

WHY CHOOSE UNIVERSITY OF UTAH?

- + **Board certified neurologists** specializing in cutaneous innervation
- + **Personal attention**—speak to qualified lab professionals via phone or email
- + **Fast turnaround time** for results
- + **Online access** to clinical reports via EPIC Link
- + **No charge for biopsy kits** and return shipping
- + **Experienced technical staff** and rigorous quality control ensure accurate results

CONTACT US

Cutaneous Nerve Laboratory

Department of Neurology

University of Utah Health

175 North Medical Dr, Rm 3335

Salt Lake City, UT 84132

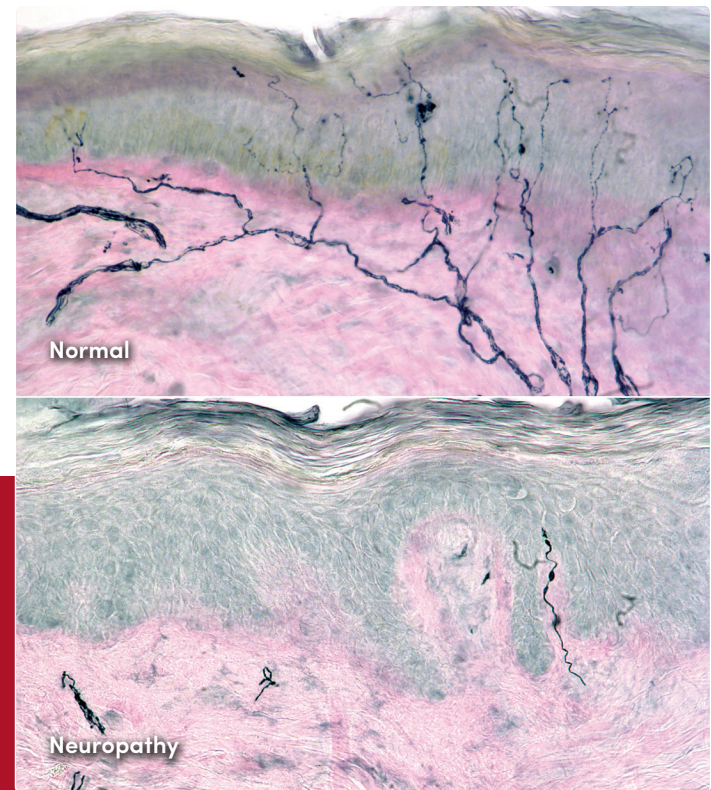
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CUTANEOUS NERVE LABORATORY



WHAT IS SMALL FIBER NEUROPATHY?

Small fiber neuropathy (SFN), or peripheral sensory neuropathy, affects small caliber nerve fibers. This disease most often presents as tingling, burning or numbness in the arms, legs or feet. Patients may also experience sensitivity to temperature (heat or cold) and/or autonomic dysfunction.

Common causes of SFN include: diabetes, HIV, alcohol or drug abuse, and use of neurotoxic agents. Often, the cause of SFN is unknown.

WHY SKIN BIOPSY?

The terminal endings of small nerve fibers in the epidermis are often the first areas to degenerate, with distal to proximal gradients. Small fiber neuropathy may involve single nerves (mononeuropathy) or many nerves (polyneuropathy), often in a length dependent fashion.

Cutaneous nerve evaluation has been used clinically since 1993 and is well tolerated by patients. It is a sensitive, site directed, repeatable technique that reveals both acute and chronic forms of sensory neuropathy.

BIOPSY SITES

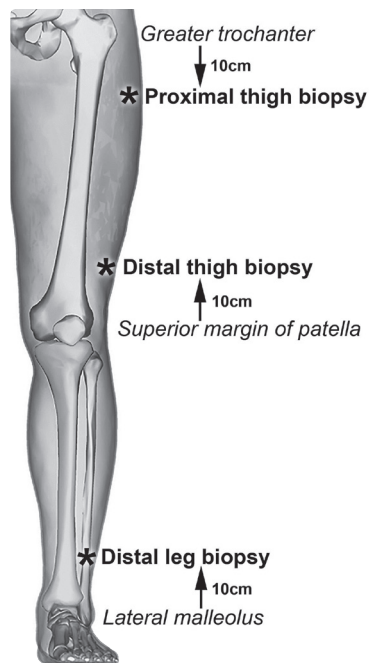
Control data for adults are available at the distal leg, distal and proximal thigh regions.

This test is easily performed in a physician's office or clinic with resultant biopsies being sent to the University of Utah for processing.

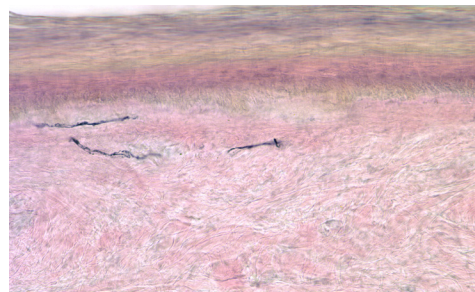
Care must be taken to prevent crushing the biopsy when removing it from the patient.

SKIN BIOPSY RESULTS

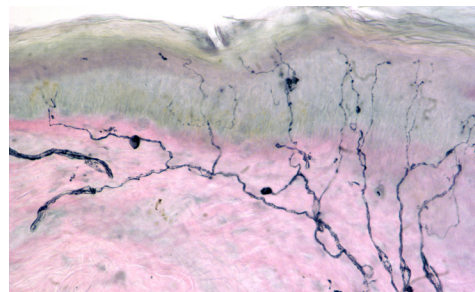
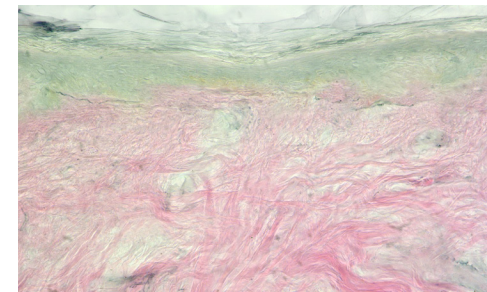
The biopsies are sectioned and stained with anti-PGP9.5 antibody which is a neuronal specific marker. This allows the reading physician to analyze the intra-epidermal sensory nerves. Clinical diagnosis is based on the density of these nerves and a report is generated and sent to the referring physician.



Neuropathy



Normal—Frozen in fix*



Normal—Frozen in FinalFix**
No nerve fiber loss

**Many commercial labs allow shipment of biopsies in aqueous-based fixatives. Up to 40% of these biopsies freeze in shipment, resulting in freezing damage artifact and a substantial loss of nerve fibers. This loss may lead to a false diagnosis of peripheral neuropathy.*

***Our laboratory fixative, tested over time, allows centers to safely ship biopsies in fixative, without freezing damage artifact.*

FinalFix

Proprietary formula specifically formulated to eliminate shipping damage

- ✓ Protect your patient samples
- ✓ A solution that fixes & cryoprotects samples in ONE easy step
- ✓ Same day shipping without compromising sample quality

ORDER A SKIN BIOPSY KIT

Biopsy kits can be ordered by calling the laboratory at **801-585-2461** or via email: biopsy@hsc.utah.edu.

The kits include biopsy tools, specimen vials, a pre-paid return shipping label, and instructional paperwork.

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