

SEM 553

CALIFORNIA TUMOR TISSUE REGISTRY
LOS ANGELES COUNTY - UNIVERSITY OF SOUTHERN CALIFORNIA
PROTOCOL
FOR
MONTHLY STUDY SLIDES
APRIL 1983
TUMORS OF THE PARAGANGLION SYSTEM

CONTRIBUTOR: James M. Tenney, M. D.
James Decker, M. D.
Reno, Nevada

APRIL 1983 - CASE NO. 1

TISSUE FROM: Retroperitoneum

ACCESSION NO. 23999

CLINICAL ABSTRACT:

History: This 20 year old man presented to his physician with a 6 month history of fatigue and a painless epigastric mass. A 2 month history of epigastric pain and indigestion after meals was also obtained.

Radiographs: Upper GI showed upward displacement of the third portion of the duodenum by an extrinsic mass. Chest x-ray and barium enema were normal.

SURGERY: (August 11, 1980)

An exploratory laparotomy with excision of a large retroperitoneal mass was performed.

GROSS PATHOLOGY:

A well-demarcated encapsulated reddish tan mass of tissue measuring 24 x 7 x 6 cm., and weighing 240 grams was received. Sectioning revealed homogeneous tissue with fine nodulations and marked hemorrhage.

FOLLOW-UP:

Not available.

CONTRIBUTOR: E. R. Jennings, M. D.
Long Beach, California

APRIL 1983 - CASE NO. 2

TISSUE FROM: Aortic arch

ACCESSION NO. 17579

CLINICAL ABSTRACT:

History: A 71 year old man was admitted with gastrointestinal bleeding and passing tarry stools. A porta-caval shunt was performed. On the sixth post-operative day, the patient became disoriented and his jaundice deepened. He expired on the 15th postoperative day of hepatic failure.

AUTOPSY: (June 4, 1968)

An incidental 5 x 3 cm. firm solid brown mass adjacent to and to the right of the arch of the aorta at the origin of the innominate artery. On cross section it appeared to be lobulated.

CONTRIBUTOR: Gene F. Pawlick, M. D.
South San Francisco, California

APRIL 1983 - CASE NO. 3

TISSUE FROM: Duodenum

ACCESSION NO. 22021

CLINICAL ABSTRACT:

History: A 55 year old male was admitted 9-6-75 complaining of dizziness, sweating and heaviness in his chest. On admission the hematocrit was 33.2% and despite multiple blood transfusions on 9-8-75 the hematocrit fell to 22%. The patient was taken to surgery the following day for continued upper gastrointestinal hemorrhage.

Past history: Vagotomy and pyloroplasty for upper gastrointestinal bleeding 15 years ago.

SURGERY: (September 8, 1975)

Exploratory celiotomy, duodenotomy, excision of duodenal mass, common duct exploration, tube jejunostomy and tube gastrostomy performed.

Findings: A tumor of the second portion of the duodenum was demonstrated at the site of bleeding.

GROSS PATHOLOGY:

Specimen consisted of a 6 x 5 x 4.5 cm. rounded tan tumor partially covered by mucosa on 1/2 of the external surface and bosselated by tumor nodules on the remaining half. The mucosa overlying the tumor was focally ulcerated. On cut surface, there was a soft fishflesh gray-tan tumor composed of multiple nodules with central hemorrhagic congestion.

FOLLOW-UP:

The patient was re-admitted to the hospital on February 10 - 21, 1980 for recurrent g.i. bleeding for which he did not respond to supportive care therapy. His hematocrit dropped to 25% and prompted surgery (60% gastrectomy) on 2-14-80 for a benign bleeding posterior gastric ulcer.

CONTRIBUTOR: Milton Feinberg, M. D.
Van Nuys, California

APRIL 1983 - CASE NO. 4

TISSUE FROM: Carotid bifurcation

ACCESSION NO. 21803

CLINICAL ABSTRACT:

History: A 33 year old black male had a mass in his left neck for five years. On admission, he was noted to have an irregular heart rhythm with ventricular bigeminy. Further evaluation revealed ventricular parasystole with aberrant reentry phenomenon.

