

Pediatric Pathology Grossing Guidelines

PEDIATRIC SPECIMENS- GENERAL GUIDELINES

When you get a case that should/could be for Pediatric Pathology, show it to the gross room supervisor or page Dr. Goldstein at 31418 before you dissect it. If it is the weekend or late at night, page the on-call attending to discuss the case. If Dr. Goldstein is not available during the day, page the person who is covering Pediatric Pathology, or the appropriate “organ-service” pathologist. It does not matter how trivial you feel the case is, if it is trivial, a simple discussion will confirm your assessment and you can proceed unabated. If, however, it appears not to be trivial, it can be a great learning experience for you and provide better care for your patient.

Special Considerations

UCLA is a participating member of the Children's Oncology Group (COG) and a tissue bank for pediatric neoplasms maintained at the COG Biopathology Center (BPC) at Nationwide Children's Hospital/Ohio State University. Clinical protocols change all the time and the following tumors have or still require special tissue handling: **Wilms Tumor, neuroblastoma, rhabdomyosarcoma, lymphoma, germ cell tumors, and malignant brain tumors**. Many pediatric oncology patients will be randomized into therapeutic protocols. Since the protocols and trial studies are in flux, better to check if any special things need to be done BEFORE proceeding with cases in these categories or other situations that may seem unusual or rare (which occurs in pediatric-aged patients!)

All COG treatment protocols require central pathology review, and in some cases, an expedited rapid review is necessary to determine the correct initial treatment regimen for the child. Therefore, for all children registered on protocol, a complete duplicate set of sequential slides from each block should be ordered at the time of initial histologic processing.

For all pediatric tumors for which there is sufficient material available, after satisfying protocol requirements and our needs (including our TPCL), additional frozen tissue can be submitted to the BPC. TPCL personnel will be available during regular work hours to assist with the procurement of tissue for COG protocols and tissue banking.

Pediatric Pathology Grossing Guidelines

Specimen Procurement Kit (NOTE: This is used sporadically, not all cases!):

A special biology kit for pediatric tumors may be available for pediatric tumors to be sent to BPC. Usually, it is provided by request, typically from the Peds Heme/Onc team relayed to Dr. Goldstein or a service attending, who will contact you in the event this is needed. A kit may be obtained by calling the Peds Heme/Onc Clinical Research Associate (CRA) through their office, x56708 . The kit is equipped with:

1. plastic tubes or aluminum for frozen tissue
2. truncated embedding molds for tumor frozen in OCT
3. formalin containers for fixed tissue
4. charged slides for touch imprints
5. culture tube with media for fresh tumor with separate mailing container
6. pre-printed Federal Express airbill
7. kit instructions, Specimen Transmittal Form, reimbursement invoice, Biohazard sticker, dry-ice label and a Federal Express sticker for Saturday Delivery

Additionally, a laminated wall chart is posted in the cutting area which illustrates how tissue should be processed using this special kit. The details for usage of kit materials is described in the instructions accompanying the kit.

Certain pediatric tumor cases have specialized diagnostic terms and criteria that assist decisions with treatment and protocol enrollment. These include neuroblastoma, Wilms tumor, hepatoblastoma, Ewing sarcoma/PNET and potentially other tumors, such as rhabdomyosarcoma, germ cell neoplasms and leukemias/lymphomas. College of American Pathologists' pediatric tumor synoptic reports should be used, when applicable, and the full CAP protocols may be reviewed for additional information. Synoptic reports should be used for other tumors that occur in children and adolescents. For pediatric solid tumors not signed out by Dr. Goldstein, outside review and consultation may be required based upon a discussion with your signout attending.

Inquiries related to any pediatric tumor are to be directed to:

1. Jeffrey Goldstein, M.D., x57443, Beeper 31418;
2. The Hematopathology and Neuropathology fellow or attending-on-call, for those cases.
3. Peds Hem/Onc Clinical Research Associate (CRA), x56708...
4. The Peds Heme/Onc Fellow at x56708, or the page operator for the fellow on-call
5. Noah Federman p21525 or x56708 for solid tumor service and William May (leukemia/lymphoma) office x56708 pager 10205.

Pediatric Pathology Grossing Guidelines

Chromosomal Analysis

It is advisable to save the tissue for chromosomal and/or molecular analysis of the following neoplastic disorders:

1. Wilms tumor
2. Neuroblastoma
3. Rhabdomyosarcoma (especially alveolar subtype)
4. Ewing's sarcoma/PNET/Desmoplastic small round cell tumor
5. Burkitt and other non-Hodgkin lymphomas
6. Acute leukemia and granulocytic sarcoma
7. Germ cell tumors
8. Malignant brain tumors
9. Synovial sarcoma
10. Any rare, unusual or undiagnosed pediatric tumor

If chromosome analysis is needed on any pediatric tumor, obtain **RPMI medium** from tubes provided by the Flow Cytometry Laboratory in the Surgical Pathology refrigerator. Alternatively, the Cytogenetics Laboratory can provide RPMI media. You may call the Cytogenetics Lab at x41287 and they will provide you with the RPMI media. This lab is open Monday through Friday.