



PROCEDURE FOR NERVE BIOPSY

Information for Surgeon

We request 24-hour notice to schedule receipt of the specimen at the Neurology Lab, University of Sydney. Please call your hospital Pathology Department in advance of surgery so that transportation can be arranged. In order to give us sufficient time to process the specimen, the courier should reach our lab **no later than 3.30 PM** on same day of the biopsy.

Sural nerve biopsy at ankle level:

1. Compression of calf causes the lesser saphenous vein, which is a very reliable landmark for locating the sural nerve, to distend and to become visible or palpable in the trough between the external malleolus and Achilles tendon. The sural nerve is usually located medial to the vein.
2. For local anaesthesia, infiltrate skin and subcutaneous tissue with 10 cc lidocaine (0.5%) behind the external malleolus.
3. Place incision along course of short saphenous vein.
4. Divide Scarpa's fascia and retract vein, exposing nerve usually located medial to the vein.
5. Secure bleeders and infiltrate the most proximal end of the exposed nerve with 0.2 cc Lidocaine.
6. Free nerve from surrounding soft tissue, preferably with sharp dissection. (Avoid rubbing nerve with gauze – i.e., blunt dissection – and vigorous stretching, to prevent artifacts, especially of the myelin sheath).
7. Ligate nerve at site of Lidocaine injection and cut nerve distal to ligature.
8. A minimum of 2.5 cm length of nerve is required for 5 different fixations.
9. Wrap nerve in gauze slightly moistened with NORMAL SALINE. The gauze should not be damp-soaked wet. Do not immerse nerve in saline or any other liquid. Place the specimen in a water-tight specimen jar. The specimen jar should be transported with wet ice (do not freeze the specimen) in an esky.
10. Please contact our lab to obtain a modified protocol for specimen fixation if the same day delivery cannot be achieved due to the distant location of the referring hospital/lab.