

Pediatric Pathology Grossing Guidelines

MALIGNANT BRAIN TUMORS

For intraoperative handling and submission of tissue for ancillary studies, please review the general pediatric pathology guidelines, and discuss the case with the Neuropathology attending, or with Dr. Goldstein, before proceeding.

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. Many pediatric oncology patients will be randomized into therapeutic protocols. Since the protocols and trial studies often change, better to check if any special things need to be done BEFORE proceeding with dissection and fixation.

Please refer to the Neuropathology Grossing Guidelines for sample dictation and general instructions. College of American Pathologists' pediatric tumor synoptic reports should be used, and the full CAP protocols may be reviewed for additional information.

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.

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

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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.

Please handle brain tumor specimens as per Neuropathology procedures for collection of tissue for cytogenetics and FISH studies, molecular genetics, and TPCL tissue banking.

For children enrolled on COG protocols, snap freeze 100-200 mg of tissue in liquid nitrogen (without OCT) and/or OCT embedded (1 mold – 100mg tissue) If available, 50 mg of wet formalin fixed tissue and 50-200 mg of fresh tissue in tissue culture media are also requested. Other protocol specific requirements will be provided prior to specimen receipt.

Contact the Peds Hem/Onc Clinical Research Associate (CRA), x56708 to arrange for pick-up and distribution of protocol materials.