Nerve Biopsy - General Instructions

The Division of Neuropathology, Department of Pathology and Laboratory Medicine, Children’s Hospital of Philadelphia, sends out nerve biopsies to the Mayo Clinic. Diagnostic reports generated by the Mayo Clinic and will be reported to referring physicians by the Department of Pathology and Laboratory Medicine of Children’s Hospital of Philadelphia. The instructions in this document are based on the Mayo Clinic Nerve Biopsy Protocol.

Clinical inquirers should be addressed to Dr. Mariarita Santi, M.D., Ph.D., Director of Neuromuscular Service at 215-590-3184.

Guidelines for Sending a Nerve Biopsy:

1. Notify in advance the Department of Pathology and Laboratory Medicine that a nerve biopsy will be performed. Nerve biopsies can only be accepted by the Department of Pathology and Laboratory Medicine of Children’s Hospital of Philadelphia from Monday to Friday, 8AM to 4PM. Questions about the procedure can be directed to: to Dr. Mariarita Santi, M.D., Ph.D., Director of Neuromuscular Service at 215-590-3184.

2. Complete both the CHOP Surgical Pathology Request Form and the Mayo Clinic Nerve Biopsy Information Sheet.
   a. Completed requisitions must accompany all requests. These must contain: the patient name, identification number, date of biopsy, date of birth, male/female, tissue source, biopsy site, clinical history, question(s) to be answered and differential diagnosis.
   b. Include other pertinent history and findings, such as neurologic history, imaging findings, family history, genetic testing results, prior biopsy diagnosis and/or treatment history.
   c. Questions about completing these forms can be directed to: to Dr. Mariarita Santi, M.D., Ph.D., Director of Neuromuscular Service at 215-590-3184.

3. Obtain a segment of nerve, ideally 5 cm long, but at least 2.5 cm long, transfix the proximal end with a thin suture needle to which silk or other suture material is attached. Wrap the nerve in gauze slightly moistened with normal saline and deliver immediately, together with the completed CHOP Surgical Pathology Request Form and the Mayo Clinic Nerve Biopsy Information Sheet (link), to the Children’s Hospital of Philadelphia Department of Pathology and Laboratory Medicine where the nerve will be divided and fixed according to the Mayo Clinic nerve biopsy specimen preparation protocol. Failure to handle and deliver the specimen as described above can result in artifacts that preclude diagnostic evaluation.
Guidelines for Handling and Fixation of Nerve Biopsy Specimens (FOR PATHOLOGY ONLY)

1. Please refer to Mayo Clinic Nerve Biopsy Protocol and the following specific modifications for the handling of specimens received in the Children’s Hospital of Philadelphia Department of Pathology and Laboratory Medicine:
   a. If the nerve specimen obtained in pathology is 2.5-3.0 cm long, segment “C” (piece of nerve for isopentane freezing) will be omitted. Segment “A” (Epoxy) will be reduced to 1.5-cm. Segment “B” (Paraffin) will be reduced to 1.0 cm.
   b. For fixation of Segment “A” and “B” refer to Mayo Clinic Nerve Biopsy Protocol.

Guidelines for Shipping of Nerve Biopsy Specimens (FOR PATHOLOGY ONLY)

1. The Department of Pathology and Laboratory Medicine of Children’s Hospital of Philadelphia will be responsible of shipping the nerve specimen to Mayo Clinic. Please refer to the shipping directions found in the Mayo Clinic Nerve Biopsy Protocol.

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