

Ann & Robert H. Lurie Children's Hospital of Chicago  
Division of Pediatric Otolaryngology

**Overview:**

The Division of Otolaryngology is a national leader in the field of pediatric disorders of the ear, nose, throat, and head and neck in infants and children. Our research focuses on airway, feeding and swallowing disorders, sinusitis, head and neck masses, congenital and acquired problems of the ear and hearing. An area of special interest of the Division of Otolaryngology is obstructive sleep apnea (OSA) in children, where collaboration is taking place with other divisions at Lurie and Northwestern University Feinberg School of Medicine. Study of children who have received cochlear implants is another area of collaborative research. The Pediatric Cochlear Implant Research Group of Northwestern is comprised of members of Northwestern Feinberg School of Medicine and the Department of Communication Sciences and Disorders.

**Clinical Studies:**

Title: *Metabolic alterations in children with obstructive sleep apnea*

Condition: Obstructive Sleep Apnea

Purpose: To evaluate the association of alterations in metabolic variables, including insulin resistance, to OSA in obese children as well as adolescent population.

Status: A part of this study has been published and the remaining is ongoing. (IRB approved)

Title: *Short Sleep and Metabolic Alterations in Obese Children with Obstructive Sleep Apnea*

Condition: Obstructive Sleep Apnea

Purpose: To analyze the association between sleep duration, obstructive sleep apnea (OSA) severity, and metabolic variables in obese children.

Status: A part of this study is under communication and the remaining is ongoing. (IRB approved)

Title: *Clinical indicators that predict the presence of moderate to severe obstructive sleep apnea*

Condition: Obstructive Sleep Apnea

Purpose: To develop a questionnaire to identifying children at elevated risk for OSA.

Status: Ongoing (IRB approved)

Title: *Access to care for children with symptoms of sleep disordered breathing*

Condition: Sleep Disordered Breathing

Purpose: To identify factors associated with access to Otolaryngology and Sleep facility

Status: Study design in preparation (In development)

Title: *Correlation of Metabolic variables and inflammatory markers with Obstructive Sleep Apnea and its severity*

Condition: Obstructive Sleep Apnea

Purpose: To investigate if OSA and its severity correlate with the variations in metabolic panel, insulin resistance in children with OSA

Status: Ongoing (IRB approved)

Title: *Improvement in Metabolic variables after Tonsillectomy and Adenoidectomy in patients with Obstructive Sleep Apnea*

Condition: Obstructive Sleep Apnea

Purpose: To see if Tonsillectomy and adenoidectomy (T&A) improves metabolic panel and insulin resistance in children with OSA

Status: Ongoing (IRB approved)

Title: *Current Utilization of Balloon Dilatation versus Endoscopic Techniques in Pediatric Sinus Surgery versus Endoscopic Techniques in Pediatric Sinus Surgery*

Condition: sinusitis

Purpose: to determine current trends in utilization of balloon-sinuplastomy in the management of children with chronic sinusitis.

Status: Ongoing (IRB approved)

Title: *Postoperative Observation of Children after Endoscopic Type 1 Posterior Laryngeal Cleft Repair*

Condition: congenital laryngeal cleft

Purpose: study of perioperative operative treatment of children who undergo surgical repair of post laryngeal cleft

Status: Ongoing (IRB Approved)

Title: *Pediatric peritonsillar abscess infections and surgical treatment in U.S. children, 2000-2009*

Condition: peritonsillar abscess

Purpose: Study of nationwide database to determine the current demographics of children who become infected with a peritonsillar abscess and to review current treatment protocols and outcomes

Status: Ongoing study (IRB Approved)

Title: *Antibiotic Prescriptions for Upper Respiratory Tract Infections in Children*

Condition: upper respiratory tract infection

Purpose: Study of current national trends in antibiotic use

Status: Ongoing (IRB Approved)

Title: *Pediatric temporal bone fractures and hearing loss*

Condition: temporal bone fracture

Purpose: A cost benefit analysis of management of children treated for traumatic temporal bone fracture

Status: Ongoing study (IRB Approved)

Title: *Outcomes of bone conduction implantation (Sophono) in children with aural atresia*

Condition: Conductive hearing loss in aural atresia

Purpose: Evaluation of clinical outcomes of this transcutaneous surgical implant and to describe surgical technique modification in pediatric population.

Status: ongoing (IRB approved)

Title: *Baha Attract Osseointegration Implantation*

Condition: Conductive hearing loss in aural atresia

Purpose: Study of clinical outcomes of this transcutaneous implant in children with aural atresia, with modifications in technique for patients with microtia

Status: Ongoing (IRB approved)

Title: *Endoscopic ear surgery at a tertiary care children's hospital*

Condition: Ear disorders requiring surgery

Purpose: Study of outcomes and advantages of application of endoscopic surgery to otologic surgery in the pediatric population

Status: under IRB review

Title: *Management of acute complicated mastoiditis at an urban tertiary-care pediatric hospital*

Condition: mastoiditis

Purpose: Review of patient characteristics, management and outcomes of acute mastoiditis

Status: ongoing (IRB approved)

Title: *Cerebral Anatomical and physiological factors as predictors for cochlear implant outcomes*

Condition: pediatric cochlear implantation

Purpose: Study of multiple factors including brain structure and function based upon magnetic resonance imaging to predict cochlear implant auditory and spoken language outcomes

Status: ongoing (IRB approved)

Title: *Cochlear implantation in children status post organ transplantation*

Condition: pediatric cochlear implantation

Purpose: Outcomes and complications of children with organ history of transplant who receive a cochlear implant

Status: ongoing (IRB approved)

Title: *Cochlear implantation in Children with Autism Spectrum Disorder*

Purpose: Outcomes of CI in children who have ASD

Status: ongoing (IRB approved)