Physical examination documented a 4 x 4 cm. mass in the left neck anterior to the sternocleidomastoid muscle. The mass was mobile and nontender.

SURGERY: (December 17, 1975)

Left neck exploration with excision of tumor from carotid bifurcation performed.

GROSS PATHOLOGY:

An ovoid firm mass measuring 5 x 2.5 x 2.0 cm. was received. The surface was covered by shaggy dark brown tissue. The cut surface was smooth and fleshy with many tiny cystic spaces filled with dark brown fluid. A 1.5 cm. hemorrhagic area was located in the center.

FOLLOW-UP:

The patient was seen in February 1977 for a small nodule in the right lobe of the thyroid gland. He failed to return to the endocrine clinic for further work-up. He was last seen in December of 1978 in cardiology clinic for frequent PVC's and bigeminy.

CONTRIBUTOR: John W. Colton, M. D.
Santa Monica, California

APRIL 1983 - CASE NO. 5

TISSUE FROM: Right retroperitoneum

ACCESSION NO. 23590

CLINICAL ABSTRACT:

History: An essentially healthy 24 year old man was admitted because of a lump in his abdomen just to the right of the umbilicus. An enlargement had been noticed for approximately one year. The mass was firm, nonmovable and apparently not associated with the rectus muscle. Discomfort was noted from the mass after running and pressure.

SURGERY: (June 18, 1974)

A circumscribed baseball-sized neoplasm in the retroperitoneal portion of the right side of the abdomen was found at surgery. It was intimately associated superiorly with the retroperitoneal portion of the duodenum, the vena cava and psoas muscle posteriorly and the right ureter laterally which was displaced to the right. No other abnormalities were noted.

GROSS PATHOLOGY:

The ovoid mass measured 6.8 cm. in maximum dimension and weighed 110 gms. On section, the cut surface was composed of moderately firm reddish-tan tissue with a lobulated pattern. Numerous vascular channels measuring up to 0.5 cm. in diameter coursed throughout the lesion. A few small foci of hemorrhage were present. The lesion was surrounded by a thin rim of moderately firm pink-tan tissue measuring approximately 0.1 cm. in thickness.

FOLLOW-UP:

As of March 1983, the patient is alive and well with no evidence of recurrence.

CONTRIBUTOR: E. DuBose Dent, Jr., M. D.
Glendale, California

APRIL 1983 - CASE NO. 6

TISSUE FROM: Left neck

ACCESSION NO. 21771

CLINICAL ABSTRACT:

History: A 59 year old man was unaware of a neck mass until it was discovered during a routine annual physical examination on December 23, 1975. The mass was described as a 2 cm. smooth, rubbery nodule at the angle of the left jaw which transmitted pulsation. The patient deferred any treatment and when seen again on February 4, 1976, the mass seemed to measure 3-3.5 cm.

Radiograph: Echogram of the left side of the neck revealed "this appears to be a basically solid lesion with several small cystic areas within it".

SURGERY: (March 24, 1976)

Exploration of left neck with resection of tumor was performed. An encapsulated ovoid mass was found at the left common carotid bifurcation.

GROSS PATHOLOGY:

The resected mass measured 3 cm. in greatest dimension and weighed 7 grams. The mass was solid with a pale reddish-brown color and irregular areas of yellowish-white discoloration.

FOLLOW-UP:

The patient was last seen by his physician in May 1977 at which time he was free of signs and symptoms referable to this lesion.

CONTRIBUTOR: Thomas F. McKellar, M. D.
San Luis Obispo, California

APRIL 1983 - CASE NO. 7

TISSUE FROM: Left neck

ACCESSION NO. 9795

CLINICAL ABSTRACT:

History: A 61 year old man was aware of a mass in the left side of the neck for at least 12 years. The tumor remained painless and seemed to grow slowly. It had been diagnosed as a branchial cyst on numerous occasions. The patient denied having vertigo.

SURGERY: (December 1957)

The entire mass was excised. The tumor was situated deep and medial to the sternocleidomastoid muscle. There was no attachment to the internal jugular or carotid vessels though both coursed nearby.

