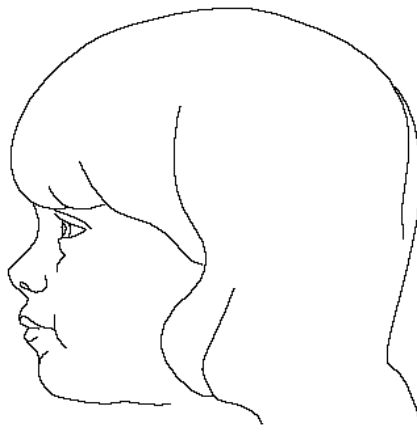


CALIFORNIA  
TUMOR TISSUE REGISTRY

## **“PEDIATRIC TUMORS”**

**Study Cases, Subscription B**

**April 2002**



**California Tumor Tissue Registry**  
**c/o: Department of Pathology and Human Anatomy**  
**Loma Linda University School of Medicine**  
**11021 Campus Avenue, AH 335**  
**Loma Linda, California 92350**  
**(909) 558-4788**  
**FAX: (909) 558-0188**  
**E-mail: [cttr@linkline.com](mailto:cttr@linkline.com)**  
**Web site & Case of the month: [www.cttr.org](http://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: LLUMC Pathology Group (gws)  
Loma Linda, CA**

**Case No. 1 - April 2002**

**Tissue from: Right ovary**

**Accession #29191**

**Clinical Abstract:**

A 10-year-old Hispanic female patient experienced abdominal bloating and increased abdominal girth for three weeks. Then was complaining of pain along her right side accompanied by bloating one week prior to admission. A large abdominal mass was noted during examination. Mass was excised for biopsy.

**Gross Pathology:**

A 1,420 grams specimen consists of 17.5 x 14.0 x 8.4 cm multicystic ovary and attached oviduct that measured 3.2 x 0.8 x 0.6 cm. The cut surface revealed multiple, subcapsular cystic spaces that contained serous fluid. Remainder of the specimen is a heterogeneous, mottled, gray tan to yellow tan mass with multiple botryoid projections.

---

**Contributor: Xuedong Wang, M.D.  
Pasadena, CA**

**Case No. 2 - April 2002**

**Tissue from: Skin**

**Accession #28685**

**Clinical Abstract:**

An ellipse of skin encapsulating a mass in the anal area wedged a 2-day-old female in the birth canal while being delivered. Ultrasound revealed cystic areas that had solid segments within the lesion. Surgical biopsy was performed.

**Gross Pathology:**

The specimen weighed 540 grams and measured 12.5 x 10.0 x 7.7 cm. Skin surface had areas of ulceration surrounded by vascularization. Cut surface revealed a tan/gray lobulated somewhat spongy, cystic mass.

**Contributor: LLUMC Pathology Group (drc)**  
**Loma Linda, CA**

**Case No. 3 - April 2002**

**Tissue from: Spleen**

**Accession #29245**

**Clinical Abstract:**

The 14-year-old male patient was seen in the Emergency Room due to difficulty in breathing and was noted to have a left upper quadrant mass which was presumed to be splenic in origin. The cyst was drained; however, after a few months there was a recurrence of the abdominal enlargement. CT scan confirmed the presence of a cyst in left upper quadrant. Splenectomy was performed.

**Gross Pathology:**

The 822 gram spleen measured 18.0 x 14.0 x 6.0 cm and consists a section that revealed a 12.0 x 10.0 x 5.0 cm serosanguinous fluid filled cyst. The remainder of the spleen parenchyma is dark red, firm, and homogeneous. Attached to the spleen is a 1.5 x 1.5x 1.5 cm brown tan nodule with homogeneous marbled brown tan appearance.

---

**Contributor: Pamela Boswell, d.o.**  
**San Diego, CA**

**Case No. 4 - April 2002**

**Tissue from: Right abdomen/chest area**

**Accession #28907**

**Clinical Abstract:**

A "nodule" was palpated in the right abdomen/chest area of a 7-month-old male. The cyst was excised.

**Gross Pathology:**

The 2.4 x 2.0 x 1.0 cm bosselated, yellow-tan-white soft tissue showed a focally cavitory parenchyma on sectioning. These spongy spaces were interrupted by foci of yellow adipose tissue.

**SPECIAL STUDIES:**

CD31	positive in cells lining spaces
Alcian Blue	positive in matrix
Alcian Blue with hyaluronidase	positive in matrix

**Contributor: LLUMC Pathology Group (bhl)**  
**Loma Linda, CA**

**Case No. 5 - April 2002**

**Tissue from: Sigmoid colon/bladder/omental mass/  
right lower quadrant**

**Accession #29219**

**Clinical Abstract:**

CT scan revealed an abdominal mass in the bowel, omental area and bowel area of a 9-year-old male patient.

