGELES: Leiomyblastoma (epithelioid leiomyosarcoma) - 12;
epithelioid mesothelioma, low grade malignancy - 1

SAN BERNARD (INLAND): Epithelioid leiomyosarcoma - 4; mesothelioma - 4

SAN FRANCISCO: Solid epithelioid mesothelioma - 1; round cell liposarcoma - 3; leiomyblastoma - 1

OHIO: Sarcoma - 2; liposarcoma - 3

INDIANA: Histiocytoma - 3; xanthogranuloma - 1

SEATTLE: Sarcoma of low malignant potential - 2; epithelioid leiomyosarcoma - 5; pleomorphic lipoma - 1; pleomorphic small cell liposarcoma - 1; epithelioid mesothelioma - 1

LONG BEACH: Localized mesothelioma - 10

OAKLAND: Epithelioid leiomyoma - 17; epithelioid leiomyosarcoma - 1

RENO: Round cell liposarcoma - 9

BAKERSFIELD: Liposarcoma, omentum - 4

FOLLOW-UP:

A CT scan in August 1984 showed no recurrence. In March 1986, she was reported to be in excellent health.

FILE DIAGNOSIS:

Epithelioid leiomyosarcoma, omentum

CONSULTATION:

AFIP (William R. Cowan, M. D.) Occasional mitotic figures are present (1-3 per 10 HPF). Although mitotic figures are few the large size of the lesion favors a malignant diagnosis.

Diagnosis: Epithelioid leiomyosarcoma

REFERENCE:

Robb, W. A. T.: Liposarcoma of the Greater Omentum. Br. J. Surg. 47: 537, 1960.

CASE NO. 6 - ACCESSION NO. 24933

MARCH 1986

LOS ANGELES: Neuroendocrine carcinoma, metastatic - 12

SAN BERNARDINO (INLAND): Neuroendocrine carcinoma - 5; neuroblastoma - 1
undifferentiated germ cell tumor - 1; Wilms' tumor - 1

SAN FRANCISCO: Apudoma - 3; scirrhous malignant lymphoma - 1; extra-
gonadal stromal tumor - 2

OHIO: Malignant small cell tumor - 3; neuroendocrine carcinoma - 2

INDIANA: Neuroblastoma - 3; embryonal rhabdomyosarcoma - 1

SEATTLE: Small cell malignant neoplasm? malignant gonadal stromal type - 8

LONG BEACH: Embryonal rhabdomyosarcoma - 10

OAKLAND: Neuroblastoma - 18

RENO: Malignant carcinoid tumor - 9

BAKERSFIELD: Small cell sarcoma - 3; carcinoid sarcoma - 1

FOLLOW-UP:

The patient was found apneic and pulseless 11 hours after surgery. Autopsy revealed massive bilateral pulmonary emboli, probably right leg. The kidneys, adrenal glands, and testes were unremarkable.

FILE DIAGNOSIS:

Neuroendocrine carcinoma, omentum

CASE NO. 7 - ACCESSION NO. 19616

MARCH 1986

LOS ANGELES: Malignant mesothelioma - 12

SAN BERNARDINO (INLAND): Malignant mesothelioma - 8

SAN FRANCISCO: Mesothelioma - 6

OHIO: Mesothelioma - 3; metastatic adenocarcinoma - 1; mast cell tumor - 1

INDIANA: Mesothelioma - 4

SEATTLE: Mesothelioma - 8

LONG BEACH: Mesothelioma - 10

OAKLAND: Mesothelioma - 18

RENO: Mesothelioma - 9

BAKERSFIELD: Mesothelioma, epithelial - 1; metastatic carcinoma - 3

FOLLOW-UP:

None

FILE DIAGNOSIS:

Mesothelioma, peritoneum

REFERENCES:

Kannerstein, M., Chung, J.: Peritoneal Mesothelioma. Hum. Pathol. 8:83-97, 1977. (Review of pathologic features of 82 cases).