GROSS PATHOLOGY:

A nodular, apparently partially encapsulated tumor weighing 40.5 grams was received in three pieces. The largest measured 6 x 4 x 3 cm. The cut surface was fibrous with irregular foci of softening and hemorrhage with lobular areas of grey glistening "tumor".

FOLLOW-UP:

Not available.

CONTRIBUTOR: Roger Terry, M. D.
San Gabriel, California

APRIL 1983 - CASE NO. 8

TISSUE FROM: Right neck

ACCESSION NO. 24816

CLINICAL ABSTRACT:

History: A 61 year old man noted a painless progressively enlarging mass at the angle of the right jaw for the past year. A 4 x 3 cm. nontender mass was located just below the skull at the angle of the right jaw was documented on physical examination. The mass was movable in the anterior-posterior plane but not cephalad-caudad. Bilateral carotid angiograms showed a marked tumor blush from the right maxillary and external carotid arteries. The patient developed paresis of the right vocal cord and hoarseness.

SURGERY: (December 1, 1982)

The patient underwent resection of the mass with excision of a portion of the vagus nerve. Pertinent operative report as follows:

There was a large mass posterior and medial to the external carotid artery. It appeared that this lay on top of the common carotid artery. The vagus nerve was identified just lateral to the common carotid artery. It was balled up into a mass of tissue that comprised the main part of the tumor mass. It did not involve the carotid body itself nor of the surrounding arterial structures. The tumor was pediculated with the vagus nerve entering the tumor in the lower end and the vagus nerve exiting the superior end. The tumor was completely surrounding the vagus nerve and densely adherent along with segments of the vagus nerve proximally and distally.

GROSS PATHOLOGY:

The specimen consisted of a 20 grams ovoid mass measuring 4.0 x 2.5 x 2.2 cm. with a rounded firm structure attached to one pole measuring no more than 1 cm. in longest dimension. The cut surface was light tan and bulged from under a thin fibrous capsule. Several dark red necrotic foci measuring from 0.2 x 0.8 cm. in diameter were distributed throughout the parenchyma.

FOLLOW-UP:

Patient seen on December 9, 1982 and January 10, 1983 for postoperative care. He is scheduled to see another physician in July.

CONTRIBUTOR: Marvin I. Retsky, M. D.
Van Nuys, California

APRIL 1983 - CASE NO. 9

TISSUE FROM: Retroperitoneum

ACCESSION NO. 22498

CLINICAL ABSTRACT:

History: This 42 year old caucasian, female presented with hypermenorrhea and severe dysmenorrhea of several months' duration.

SURGERY: (February 9, 1977)

A total abdominal hysterectomy and bilateral salpingo-oophorectomy was performed. During the procedure, an unexpected highly vascular retroperitoneal mass was encountered at the level of the aortic bifurcation. It was completely excised.

GROSS PATHOLOGY:

A grossly encapsulated 5.0 x 4.2 x 3.1 cm. mass was received. Its external surface was vaguely lobulated. The cut surface was pale-pink, faintly granular, bulging, and showed focal areas of hemorrhagic and cystic change.

FOLLOW-UP:

The patient was last seen December 1982 with no evidence of the disease.

CONTRIBUTOR: Roger Terry, M. D.
Los Angeles, California

APRIL 1983 - CASE NO. 10

TISSUE FROM: Right neck

ACCESSION NO. 21694

CLINICAL ABSTRACT:

This clinically complex case with 4 volumes of records is summarized for the pertinent data as follows:

In May 1973, the patient was admitted for a fever of unknown origin. At that time she was 48 years of age and had been mentally retarded with idiopathic epilepsy since birth. During this admission a mass was noted in the right side of her neck which was described as 5 x 7 cm. occupying the jugulodigastric area. It was movable front to back but not up and down and was nontender and nonfluctuant. A smaller 1 x 2 cm. firm nodule was located in the right lobe of the thyroid.

An angiogram revealed a very large extremely vascular tumor arising in the upper neck displacing the carotid artery laterally and anteriorly. The primary blood supply was from the superior thyroid artery. The internal and external carotid arteries were not splayed away from each other as is commonly seen in carotid body tumors. The angiographer thought the most likely diagnosis was thyroid carcinoma.

