

Duke Nerve Center

State-of-the-art program utilizing the latest diagnostic, therapeutic, and surgical techniques to maximize functional recovery



Dedicated care coordination, with referral triage specialists



Rapid access to specialists in peripheral nerve

Overview

We offer comprehensive evaluation, diagnosis, and treatment for patients of all ages with complex peripheral nerve injuries. Using interdisciplinary clinical evaluations supported by advanced imaging and expertly performed nerve studies, our center is able to efficiently and effectively determine the most accurate diagnosis in order to provide a *patient-specific* treatment plan. In cases of severe injury, patients have access to nerve surgeries including decompression, neurolysis, reconstruction, and transfer that are further optimized through muscle and tendon transfers, and bone reconstruction to provide the fullest return of function.

When to Refer

Although nerve injuries are often not life threatening, they can significantly impact a patient's quality of life. Patients should be referred if symptoms persist without improvement at 6-12 weeks from after onset. Delays in referral can affect the optimal window of treatment for nerve injury.

Comprehensive Care

For patients with nerve injury that require ongoing clinical support, Duke offers a novel and unique program. Using in-person visits and remote check-ins, our OT and PT primary nerve health specialists work directly with patients to ensure care and encourage better overall health and wellness through our nerve health programs. In these programs, providers stay connected with patients to address new concerns, health coaching, and rehabilitation pre- and post-operatively. If additional care is needed, we can help expedite referrals to other providers at Duke, including pain management, case management, psychology, nutritionists, smoking cessation, and community support such as vocational rehabilitation.



To refer a patient, log in to Duke MedLink or call 919-613-7797

What We Treat

Our experienced team can diagnose and manage care for your patients, including patient-specific rehabilitation programs and surgery when necessary, for conditions including, but not limited to:

Nerve Compression Syndromes

Nerve procedures that safely locate nerves causing pain, numbness, weakness which are freed from tissues or structures causing compression to prevent continued symptoms

Upper Extremity:

- Thoracic Outlet Syndrome Brachial plexus compression at the neck and chest
- Quadrilateral Space Syndrome Axillary nerve compression
- Cubital Tunnel Syndrome Ulnar nerve compression at the elbow
- Pronator Syndrome Proximal Median Nerve Compression
- Radial Tunnel Syndrome Radial nerve compression in the forearm
- Carpal tunnel Syndrome Median nerve compression at the wrist
- Ulnar Tunnel Syndrome Ulnar nerve compression at the wrist

Lower Extremity:

- Meralgia Paresthetica Lateral femoral cutaneous nerve compression at the hip
- Foot drop Peroneal nerve compression in the leg
- Soleal Sling Syndrome Tibial nerve compression
- Tarsal Tunnel Syndrome Posterior tibial nerve compression

Nerve Tumors

Removal of benign and malignant nerve tumors with microsurgical precision

- Benign Peripheral Nerve Sheath Tumors -Schwannomas
- Malignant Peripheral Nerve Sheath Tumors (MPNSTs)
- Neurofibromas

Traumatic Nerve Injuries

Nerve procedures to repair, transfer, or reconstruct nerves and when needed, use tendon, muscle, and bone procedures to further enhance function

- Avulsion, stretch, or crush following motor vehicle accidents
- Lacerations from knife and blast injuries
- Brachial plexus injuries in adults and children, including brachial plexus birth injuries
- Nerve injuries following surgical procedures

Painful Nerve Conditions

Procedures to relieve nerve pain caused by prior damage, scarring, or inflammation through decompression, excision, implantation (regenerative peripheral nerve interface), repair, reconstruction, or transfer (targeted muscle reinnervation)

- Brachial neuritis
- Entrapment neuropathies
- Inflammatory neuropathies
- Parsonage turner syndrome
- Neuralgic amyotrophy
- Neuromas from prior trauma or amputation
- Targeted muscle reinnervation (TMR)
- Regenerative peripheral nerve interface (RPNI)

Functional Extremity Restoration following Upper Motor Neuron Injuries

Surgeries on nerve, tendon, muscle, and bone to restore function in the upper and lower extremities following:

- Cerebral palsy
- Spinal cord injury
- Stroke
- Traumatic brain injury