Roberts, G.H., Campbell, G. M.: Exfoliative Cytology of Diffuse Mesothelioma. J. Clin. Path. 25:577-582, 1972. (Cytology of 14 cases, criteria for cytologic malignancy)

Suzulei, Y., Chung, J., Kannerstein, M.: Ultrastructure of Human Malignant Diffuse Mesothelioma. Am. J. Path. 85:241-262, 1976. (Electron microscopic findings in mesothelioma)

Kannerstein, M., Chung, J., McCanghey, W. T. E.: Asbestos and Mesothelioma. A review. Pathol. Annu. 13(part 1): 81-129, 1978. (Role of asbesto in origin of mesothelioma, pathology, histochemistry of tumor)

LOS ANGELES: Leiomyosarcoma - 4; liposarcoma, spindle cell type - 2; malignant peripheral nerve, sheath tumor (Schwannoma) - 6

SAN BERNARDINO (INLAND): Malignant schwannoma - 8

SAN FRANCISCO: Leiomyosarcoma - 1; neurosarcoma - 5

OHIO: Spindle cell sarcoma - 4; malignant fibrous histiocytoma - 1

INDIANA: Fibrosarcoma - 3; malignant schwannoma - 1

SEATTLE: Intermediate grade spindle cell sarcoma - 8

LONG BEACH: Fibrosarcoma - 10

OAKLAND: Leiomyosarcoma - 14; liposarcoma - 1; malignant fibrous histiocytoma - 1; malignant schwannoma - 2

RENO: Leiomyosarcoma - 7; sarcoma, NOS - 2

BAKERSFIELD: Fibrosarcoma - 3; malignant schwannoma - 1

FOLLOW-UP:

The patient was lost to follow-up after 1983. A disability insurance inquiry was received in January 1985.

SPECIAL STAINS:

The AMP is completely removed by hyaluronidase.

FILE DIAGNOSIS:

Malignant schwannoma, retroperitoneum

cross file:

Fibrosarcoma, retroperitoneum

CONSULTATION:

AFIP (R. R. McMeekin, M. D.): Sarcoma, probably malignant schwannoma.

K. Proppe, M. D. (Massachusetts General Hospital): Sarcoma, unclassified (spindle cell), Grade III/III.

R. L. Kempson, M. D. (Stanford University Hospital): Sarcoma consistent with nerve sheath sarcoma.

REFERENCES:

Ghosh, B. C., Ghosh, L, Huvos, A. G., Gostner, J. G.: Malignant Schwannoma. A Clinicopathologic Study. Cancer 31:184-190, 1973. (Review of 115 cases)

Chen, K.T. K., Latomaca, R., Fabich, D., Padgug, A., Gafez, G. R., Gilbert, E. F.: Malignant Schwannoma: A Light Microscopic and Ultrastructural Study. Cancer 45:1585-1593, 1980. (Histologic findings in 3 cases)

Trojanowski, J. Q., Kleinman, G. M., Proppe, K. H.: Malignant Tumors of Nerve Sheath Origin. Cancer 46:1202-1212, 1980. (Microscopic features of malignant nerve sheath tumors, survival statistics).

White, H. R.: Survival in Malignant Schwannoma: An 18 year study. Cancer 27:720-729, 1971. (15 cases, significance of epithelioid and metaplastic elements).

LOS ANGELES: Multicystic peritoneal mesothelioma, benign, reactive - 8

SAN BERNARDINO (INLAND): Reactive process (cystic lesion) with mesothelial cell hyperplasia - 8

SAN FRANCISCO: Benign localized cystic mesotheliomas - 6

OHIO: Mesothelial cyst - 5

INDIANA: Mesothelial hyperplasia - 4

SEATTLE: Benign cystic mesothelioma - 8

LONG BEACH: Cystic mesothelioma - 10

OAKLAND: Peritoneal pseudotumor with mesothelial cysts - 10; cystic mesothelioma - 6; decidualized endometriosis - 2

RENO: Benign cyst - 6; benign mesenteric - 3

BAKERSFIELD: Mesothelioma, fibrous-epithelial - 1; benign fibrous tumor - 3

FOLLOW-UP:

The patient was lost to follow up.

FILE DIAGNOSIS:

Benign cystic mesothelioma, peritoneum

CONSULTATION:

AFIP (B. H. Smith, M. D.): Inflammatory cysts, fibrous and reactive mesothelial hyperplasia.

REFERENCE:

Rosai, J., Dehner, L. P.: Nodular Mesothelial Hyperplasia in Hernia Sacs: A Benign Reactive Condition Simulating a Neoplastic Process. Cancer 35:165-175, 1975. (13 cases of florid reactive mesothelial hyperplasia).