A I ¹²⁵ thyroid scan revealed uptake in the left lobe of the thyroid but the mass in the right side of the neck failed to take up radioiodine. A biopsy of the thyroid nodule was interpreted as an adenomatous nodular goiter with degenerative changes (73-10565).

Because of the patient's poor clinical condition (she was subsequently demonstrated to have extensive peritoneal tuberculosis), removal of the mass in the right side of the neck was deferred until 1975 at which time the mass was described as 10 x 15 cm. in size.

SURGERY: (November 17, 1975)

She had a subtotal thyroidectomy (for nodular goiter) with removal of a 40 gm. mass of rubbery hemorrhagic appearing tissue and excision of neck mass.

Description of the operative finding has been inadvertently misplaced. Details of the findings at surgery are unavailable.

FOLLOW-UP:

The patient was seen in January 1983 for seborrheic keratosis and there was no clinical evidence of the recurrent mass.

CONTRIBUTOR: Dorothy Tatter, M. D.
Los Angeles, California

APRIL 1983 - CASE NO. 11

TISSUE FROM: Urinary bladder

ACCESSION NO. 10950

CLINICAL ABSTRACT:

History: This 46 year old caucasian male presented to the emergency room complaining of a severe frontal headache of 3 weeks duration. He also was dis-oriented and had been vomiting for several days. He related a history of chronic alcoholism, and had been drinking for the previous four days. Physical examination revealed a right homonomous hemianopsia skull films on admission showed a possible parasagittal tumor, possibly meningioma. A left occipital craniotomy was performed, with partial excision of a meningioma extending into the longitudinal sinus. His post-operative course was stormy, with continued unresponsiveness, and a developing left hemiparesis. He was returned to surgery 3 days following the initial procedure for evaluation of a subdural hematoma. Following this procedure, he developed right basilar pneumonia, and ten days later, a wound infection at the craniotomy site was noted. A lumbar puncture revealed an opening pressure of 140 mm., with 1,000 WBC's, 97% of which were polymorphonuclear leucocytes. Antibiotics were started; however, he expired the following day, February 7, 1960.

AUTOPSY:

Bilateral bronchopneumonia, bacterial meningitis, and cerebral edema were the primary autopsy diagnoses. Also noted incidentally was a submucosal tumor in the wall of the urinary bladder, just lateral to the right ureteral orifice. The tumor was well circumscribed, nodular, bright yellow-orange, and measured 3 x 3.5 x 2.5 cm.

CONTRIBUTOR: Loren R. Ayres, M. D.
Arcadia, California

APRIL 1983 - CASE NO. 12

TISSUE FROM: Left neck

ACCESSION NO. 22811

CLINICAL ABSTRACT:

History: This 44 year old caucasian male noted a mass in his left neck while shaving approximately 3 months prior to admission. A second mass was noted in the right neck 1 month prior to admission.

On physical examination, both masses were firm and non-tender, and no adenopathy was found.

SURGERY: (December 6, 1977)

A highly vascular tumor located 2 cm. below the bifurcation of the carotid artery was excised.

GROSS PATHOLOGY:

A 5 x 3 x 2.5 cm. lobulated mass was received. Cross section revealed a variegated pink-tan to red-brown cut surface.

FOLLOW-UP:

The patient had a benign lipoma removed from the left side of the neck in early 1978. He has since been lost to follow-up.

STUDY GROUP CASES
FOR
APRIL 1983

CASE NO. 1 - ACC. NO. 23999

LOS ANGELES: Paraganglioma, retroperitoneum - 10

SAN FRANCISCO: Paraganglioma - 13

MARTINEZ: Paraganglioma - 8

RENO: Paraganglioma - 13

OAKLAND: Paraganglioma, retroperitoneum - 4; pheochromocytoma, adrenal - 4

BAKERSFIELD: Paraganglioma - 4; extra-adrenal pheochromocytoma - 1

CENTRAL VALLEY: Para-aortic (Zuckerkanal) paraganglioma - 5

FRESNO: Para-aortic paraganglioma - 12

LONG BEACH: Paraganglioma (of the organ of Zuckerkanal) - 7

SAN BERNARDINO (INLAND): Aortic body paraganglioma - 8

WEST SAN FERNANDO VALLEY: Extra-adrenal pheochromocytoma - 3

OHIO: Paraganglioma - 4

FILE DIAGNOSIS:

