

# Pediatric Subspecialists

## Part I: Surgical Subspecialists



The American Academy of Pediatrics (AAP) has created a series of fact sheets about different surgical and medical pediatric subspecialists whom your children may be referred to. The fact sheets are available on the AAP Web site at <http://www.aap.org/family/pedspecfactsheets.htm>.

Following are excerpts from the surgical subspecialty series. If you have additional questions, please talk with your pediatrician.

If your child needs an operation, your pediatrician will refer your child to a pediatric surgical subspecialist. This type of doctor has had special training and is experienced in children's surgical needs from birth to young adulthood.

There are a variety of pediatric surgical subspecialists, including the following:

- Anesthesiologists
- General Surgeons (includes neonatal, prenatal, trauma, and cancer surgeons)
- Neurosurgeons (brain and spinal cord surgeons)
- Ophthalmologists (eye surgeons)
- Orthopedic Surgeons (bone surgeons)
- Otolaryngologists (ear, nose, and throat surgeons)
- Plastic Surgeons
- Urologists (kidney, bladder, and genital surgeons)

Pediatric surgical subspecialists are the best choice if your child needs any type of surgery because they have the most experience in treating children. This comes from their years of specialized training, which includes

- At least 4 years of medical school
- One year of a surgical or medical internship
- Three to 5 years of residency training in their specialized area of surgery
- One to 2 additional years of fellowship training in their *pediatric* surgical specialty

### Pediatric Anesthesiologist

If your child has an illness, injury, or disease that requires surgery, a *Pediatric Anesthesiologist* has the experience and qualifications to assist in the treatment and to help ensure a successful surgery for your child.

A pediatric anesthesiologist is a fully trained anesthesiologist who has completed at least 1 year of specialized training in anesthesia care of infants and children. Most pediatric surgeons deliver care to children in the operating room along with a pediatric anesthesiologist. Many children who need surgery have complex medical problems that affect many parts of the body. The pediatric anesthesiologist is best qualified to evaluate these complex problems and plan a safe anesthetic for each child. Through special training and experience, pediatric anesthesiologists provide the safest care for infants and children undergoing anesthesia.

### What types of treatments do pediatric anesthesiologists provide?

Pediatric anesthesiologists are primarily concerned with the anesthesia, sedation, and pain management needs of infants and children. Pediatric anesthesiologists generally provide the following services:

- Evaluation of complex medical problems in infants and children when surgery is necessary
- Planning and care for children before and after surgery
- A nonthreatening environment for children in the operating room
- Pain control, if needed, after surgery, either with intravenous (IV) medications or other anesthetic techniques
- Anesthesia and sedation for many procedures out of the operating room, such as magnetic resonance imaging (MRI), computed tomographic (CT) scan, and radiation therapy

### Pediatric Surgeon

If your child has an illness, injury, or disease that requires surgery, a *Pediatric Surgeon* has the experience and qualifications to treat your child.

Surgical problems seen by pediatric surgeons are often quite different from those commonly seen by adult or general surgeons. Special training in pediatric surgery is important.

### What types of treatments do pediatric surgeons provide?

Pediatric surgeons diagnose, treat, and manage all children's surgical needs, including the following:

- Surgical repair of birth defects
- Serious injuries that require surgery (liver lacerations, knife wounds, or gun shot wounds)
- Diagnosis and surgical care of tumors
- Transplantation operations
- Endoscopic procedures (bronchoscopy, esophagogastroduodenoscopy, colonoscopy)
- All other surgical procedures for children

### Pediatric Neurosurgeon

If your child has problems involving the head, spine, or nervous system, a *Pediatric Neurosurgeon* has the experience and qualifications to treat your child.

Neurosurgical problems seen by pediatric neurosurgeons are often quite different from those commonly seen by adult or general neurosurgeons. Special training in pediatric diseases as they relate to pediatric neurosurgical diseases is important. Pediatric neurosurgical problems often are present for life. Pediatric neurosurgeons have a special and long-standing relationship with their patients. Children with nervous system problems frequently require ongoing and close follow-up throughout childhood and adolescence.

