



Autopsy Brain Examination - General Instructions

The Division of Neuropathology, Department of Pathology and Laboratory Medicine, Children's Hospital of Philadelphia, provides a full range of consultation services for examination of brains obtained at the time of autopsy.

Clinical inquirers should be addressed to Dr. Brian Harding at 267-426-5504. Final reports are faxed and final copies are mailed. Written reports indicate patient information, accession number, slide/blocks examined, stains performed and interpretation. All original materials will be returned to the referring institution upon completion of our studies. Remaining CNS tissues left over after completion of autopsy examination will be discarded unless otherwise requested. Recut H&E stained sections submitted with the case, as well as any additional slides we have prepared in our laboratory, will be retained. For cases in which the entire autopsy brain examination is performed here at CHOP, a set of H&E stained sections will be prepared and returned along with the final report.

How To Send Post Mortem Brain Specimens:

- 1. Complete the Autopsy Brain Examination Requisition Form.** Questions about completing the requisition can be directed to: Dr. Brian Harding at 267-426-5504.

A completed requisition must accompany all requests. It should contain:

- a. The patient name, identification number, date of biopsy, date of birth, male/female, clinical history, etc. as indicated on the requisition form.
- b. Other pertinent history and findings, as well as copies of the imaging studies and/or reports.
- c. Complete billing information for referring institution.

Along with the completed requisition, a copy of the referring pathologist's final systemic and neuropathology autopsy reports, or at least preliminary versions of these reports, must accompany all specimens submitted. If other consultants have previously seen the case, copies of those reports should also be included.

- 2. Guidelines for Autopsy Brain Specimen Preparation:**

If a gross brain examination with cutting and blocking of tissues has already been performed by the referring pathologist/neuropathologist, then the following should be provided:

- a. Complete set of recut H&E stained slides.
- b. Complete set of paraffin blocks.
- c. Complete set of gross brain pictures if these were prepared, ideally in digital format. If digital, these can be burned onto a CD, labeled with the Patient's Name, DOB and specimen ID# (your autopsy case #) and sent along with paperwork for the case.

Occasionally it may be helpful to send original immunohistochemical stained sections or special stains if these have been prepared. If this is necessary, these original sections can also be submitted; they will always be returned promptly to the submitting institution.

If a gross brain examination was performed with cutting (partial or complete) but without blocking of tissues, or if no gross brain examination has been performed, then the following should be provided:

- a. Brain tissue either intact, or whatever sections have been prepared, fixed in formalin.
- b. Complete set of gross brain pictures if these were prepared, ideally in digital format. If digital, these can be burned onto a CD, labeled with the Patient's Name, DOB and specimen ID# (your autopsy case #) and sent along with paperwork for the case.

If fresh frozen tissue was obtained at the time of autopsy, these tissues can also be sent to CHOP as part of the consultation, where clinically indicated. If it is felt to be necessary to obtain fresh frozen brain tissue at the time of an autopsy and you do not have a protocol for doing so, please contact Dr. Brian Harding, Director of Medical Neuropathology, at 267-426-5504 for instructions.

3. Specimen Preparation and Shipping:

GLASS SLIDES AND PARAFFIN BLOCKS

- a. All materials sent by either standard or express mail must be protected from damage by using proper packaging. It is recommended that glass slides be enclosed in plastic slide boxes (available in most laboratories) which hold up to five slides each. Excess space in the box under the lid should be filled with cotton gauze or tissue paper, to avoid breakage due to shaking. The lid of the box should be taped closed. Slide boxes should be surrounded by the relevant pathology reports and/or referral letter), enclosed in a rigid mailing container (either a cardboard box or rigid screw-cap mailing tube), and the space around the materials filled with padding (gauze, paper, or styrofoam). It is suggested that all materials related to the case be shipped in the same container.
- b. The box or cylinder should be tightly closed and sealed with tape. The mailing label should include a return address as well as the name of the referring clinician or pathologists.
- c. Material sent by express mail or from outside the U.S. usually requires identification of the contents. A sample label might read:
Glass slides of Human Tissue for Diagnosis
Non-Infectious
Non-Hazardous
No Commercial Value
- d. For questions for proper shipment of specimens, please contact the carrier.

FIXED TISSUE

- a. Whole or sections brain tissue that has been placed in formalin can be submitted for gross and microscopic examination.
- b. Immerse the tissue in 10% neutral buffered formalin (NBF) in an appropriate sealable container.
- c. Label containers with "Formaldehyde precaution".
- d. Double bag the specimen containers and place into a box with adequate absorbent material in case of leakage.
- e. Securely seal the box.
- f. Indicate on the exterior of the box "Formaldehyde Precaution".
- g. The mailing label should include a return address as well as the name of the referring clinician or pathologists.
- h. Material sent by express mail or from outside the U.S. usually requires identification of the contents. A sample label might read:
Human Tissue for Diagnosis
Non-Infectious
Non-Hazardous
No Commercial Value
- i. For questions for proper labeling and shipment of specimens, please contact the carrier.
- j. Ship at ambient temperature, **DO NOT FREEZE.**

FROZEN TISSUE

- a. Placed the double-bagged specimen into a Styrofoam container (primary container) with adequate dry ice.
- b. Use at least 6-8 pounds dry ice. Use more in the summer months. **DO NOT** use wet ice, or coolants (i.e., Cool Packs).
- c. Make certain the requisition is placed in the box, but on the outside of the double bag.
- d. Securely seal the container and label with "Frozen Tissue - Do Not Thaw".
- e. Material sent by express mail or from outside the U.S. usually requires identification of the contents. A sample label might read:
Human Tissue for Diagnosis
Non-Infectious
Non-Hazardous
No Commercial Value
- f. For questions for proper labeling and shipment of specimens, please contact the carrier.
- g. To avoid delivery problems due to prolonged transit time, please try to ship specimens from Monday to Thursday and never ship a frozen specimen over the weekend.

Shipping address:

Department of Pathology and Laboratory Medicine
The Children's Hospital of Philadelphia
34th Street and Civic Center Boulevard
Main 5NW27, 5th Floor
Philadelphia PA 19104-4318
215-590-1728
215-590-1736 FAX