Paraganglioma, retroperitoneum

LOS ANGELES: Paraganglioma, aortic body - 6; thymoma - 4

SAN FRANCISCO: Paraganglioma, aortic body type - 13

MARTINEZ: Hemangiopericytoma - 10

RENO: Paraganglioma - 13

OAKLAND: Aortic body tumor, aortic arch - 8

BAKERSFIELD: Paraganglioma, aortic arch - 4; hemangiopericytoma - 1

CENTRAL VALLEY: Aortic body paraganglioma - 5

FRESNO: Hemangiopericytoma - 2; aortic body paraganglioma - 10

LONG BEACH: Paraganglioma - 5; spindle cell thymoma - 2

SAN BERNARDINO (INLAND): Paraganglioma - 7; thymoma - 1

WEST SAN FERNANDO VALLEY: Paraganglioma - 2; hemangiopericytoma - 1

OHIO: Paraganglioma - 4

FILE DIAGNOSIS:

Aortic body tumor, aortic arch

REFERENCES:

Olson, J. L., and Salyer, W. R.: Mediastinal Paraganglioma (Aortic Body Tumor). Cancer 41:2405, 1978.

Lack, E. E., Stillenger, R. A., Colvin, D. B., et al: Aortico-Pulmonary Paraganglioma. Cancer 43: 269, 1979.

LOS ANGELES: Gangliocytic paraganglioma, duodenum - 10

SAN FRANCISCO: Paraganglioma, gangliocytic type - 13

MARTINEZ: Gangliocytic paraganglioma - 10

RENO: Gangliocytic paraganglioma - 13

OAKLAND: Gastrinoma, duodenum - 7; gangliocytic paraganglioma - 1

BAKERSFIELD: Gangliocytic paraganglioma - 3; carcinoid - 2

CENTRAL VALLEY: Carcinoid tumor - 3; paraganglioma - 2

FRESNO: Gangliocytic paraganglioma - 6; carcinoid - 2; malignant pheochromocytoma - 4

LONG BEACH: Gangliocytic paraganglioma - 7

SAN BERNARDINO (INLAND): Gangliocytic paraganglioma - 7; gastrinoma - 1

WEST SAN FERNANDO VALLEY: Paraganglioma - 1; pheochromocytoma - 2

OHIO: Gangliocytic paraganglioma - 4

FILE DIAGNOSIS:

Gangliocytic paraganglioma, duodenum

REFERENCES:

Taylor, H. B., and Hewig, E. B.: Benign Non-chromaffin Paragangliomas of the Duodenum. Virchows Arch (Pathol Anat) 335:356, 1962.

Reed, R. J., Daroca, P. J. and Harkin, J. C.: Gangliocytic Paraganglioma. AJSP 1:207, 1977.

LOS ANGELES: Paraganglioma, carotid body - 10

SAN FRANCISCO: Paraganglioma, carotid body type - 13

MARTINEZ: Carotid body paraganglioma - 10

RENO: Carotid body tumor - 13

OAKLAND: Carotid body paraganglioma, carotid bifurcation - 9

BAKERSFIELD: Carotid body paraganglioma - 5

CENTRAL VALLEY: Carotid body paraganglioma - 5

FRESNO: Carotid body paraganglioma - 12

LONG BEACH: Paraganglioma (carotid body tumor) - 7

SAN BERNARDINO (INLAND): Paraganglioma - 8

WEST SAN FERNANDO VALLEY: Branchiomic paraganglioma - 3

OHIO: Paraganglioma - 4

FILE DIAGNOSIS:

Carotid body tumor, carotid bifurcation

REFERENCES:

Shambun, W. R., Remine, W. H., and Sheps, S. G., et al.: Carotid Body Tumor: Clinico Pathologic Analysis of 90 Cases. Am. J. Surg. 122:732, 1971.

