North Bristol NHS Trust

Department of Neuropathology

Title: General Guidelines for Sending a Nerve Biopsy

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GENERAL GUIDELINES FOR SENDING A NERVE BIOPSY

General Guidelines for Sending a Nerve Biopsy Specimen to the Neuropathology Department

Prior Notification:

As for muscle biopsies, all peripheral nerve biopsy procedures should be pre-booked through the Neuropathology Department Office if possible.

Contact 0117 414 2402/3 or email <u>NeuropathologySecretaries@nbt.nhs.uk</u>

A4-sized green Neuropathology Request Forms (NP/MGT/FM/011) are available from the Neuropathology secretaries and a nerve biopsy kit including a petri dish, cling film and request form can be sent.

If in doubt about the choice of biopsy site, please discuss the case with a Consultant Neuropathologist before booking the procedure.

The Biopsy Procedure:

Please note the following guidelines for taking a specimen:

- Normally the sural nerve is sampled. This biopsy specimen should be at least 2cm in length, providing sufficient tissue for frozen sectioning, paraffin wax processing for light microscopy, and electron microscopy.
- The specimen should not be tethered or pinned in any way.
- To prevent desiccation, the specimen(s) should be placed on a nonabsorbent substrate and wrapped in cling-film for transport to the laboratory.
- Ensure that there is **no specimen contact with any fluid**, for example fixative or saline solutions.
- Refer to the appropriate section below for instructions on sending the biopsy samples to the laboratory.
- In some cases, frozen sectioning may not be necessary, in which case the specimen can be fixed locally and transported less urgently to the Department of Neuropathology in Neutral Buffered Formalin. (If none available please notify the lab and can be sent fresh and placed in formalin upon arrival).

Nerve Biopsy Procedures Performed by Other Departments at Southmead Hospital

Please schedule the procedure early enough in the day to ensure the specimen arrives at the laboratory well before the end of the afternoon, allowing time for the specimen to be sampled and prepared immediately after its arrival.

Early on the day of the procedure, contact the laboratory to provide us with an expected delivery time for the specimen. This helps us manage the day's workload. Also, if a delay becomes unavoidable, please keep the laboratory staff informed.

Make arrangements for delivering the specimen to the Neuropathology Department, bearing in mind that if fresh the time elapsing between taking the biopsy and its delivery to the laboratory should be kept to a minimum. If you anticipate a delay in delivery in excess of 15 minutes, liaise with a Consultant Neuropathologist or Biomedical Scientist; **contact the laboratory on x42400**.

Packaging and Transportation	If the biopsy can be delivered to the department within 30 minutes of removal, the specimen can be placed on a piece of dental wax in a Petri dish, or other shallow container with flat bottom.
	If sent via the pneumatic tube system, the specimen should be carefully wrapped in cling film and put in a labelled universal container.
	The specimen container must be clearly labelled and placed in a sealable specimen bag.
	If the specimen is taken out of hours it can be placed in formalin.
Accompanying Information	Completed green Neuropathology request form, placed in the separate pocket of the specimen bag (if this has not previously been sent to the department)
Point of Delivery	Pneumatic tube system – ensure that the department is telephoned (x42400) immediately prior to sending the specimen.
	By porter - Neuropathology Main Laboratory or Cellular Pathology Specimen Reception, Pathology Sciences Building. If delivered to Specimen Reception, ensure the Neuropathology Department is contacted by telephone. Never leave the sample in Specimen Reception without
	speaking to a member of the Neuropathology team . It is imperative that the sample is dealt with in the quickest possible manner if fresh.

Nerve Biopsy Procedures Performed at Other Hospitals

In order to provide a satisfactory diagnostic service for peripheral nerve biopsy specimens taken at locations away from Southmead Hospital, it is important that the following guidelines are followed:

- In addition to booking the procedure with the Neuropathology Department in advance, ensure that a pot of formalin fixative will be available at the time of biopsy. We can provide this, together with appropriate packaging, but allow sufficient time for it to be sent.
- If clinicians have flagged that there is no need to send an unfixed specimen to the Neuropathology Department, please discuss with the consultant neuropathologist on call at NBT regarding clinical need for specimen in

formalin fixative and follow instructions. If it is not possible for the specimen to be delivered personally, it can be sent, either by hospital transport, or by courier, or through the post following the appropriate Royal Mail guidelines regarding packaging and labelling.

• Please notify the laboratory once the specimen has been despatched, to provide us with an expected delivery time. Please ensure if sending fresh the sample reaches that laboratory <u>no later than 4pm (Mon-Friday)</u>.

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Specimen Preparation	Ideally, the excised specimen should be at least 2cm in length. After excision, place it on a piece of dental wax at room temperature.
	If sending fresh tissue:
	Nerve biopsies can be left for up to 1 hour at room temperature after the biopsy was taken, before being dealt with. If you think the sample will take longer to arrive then carry out the following -
	Divide transversely (approx. 2:1 ratio) into two pieces. Place the larger piece (at least 1 cm long) into the formalin fixative which <i>must be at room temperature</i> for paraffin histology and EM. Place the fresh piece into a universal container carefully wrapped in cling film.
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	Cut End
	For Paraffin and EM For Frozen
	If sending fixed tissue only:
	The entire nerve biopsy can be immersed in formalin and sent
Packaging and Transportation	The specimen pots must be clearly labelled and placed in a seal-able specimen bag. Refer to the notes above regarding delivery to the Neuropathology Department.
Accompanying Information	Completed green Neuropathology request form, placed in the separate pocket of the specimen bag (if this has not previously been sent to the department)
Point of Delivery	Neuropathology Main Laboratory or Cellular Pathology and Neuropathology Specimen Reception, Pathology Sciences Building. If delivered to Specimen Reception, ensure the Neuropathology Department is contacted by telephone. Neuropathology has a sample box located on the counter in the Specimen Reception. This box is routinely checked

throughout Neuropathology's hours of business so biopsy samples (in fixative) can be left in here.
Alternatively, specimens from other hospitals can be sent to the Department by post or courier service provided they are appropriately and securely packed. In this case please notify the laboratory that you are sending the sample (contact 0117 424 2400)

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