### For More Information

- Nath RK, Lyons AB, & Paizi M. (2008). Successful management of foot drop by nerve transfers to the deep peropeal perve. I Reconstr Microsurg, 24(6):419-427.
- http://www.drnathfootdrop.com/resources /case studies.php
- · Contact our offices and ask to speak with the patient liaison.

## Institute Director and Founder, Dr Nath,

specializes in reconstructive microsurgery and is Board-certified by the American Board of Plastic and Reconstructive Surgery. He has extensive experience with nerve reconstruction surgery techniques, and regularly publishes his surgical. techniques and outcomes in medical journals. During his 12 years of practice he has treated several thousand children and adults with problems due to nerve injury.

## The World Comes to Houston

The Institute is located in the Texas Medical Center in Houston, and surgeries are performed at Memorial Hermann Hospital, Patients from all 50 states and several countries around the world have been treated at the Texas Nerve & Paralysis, Dr. Nath provides consultation for surgical options as well as more conservative management of nerve injuries before patients travel to meet him in person.

### Dr. Nath Travels to Meet Patients and Therapists

Dr. Nath travels to several cities every year, providing outreach visits to old and new patients and their therapists. To see the latest schedule or to reserve a slot at an outreach visit see: http://www.drnathclinics.com.

# TEXAS NERVE & PARALYSIS

6400 Fannin St. Suite 2420 Houston, TX 77030

Email: drnath@drnathmedical.com Website: www.dmathmedical.com Toll-Free (866) 675-2200 Telephone (713) 592-9900



NERVE & PARALYSIS



# DR. RAHUL NATH M.D.

ONE OF "AMERICA'S TOP DOCTORS" 2001 - 2008

> Medical Degree from Northwestern University Chicago, USA

Offices in: Dubai, UAE Houston Texas, USA

Medical Licenses in Texas and Dubai

### Foot Drop

Foot drop refers to the loss of the ability to dorsiller, or nist the floot at the anale, causing a floppy foot that hampers walking. Foot drop can be caused by many factors, but most often it is due to an injured personal nerve. When the personnal nerve is damaged, it cannot stimulate the tibialis anterior muscle which is responsible for lifting the foot up at the ankle. Trauma or a tumor anywhere along the nerve can cause foot drop.

There are two methods for surgically repairing the necessary available within six months of the injury. These surgeries offer recovery of voluntary movement so that the patient does not have to use and the surgice device or walk with an awkward gait, and the surgice of the s

# 1. Nerve Transfer Surgery

- Healthy nerves adjacent to the injured nerve can be bridged to the injured nerve, bypassing the area of injury.
- Nerves responsible for the ability to push down the foot, for example, can be branched to also supply power to the ankle for lifting up.

# Nerve Decompression Surgery When the peroneal nerve is stretched but not

 When the peroneal nerve is stretched but not torn a simple nerve decompression surgery can restore function

 Decompression refers to surgically relieving pinching of the nerve, and like a garden hose that has been unkinked, the flow of power to the muscle improves and results in return of function

### Foot Drop Nerve Surgery

- Surgery takes 1-2 hours, and requires 1
- overnight stay in the hospital.

  The incision is 1-3 inches long behind the knee.

#### FOOT DROP SURGICAL STEPS



A.) Surgical incision is made at the popliteal fossa.
 B.) Preoperative anatomy of the tibial and peroneal nerves (common and the branches to superficial and deep peroneal nerves).



Partial transfer of superficial peroneal nerve to deep peroneal nerve. Two fascicle groups of the superficial nerve suffice to neurotize the deep peroneal distal stump.



Partial transfer of tibial nerve to common peroneal nerve.

# Records Needed for Treatment Planning • Candidates must have been injured less than 6

- months before nerve surgery.

   EMG (electromyogram) of the sciatic nerves
- EMG (electromyogram) of the sciatic nerves and muscle distribution.
- and muscle distribution.
   Therapist reports of range of motion in the
- ankle and current function.

  Medical records pertaining to the injury and treatment.

### Recovery and Results

- Stay in Houston is 3-4 Days.
   Return to work in about 1-2 weeks (You will be
- on crutches for about 2 weeks).
- Physical therapy is required during the recovery period.
- Function may return in 6 months to 2 years.
   Up to 50% to 80% of patients may have
  - improved movement.

#### FOOT DROP SURGERY