CASE NO. 5 - ACC. NO. 23590

APRIL 1983

LOS ANGELES: Paraganglioma, retroperitoneum - 10

SAN FRANCISCO: Paraganglioma - 13

MARTINEZ: Paraganglioma - 10

RENO: Paraganglioma - 13

OAKLAND: Paraganglioma, retroperitoneum - 9

BAKERSFIELD: Paraganglioma - 5

CENTRAL VALLEY: Para-aortic (Zuckerkanal) paraganglioma - 5

FRESNO: Paraganglioma - 12

LONG BEACH: Paraganglioma - 5; carcinoid - 2

SAN BERNARDINO (INLAND): Paraganglioma - 8

WEST SAN FERNANDO VALLEY: Paraganglioma - 3

OHIO: Paraganglioma - 4

FILE DIAGNOSIS:

Paraganglioma - organ of Zuckerkanal, retroperitoneum

REFERENCES:

Glenn, F. and Gray, G. F.: Functional Tumors of the Organ of Zuckerkanal. Ann. Surg. 183:578, 1976.

CASE NO. 6 - ACC. NO. 21771

APRIL 1983

LOS ANGELES: Paraganglioma, carotid body - 10

SAN FRANCISCO: Paraganglioma, aortic body type - 13

MARTINEZ: Carotid body paraganglioma - 10

RENO: Paraganglioma - 13

OAKLAND: Paraganglioma, left neck - 9

Bakersfield: Carotid body paraganglioma - 5

CENTRAL VALLEY: Carotid body paraganglioma - 5

FRESNO: Paraganglioma - 12

LONG BEACH: Paraganglioma (carotid body tumor) - 7

SAN BERNARDINO (INLAND): Paraganglioma - 11

WEST SAN FERNANDO VALLEY: Paraganglioma - 3

OHIO: Paraganglioma - 4

FILE DIAGNOSIS:

Carotid body tumor, neck

CASE NO. 7 - ACC. NO. 9795

APRIL 1983

LOS ANGELES: Paraganglioma, carotid body - 10
SAN FRANCISCO: Paraganglioma - 13
MARTINEZ: Carotid body paraganglioma - 10
RENO: Paraganglioma - 13
OAKLAND: Paraganglioma, left neck - 9
BAKERSFIELD: Paraganglioma - 5
CENTRAL VALLEY: Paraganglioma - 5
FRESNO: Paraganglioma - 12
LONG BEACH: Paraganglioma (carotid body tumor) - 7
SAN BERNARDINO (INLAND): Paraganglioma - 11
WEST SAN FERNANDO VALLEY: Paraganglioma - 2; malignant paraganglioma - 1
OHIO: Paraganglioma - 4

FILE DIAGNOSIS:

Carotid body tumor, neck

CASE NO. 8 - ACC. NO. 24816

APRIL 1983

LOS ANGELES: Paraganglioma, vagal body - 10
SAN FRANCISCO: Paraganglioma, intravagal type - 13
MARTINEZ: Intravagal paraganglioma - 10
RENO: Paraganglioma - 13
OAKLAND: Intravagal paraganglioma, right neck - 9
BAKERSFIELD: Intravagal paraganglioma - 5
CENTRAL VALLEY: Intravagal paraganglioma - 5
FRESNO: Paraganglioma - 12
LONG BEACH: Paraganglioma of vagus nerve - 7
SAN BERNARDINO (INLAND): Vagal paraganglioma - 11
WEST SAN FERNANDO VALLEY: Paraganglioma - 3
OHIO: Paraganglioma - 4

FILE DIAGNOSIS:

Paraganglioma, vagal body

REFERENCES:

Chaudhry, A. P., Haar, J. G., Koul, A., et al.: A Non-functioning Paraganglioma of Vagus Nerve. Cancer 43:1689, 1979.

