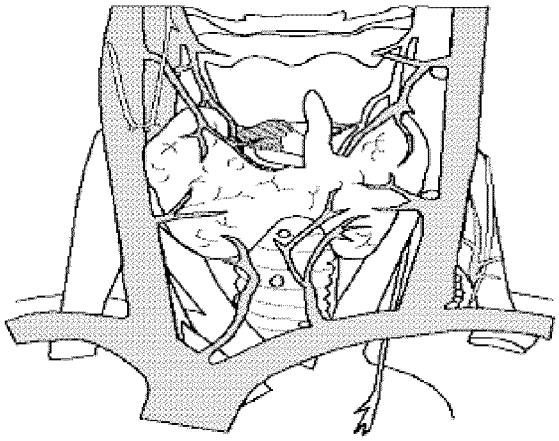
CALIFORNIA
TUMOR TISSUE REGISTRY

"Endocrine Pathology"

Study Cases, Subscription A

November 2006



California Tumor Tissue Registry
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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:
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: Loma Linda Pathology Group (mm) **Case No. 1 - November 2006 A**
Loma Linda, CA

Tissue from: Adrenal glands **Accession #29173**

Clinical Abstract:

A 42 year old man had worsening symptoms of Cushing's syndrome. A full work-up showed no localized masses. A bilateral adrenalectomy was performed.

Gross Pathology:

The left adrenal specimen weighed 27 grams and contained a 7.0 x 4.5 x 2.0 cm adrenal gland with a slightly nodular, dark red cortex and a red-tan medulla. The right adrenal gland specimen weighed 32 grams and contained a 6.5 x 3.2 x 2.5 cm adrenal gland with a slightly nodular purple-tan cortex.

Contributor: Xuedong Wang, M.D. **Case No. 2 - November 2006 A**
Pasadena, CA

Tissue from: Adrenal gland **Accession #29472**

Clinical Abstract:

Multiple medical problems developed in this 33 year old woman during the late stages of her pregnancy. She was admitted at 36 weeks' gestation because of fetal demise. During work-up, a mass was noted in her right adrenal gland and very high norepinephrine levels were found.

Gross Pathology:

The 120 gram, 7.5 x 6.5 x 4.8 cm adrenal gland was largely replaced by a yellow-gray mass with areas of necrosis.

Contributor: Loma Linda Pathology Group (mrd) **Case No. 3 - November 2006 A**
Loma Linda, CA

Tissue from: Right adrenal gland **Accession #29239**

Clinical Abstract:

A pregnant 21 year old woman was discovered to have elevated serum and urine cortisol levels. A mass was found in her right adrenal gland.

Gross Pathology:

The specimen consisted of a 108 gram, 7.0 x 6.0 x 4.5 cm, well-circumscribed orange-colored mass.

Contributor: Lester Thompson, M.D. **Case No. 4 - November 2006 A**
Woodland Hills, CA

Tissue from: Left adrenal gland **Accession #30274**

Clinical Abstract:

A 63 year old woman had a history of hypertension, which recently had become postural. She presented to the emergency department with epistaxis. During work-up she became diaphoretic and complained of chest pain. A CT scan showed a left adrenal mass.

Gross Pathology:

The resected mass was 2 cm in diameter and had a yellow-red cut surface with areas of degeneration and hemorrhage.

Contributor: Loma Linda Pathology Group (bl) **Case No. 5 - November 2006 A**
Loma Linda, CA

Tissue from: Thyroid **Accession #29237**

Clinical Abstract:

While pregnant, this 30 year old woman was noted to have a thyroid mass. A needle aspiration biopsy was negative and the mass was watched for two years until it increased in size. At that time, a subtotal thyroidectomy was performed.

Gross Pathology:

The left lobe of the thyroid was replaced by a 4.9 x 3.4 x 2.5 cm friable red-tan mass.

Contributor: Phillip Gordon, M.D. **Case No. 6 - November 2006 A**
Winter Haven, FL

Tissue from: Thyroid **Accession #30193**

Clinical Abstract:

A 35 year old woman presented with a fullness in the left side of her neck. A thyroidectomy was performed.

Gross Pathology:

The left lobe was 8.4 grams and 3.5 x 3 x 1.3 cm.

Contributor: Robert James, M.D. **Case No. 7 - November 2006 A**
Ventura, CA

Tissue from: Thyroid **Accession #30293**

Clinical Abstract:

This 60 year old woman had a goiter and cervical lymphadenopathy. A total thyroidectomy was performed. After surgery, her blood calcitonin level was 1550 pg/mL (reference range for females, post-calcium stimulation: 35 pg/mL or less).

Gross Pathology:

The markedly irregular thyroid gland had a 9 x 5 x 5 cm right lobe and a 4.5 x 2 x 2 cm left lobe. The right lobe contained an 8.5 cm diameter rubbery, pale tan tumor.

Contributor: Scott Silveira, M.D. **Case No. 8 - November 2006 A**
Dearborn, MI

Tissue from: Thyroid **Accession #29543**

Clinical Abstract:

For three years, this 38 year old woman had been known to have a right sided thyroid nodule and for one year she had been on medication for hypothyroidism. After symptoms of recurrent laryngeal nerve involvement were noted, she underwent a right hemithyroidectomy.

Gross Pathology:

The 56 gram, 7.0 x 4.5 x 3.0 cm thyroid lobe was replaced by a firm, homogeneous pale yellow tumor.

Special Studies:

AE1/AE3:	positive
TTF-1:	positive
Thyroglobulin:	negative

Contributor: Jin Wang, M.D. **Case No. 9 - November 2006 A**
Hangzhou, People's Republic of China

Tissue from: Thyroid **Accession #30265**

Clinical Abstract:

After two months of noting a neck mass, this 74 year old man developed a hoarse voice and sought medical attention. He was found to have bilateral thyroid enlargement, more severe on the right side.

Gross Pathology:

Within the right thyroid lobe was an 8.5 x 7.5 x 5 cm, encapsulated mass with a gray-white and dark red cut surface showing occasional calcifications and central necrosis.

Special Studies:

Positive: Pancytokeratin

Negative: CD45, CD3, CD20, CD30, CD15, CD 31, Chromogranin, S100, Thyroglobulin, TTF-1

Contributor: Peter Morris, M.D. **Case No. 10 - November 2006 A**
Santa Barbara, CA

Tissue from: Thyroid **Accession #30389**

Clinical Abstract:

After a 6-month course of treatment for thyroiditis, this 18 year old woman was referred for thyroidectomy because of the presence of three thyroid nodules.

Gross Pathology:

The right lobe of thyroid weighed 64 grams and was 6.5 x 6 x 3.3 cm. The cut surfaces showed innumerable pale tan-white nodules ranging from 0.3 to 2.5 cm in greatest diameter. There were no areas of calcification, hemorrhage or cystic degeneration.

Special Studies:

Abnormal cells negative: TTF-1, AE1/AE3, CAM5.2, CK8, CD45

Abnormal cells negative, with positive staining of background lymphocytes: CD3, CD43, CD20

Abnormal cells positive: CD30