**Gross Pathology:**

Opening the bowel revealed three hemorrhagic areas. Bowel passed over one end of the 11.5 x 7.8 x 7.0 cm. yellow to red tan, firm tissue cylinder that was pushing into the serosa. Cut surface of tumor was white to yellow w/ areas of hemorrhage. Omentum mass was 24 grams and 8.5 x 3.5 x 2.5 cm portion of yellow tan adipose with firm center. Right lower quadrant abdominal mass was pink tan, soft tissue fragment that weighed 10 grams and measured 3.8 x 3.3 x 2.1 cm.

---

**Contributor: LLUMC Pathology Group (cz)**  
**Loma Linda, CA**

**Case No. 6 - April 2002**

**Tissue from: Abdominal mass**

**Accession #29047**

**Clinical Abstract:**

A potty-trained 3-year-old Hispanic female was observed by the mother to have decreased urine output, abdominal enlargement and four episodes of enuresis. Urinalysis showed presence of protein, acetone, 0 to 5 white blood cells and 0 to 4 red blood cells. CT scan revealed an abdominal mass that extended into the pelvic area. Incisional biopsy of abdominal mass was performed.

**Gross Pathology:**

The specimen came in 3 sections. First section of the yellow-tan soft tissue measured 1.5 x 1.1 x 0.7 cm. Next was a portion of yellow-tan soft tissue that weighed 25 grams and measured 2.0 x 1.0 x 1.0 cm. The third section was 57 grams and measured 12.0 x 10.0 x 2.5 cm part of the lobular, tan, soft tissue

**SPECIAL STUDIES:**

Desmin	4+diffuse positivity
Vimentin	4+diffuse positivity
S-100 protein	negative (weak background staining)
CAM 5.2 cytokeratin	1-2+ staining of spindled cells at the periphery, probably mesothelial in origin, with no significant staining of the cells of interests.

**Contributor: Nora Ostrzega, M.D.**  
**Sylmar, CA**

**Case No. 7 - April 2002**

**Tissue from: Retroperitoneal tissue**

**Accession #28717**

**Clinical Abstract:**

Parents of this 17-month-old female observed abdominal pains, difficulty in stooling and hematochezia from the patient. Stool appearance was dark brown with soft consistency. An “egg size” abdominal mass was palpated during examination. CT scan and ultrasound revealed a well circumscribed mass with invasion of the bone. Excisional biopsy was performed.

**Gross Pathology:**

This specimen is a 7.0 x 5.0 x 5.0 cm well circumscribed mass. Cut surface showed a well circumscribed tumor, nodular, soft light tan with focal areas of hemorrhage.

---

**Contributor: Gerald E. Dagleish, M.D.**  
**Simi Valley, CA**

**Case No. 8 - April 2002**

**Tissue from: Right flank**

**Accession #29034**

**Clinical Abstract:**

A tumor was found in the right flank of a 14-year-old male who injured the same area from a bike accident six months ago. The tumor was excised for biopsy.

**Gross Pathology:**

Specimen was a firm rubbery tissue with a reddish tan outer surface that measured 5.0 x 4.0 x 3.0 cm. Sections showed pale tan to yellow tissue, with a central cystic space that is 1.5 cm in dimension.

**SPECIAL STUDIES:**

SMA/Desmin	negative
S-100 protein	focal 1+ positivity
CD34/Factor 8	only positive in vascular structures

**Contributor: LLUMC Pathology Group (cz)**  
**Loma Linda, CA**

**Case No. 9 - April 2002**

**Tissue from: Liver**

**Accession #29235**

**Clinical Abstract:**

At the age of two months, this 14-month-old male had a tumor found in his liver. The mass remarkably decreased its size after several months of chemotherapy. Biopsy was performed.

**Gross Pathology:**

The 12.0 x 8.1 x 6.2 cm tumor replaced most of the liver parenchyma. Tumor was solid variegated, with extensive areas of white, hard gritty calcifications, foci of hemorrhage, and few small cystic spaces. A small area of the tumor is tan and soft.

---

**Contributor: Xuedong Wang, M.D., Ph.D.**  
**Pasadena, CA**

**Case No. 10 - April 2002**

**Tissue from: Right colon**

**Accession #29031**

**Clinical Abstract:**

With no history of gastrointestinal disease, this 14-year-old female experienced cramping abdominal pain, mainly on her right side for a week. Colonoscopy showed a large right colon ulcerative mass. Right hemicolectomy was performed.

**Gross Pathology:**

The distal segment of the ileum measured 4.3 cm in length and 4.0 cm in circumference. A pink-tan, firm submucosal nodule that measured 4.5 x 3.5 cm by maximally 1.3 cm in thickness was protruding into the lumen. Cut surface of neoplasm was pale pink-tan, solid and homogeneous. Mucosal lining of the colon was edematous, red tan and glistening.

**SPECIAL STUDIES:**

Actin	focally positive
AE1-3	negative
CAM5.2	negative
Desmin	negative
EMA	negative
CD34	negative
S-100 protein	negative
CD20(L26), UCHL-1/CD68	highlighted the B, T lymphocytes and histiocytes in the background