CASE NO. 9 - ACC. NO. 22498

APRIL 1983

LOS ANGELES: Paraganglioma, organ of Zuckerkandl - 10

SAN FRANCISCO: Paraganglioma, organ of Zuckerkandl - 13

MARTINEZ: Paraganglioma of Zuckerkandl - 10

RENO: Zuckerkandl's paraganglioma - 13

OAKLAND: Chemodectoma, organ of Zuckerkandl - 9

BAKERSFIELD: Paraganglioma, organ of Zuckerkandl - 5

CENTRAL VALLEY: Para-aortic (Zuckerkandl) paraganglioma - 5

FRESNO: Paraganglioma (aortic body) - 12

LONG BEACH: Paraganglioma (organ of Zuckerkandl) - 7

SAN BERNARDINO (INLAND): Para-aortic paraganglioma - 11

WEST SAN FERNANDO VALLEY: Paraganglioma - 3

OHIO: Paraganglioma - 4

FILE DIAGNOSIS:

Paraganglioma, retroperitoneum

REFERENCES:

Lack, E. E., Cubilla, A. L., Woodroff, J. M., et al.: Extra-Adrenal Paragangliomas of the Retroperitoneum. AJSP 4:109, 1980.

CASE NO. 10 - ACC. NO. 21694

APRIL 1983

LOS ANGELES: Paraganglioma, carotid body - 10

SAN FRANCISCO: Paraganglioma, carotid body type - 13

MARTINEZ: Paraganglioma - 10

RENO: Paraganglioma - 13

OAKLAND: Paraganglioma, right neck - 9

BAKERSFIELD: Paraganglioma - 5

CENTRAL VALLEY Carotid body paraganglioma - 5

FRESNO: Paraganglioma - 12

LONG BEACH: Medullary carcinoma, thyroid - 4; paraganglioma - 3

SAN BERNARDINO (INLAND): Paraganglioma - 10; medullary carcinoma - 1

WEST SAN FERNANDO VALLEY: Paraganglioma - 2; gliomangioma - 1

OHIO: Paraganglioma - 4

FILE DIAGNOSIS:

"Thyroidal" paraganglioma, neck

LOS ANGELES: Pheochromocytoma, urinary bladder - 10

SAN FRANCISCO: Pheochromocytoma - 13

MARTINEZ: Pheochromocytoma, urinary bladder - 6; paraganglioma, urinary bladder - 1; chromaffin paraganglioma, urinary bladder - 2; pheochromocytoma (paraganglioma), urinary bladder - 1

RENO: Extra-adrenal pheochromocytoma - 13

OAKLAND: Paraganglioma, urinary bladder - 8; granular cell tumor - 1

BAKERSFIELD: Pheochromocytoma, urinary bladder - 2; paraganglioma, urinary bladder - 3

CENTRAL VALLEY: Paraganglioma, urinary bladder - 5

FRESNO: Granular cell schwannoma - 1; pheochromocytoma - 11

LONG BEACH: Paraganglioma, urinary bladder (pheochromocytoma) - 7

SAN BERNARDINO (INLAND): Paraganglioma - 7; pheochromocytoma - 4

WEST SAN FERNANDO VALLEY: Paraganglioma - 3

OHIO: Paraganglioma - 4

FILE DIAGNOSIS:

Paraganglioma, bladder.

REFERENCES:

Leestma, J. E., and Price, E. B.: Paraganglioma of the Urinary Bladder. Cancer 28:1063, 1971.

CASE NO. 12 - ACC. NO. 22811

APRIL 1983

LOS ANGELES: Paraganglioma, carotid body - 10

SAN FRANCISCO: Paraganglioma, carotid body type - 13

MARTINEZ: Carotid body tumor - 10

RENO: Paraganglioma - 13

OAKLAND: Chemodectoma, right neck - 9

BAKERSFIELD: Paraganglioma - 5

CENTRAL VALLEY: Paraganglioma, carotid body - 5

FRESNO: Paraganglioma, carotid body - 12

LONG BEACH: Paraganglioma, carotid body tumor - 7

SAN BERNARDINO (INLAND): Paraganglioma - 11

WEST SAN FERNANDO VALLEY: Paraganglioma - 3

OHIO: Paraganglioma - 4

FILE DIAGNOSIS:

Carotid body tumor, neck