

# When to Refer to Pediatric Neurosurgery



From advanced surgical techniques for rare brain tumors, epilepsy or Chiari malformations to urgent interventions for injuries due to trauma or stroke, the Division of Pediatric Neurosurgery at Nationwide Children's Hospital provides the best possible care to all pediatric patients with neurosurgical needs throughout Ohio and surrounding states.

## APPROPRIATE NEUROSURGERY REFERRALS

The following list of criteria may be used by primary care physicians to evaluate appropriate referrals. If you have any questions regarding these or any other conditions not listed that may require referral to Neurosurgery, please contact us at **(614) 722-2010** for a consultation.

- :: Abnormal head shape
- :: Abnormal rate of head growth, either too fast or too slow
- :: Spine fractures
- :: Brain tumors
- :: Tumors of the spine and spinal cord
- :: Spina bifida:
  - Myelomeningocele
  - Tethered spinal cord
  - Cutaneous markers of occult spinal dysraphism:
    - » Fatty subcutaneous mass in the lumbar region
    - » Hairy patch on the back
    - » Dermal sinus
- :: Signs of raised intracranial pressure:
  - Headache, nausea, vomiting, papilledema
- :: Closed head injury with loss of consciousness or concern about skull fracture
- :: Transient neurologic deficit
- :: Progressive neurologic deficit
- :: Chiari malformation on MR imaging
- :: Cerebrovascular disease:
  - Sudden onset headache
  - Intracerebral or subarachnoid hemorrhage
  - Vascular anomalies:
    - » Cerebral aneurysm
    - » Arteriovenous malformation
    - » Cavemous angioma
    - » Moyamoya disease
- :: Brachial plexus injury:
  - Weakness in one arm after trauma
  - Less movement of one arm after birth
- :: Epilepsy that cannot be controlled with medication
- :: Spasticity in patients with cerebral palsy
- :: Back pain with pain radiating down leg
- :: Peripheral nerve injury

### NEUROSURGERY

Nationwide Children's Hospital  
(614) 722-2010  
NationwideChildrens.org  
Keyword: Neurosurgery

## NEUROSURGICAL EXPERTISE

Our team of neurosurgeons values collaborative relationships with primary care physicians and believes in maintaining communication to support ongoing patient care.

### Corey Raffel, MD, PhD - Chief of Neurosurgery



Dr. Raffel is Chief of Neurosurgery at Nationwide Children's Hospital and Professor of Neurological Surgery at The Ohio State University College of Medicine. He has a special interest in the surgical treatment of brain tumors and epilepsy. Dr. Raffel, named to the 2007 list of "Best Doctors in America," is regarded among the leading pediatric neurosurgeons in the country.

### Edward J. Kosnik, MD, FACS, FAAP



Dr. Kosnik is Associate Medical Director of the Department of Surgery and a pediatric neurosurgeon at Nationwide Children's Hospital. He is also a Clinical Professor of Surgery at The Ohio State University College of Medicine. Dr. Kosnik has special interests in the treatment of pediatric brain tumors, hydrocephalus, craniostenosis and various other congenital abnormalities, and spasticity. He was recognized with the Ohio Neurosurgeon of the Year Award by the Ohio State Neurosurgical Society in 2007.

### Ronald Thomas Grondin, MD, MSc, FRCSC



Dr. Grondin is a pediatric neurosurgeon at Nationwide Children's Hospital and an assistant professor of Neurosurgery at The Ohio State University College of Medicine. His clinical interests include the surgical treatment of epilepsy, neuroendoscopic management of hydrocephalus and craniosynostosis, and pediatric neurovascular disease.



*Our program offers rapid scheduling, within one week, for clinic appointments and operations. To make a referral or to receive a consultation on a neurosurgical case, please contact us at (614) 722-2010. For more information on our program, visit [www.NationwideChildrens.org](http://www.NationwideChildrens.org) and enter keyword: **Neurosurgery**.*