### What types of treatments do pediatric neurosurgeons provide?

Pediatric neurosurgeons diagnose, treat, and manage all children's nervous system problems and head and spinal deformities, including the following:

- Problems and injuries of the brain, spine, or nerves
- Gait abnormalities (spasticity)
- Birth injuries (weakness of arms and legs)

### Pediatric Ophthalmologist

If your child has an eye problem, is having difficulty with a vision screening exam, or needs surgery for an illness affecting the eyes, a *Pediatric Ophthalmologist* has the experience and qualifications to treat your child.

### What types of treatments do pediatric ophthalmologists provide?

Pediatric ophthalmologists can diagnose, treat, and manage all children's eye problems. Pediatric ophthalmologists generally provide the following services:

- Perform eye exams.
- Prescribe eyeglasses and contact lenses.
- Perform surgery, microsurgery, and laser surgery of the eyes (for problems like weak eye muscles, crossed eyes, roving eyes, blocked tear ducts, and infections).
- Diagnose problems of the eye associated with diseases of the body, such as diabetes or juvenile rheumatoid arthritis (JRA).
- Diagnose visual processing disorders.
- Care for eye injuries.

### Pediatric Orthopedic Surgeon

If your child has musculoskeletal (bone) problems, a *Pediatric Orthopedic Surgeon* has the experience and qualifications to treat your child.

### What types of treatments do pediatric orthopedic surgeons provide?

Pediatric orthopedic surgeons diagnose, treat, and manage children's musculoskeletal problems, including the following:

- Limb and spine deformities (club foot, scoliosis)
- Gait abnormalities (limping)
- Bone and joint infections
- Broken bones

### Pediatric Otolaryngologist

If your child needs surgical or complex medical treatment for illnesses or problems affecting the ear, nose, or throat, a *Pediatric Otolaryngologist* has the experience and qualifications to treat your child. Many general otolaryngologists provide surgical care for children. However, in many areas of the country, more specialized otolaryngology care is available for children.

### What types of treatments do pediatric otolaryngologists provide?

Pediatric otolaryngologists are primarily concerned with medical and surgical treatment of ear, nose, and throat diseases in children. Pediatric otolaryngologists generally provide the following services:

- Diagnosis and treatment of ear, nose, and throat disorders, and head and neck diseases
- Surgery of the head and neck, including before- and after-surgery care
- Consultation with other doctors when ear, nose, or throat diseases are detected
- Assistance in the identification of communication disorders in children

### Pediatric Plastic Surgeon

If your child needs surgery to fix a deformity caused by a birth defect, injury, illness, or tumor, a *Pediatric Plastic Surgeon* has the experience and qualifications to treat your child.

### What types of treatments do pediatric plastic surgeons provide?

Pediatric plastic surgeons generally provide treatment for the following:

- Birth defects of the face and skull (cleft lip and palate, misshapen skull)
- Birth defects of the ear (protruding or absent ear)
- Birth defects of the chest and limbs (misshapen breasts, webbed fingers)
- Injuries to the head, face, hands, arms, and legs
- Birthmarks and scars
- Burns
- Cosmetic surgery to improve a child's self-image

### Pediatric Urologist

If your child has an illness or disease of the genitals or the urinary tract (kidneys, ureters, and bladder), a *Pediatric Urologist* has the experience and qualifications to treat your child.

A pediatric urologist usually devotes a minimum of 50% of his or her practice to the urologic problems of infants, children, and adolescents.

### What types of treatments do pediatric urologists provide?

Pediatric urologists are surgeons who can diagnose, treat, and manage children's urinary and genital problems. Pediatric urologists generally provide the following services:

- Evaluation and management of voiding disorders, vesicoureteral reflux, and urinary tract infections that require surgery
- Surgical reconstruction of the urinary tract (kidneys, ureters, and bladder), including genital abnormalities, hypospadias, and intersex conditions
- Surgery for groin conditions in childhood and adolescence (undescended testes, hydrocele/hernia, varicocele)

#### Remember

To learn more about pediatric subspecialists, visit the AAP Web site at <http://www.aap.org/family/pedspecfactsheets.htm>.

#### From your doctor