LOS ANGELES: Pseudomyxoma peritonei - 12

SAN BERNARDINO (INLAND): Pseudomyxoma peritonei - 8

SAN FRANCISCO: Pseudomyxoma peritonei - 6

OHIO: Pseudomyxoma peritonei - 5

INDIANA: Pseudomyxoma peritonēi - 4

SEATTLE: Pseudomyxoma peritonei - 8

LONG BEACH: Pseudomyxoma peritonei - 10

OAKLAND: Pseudomyxoma peritonei - 16; myxoma peritonei - 2

RENO: Pseudomyxoma, peritonei - 9

BAKERSFIELD: Myxoma - 4

FOLLOW-UP:

No follow-up available.

FILE DIAGNOSIS:

Pseudomyxoma peritonei, peritoneum

SPECIAL STAINS:

PAS - positive for mucin.

REFERENCES:

Long, R. T. L., Spratt, J. S., Dowling, E.: Pseudomyxoma Peritonei: New Concepts in Management with Report of Seventeen Patients. Am. J. Surg. 117:162-169, 1969. (Clinical features in 17 cases)

Fernandez, R. N., Daly, J. M.: Pseudomyxoma Peritonei. Arch. Surg. 115:409-414, 1980. (Review of 38 cases, methods of treatment, survival).

Sandenbergh, H. A., Woodruff, J. D.: Histogenesis of Pseudomyxoma Peritonei: Review of a case. Obstet. Gynecol. 49:339-345, 1977. (Suggests that pseudomyxoma peritonei results from mucinification of mesothelium.

LOS ANGELES: Non chromaffin paraganglioma (pheochromocytoma) - 12

SAN BERNARDINO (INLAND): Paraganglioma - 8

SAN FRANCISCO: Paraganglioma - 6

OHIO: Extra-adrenal paraganglioma - 5

INDIANA: Pheochromocytoma, extra-adrenal - 4

SEATTLE: Paraganglioma - 8

LONG BEACH: Pheochromocytoma - 10

OAKLAND: Paraganglioma - 18

RENO: Pheochromocytoma - 9

BAKERSFIELD: Pheochromocytoma - 4

FOLLOW-UP:

No follow-up available.

FILE DIAGNOSIS:

Pheochromocytoma, retroperitoneum

X-FILE

Paraganglioma, retroperitoneum

REFERENCES:

Wilson, R. A., Ibanez, M. L.: A comparative study of 14 cases of Familial and Nonfamilial Pheochromocytomas. Hum. Pathol. 9:181-188, 1978. (Clinical differences between nonfamilial pheochromocytoma and Sipple Syndrome. Inability to distinguish malignancy by microscopic features).

Falterman, C.J., Kreisberg, R.: Pheochromocytoma. Clinical Diagnosis and Management. South Med. J. 75:321-328, 1982. (Clinical features treatment).

Goldfein, A.: Pheochromocytoma: Clin. Endocrin. Metab. 10:607-630, 1981. (General review article).

LOS ANGELES: Hemangiopericytoma - 12

SAN BERNARDINO (INLAND): Hemangiopericytoma - 8

SAN FRANCISCO: Hemangiopericytoma - 6

OHIO: Hemangiopericytoma - 5

INDIANA: Hemangiopericytoma - 4

SEATTLE: Hemangiopericytoma - 8

LONG BEACH: Hemangiopericytoma - 10

OAKLAND: Leiomyosarcoma - 18

RENO: Fibrous histiocytoma - 7; hemangiopericytoma - 2

BAKERSFIELD: Fibrous histiocytoma - 2; hemangiopericytoma - 2

FOLLOW-UP:

No follow-up available.

SPECIAL STAINS:

Trichrome negative. It is no smooth muscle.

FILE DIAGNOSIS:

Hemangiopericytoma, cul-da-sac

REFERENCES:

Varela-Duran, J., Oliva, H., Rosai, J.: Vascular Leiomyosarcoma: The Malignant Counterpart of Vascular Leiomyoma. *Cancer* 44:1684-1691, 1979. (Six cases of vascular leiomyosarcoma. Relation of mitotic count to behavior)

Ranchod, M., Kempson, R. L.: Smooth Muscle Tumors of the Gastrointestinal Tract and Retroperitoneum: A pathologic analysis of 100 cases. *Cancer* 39:255-262, 1977. (Mitotic counts as prognostic factor, survival statistics. Includes CTTR cases).

Ferencey, A., Richart, R.M., Okayalci, T.: A Comparative Ultrastructural study of Leiomyosarcoma, Cellular Leiomyoma, and Leiomyoma of the Uterus. *Cancer* 28:1004-1018, 1971. (Electron microscopic distinction between leiomyoma and leiomyosarcoma)