Pediatric Grand Rounds

FRIDAY, APRIL 14, 2017
8:00 a.m. Storm Eye Auditorium
Topic: “EBM Project/Pediatric Academic Society Abstract Review”
Speakers: Pediatric Residents
Lauren Lucas, MD
Patricia Dias, MD
Jordan Newman, MD
Sarah Yale, MD
Jonathan Mathis, MD
Laurie Graves, MD

FRIDAY, APRIL 21, 2017
8:00 a.m. Storm Eye Auditorium
Topic: “Connections and Converging Technology: 350 Years of Progress in Pulse Oximetry”
Speaker: Donald H. Arnold, MD, MPH
Associate Professor, Pediatrics and Emergency Medicine
Vanderbilt University School of Medicine

New Scoliosis Treatments for Kids of All Ages

Scoliosis is a lateral deviation or deformity of the spine that can take on many different shapes and sizes. The different etiologies of scoliosis are congenital, neuromuscular, or idiopathic. Congenital scoliosis is a failure of formation or segmentation of the vertebra, which may result in a rapidly progressive deformity. Neuromuscular scoliosis conditions include cerebral palsy, muscular dystrophy, and myelomeningocele.

For those patients who is etiology is unknown, they are generally classified as having idiopathic scoliosis. Idiopathic scoliosis can develop during infancy, childhood, or in adolescence. The very youngest patients with infantile scoliosis can be treated with serial casting programs to derotate the thorax to correct the spinal deformity. The figures below show an infantile scoliosis patient who received a cast and had complete resolution of her scoliosis.

In those school-aged children with substantial deformity, newer technology such as growing rods or titanium prosthetic ribs, maybe used to correct deformity and still allow the child to grow. The figures to the right show a prosthetic titanium rib and a growing rod. The newest technology allows surgeons to magnetically lengthen the growing rods in the office, so that repeat trips to the operating room can be avoided.

Once the child reaches the termination or near the end of their growth, a spinal fusion with instrumentation is indicated to ensure that the deformity does not progress into adult life. The figures to the left show a child with adolescent idiopathic scoliosis who underwent posterior spinal fusion and instrumentation.

Here at MUSC, Dr. Matthew Dow and Dr. Robert Murphy utilize these advanced techniques to treat children of all etiologies and ages of scoliosis. We have a comprehensive spinal deformity program that encompasses physical therapists, nurse practitioners, and nursing staff to ensure that the patients receive the highest level of world-class care here in Charleston.

For a consultation with one of our pediatric orthopaedists, please call 843-876-0111. We have offices conveniently located in West Ashley, North Charleston, and Mount Pleasant, in addition to our office in downtown Charleston.