UTAH Otolaryngology UPDATES

The University of Utah
Division of Otolaryngology

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A Message from the Chairman

The University of Utah continues an aggressive building campaign that has many positive effects on Otolaryngology Head & Neck Surgery. The ground breaking for the third phase of the Huntsman Cancer Center has recently taken place and will add additional clinical space. Also, the University of Utah Hospital expansion is in the final phases of completion. This addition is planned to be open in July of 2009 and will accomplish the conversion of all patient rooms at the University Hospital to a private room format. The operating rooms are also being remodeled. For those of you who are Alumni from our Program, you will likely remember the ENT Operating Room #8. I have operated in that room for the past fifteen years and believe it is the smallest room in the operating room complex. I am happy to announce that Operating Room #8 no long exists. The operating rooms are currently being remodeled and Otolaryngology will soon be assigned two large operating theaters. We are looking forward to this upgrade.

I am also pleased to announce the Otolaryngology clinic space is undergoing a major remodel. We will be expanding into the clinic space vacated by Neurosurgery. This will more than double our existing space and allow us to provide much of our clinical services in one location. This clinic ex-

(Cont p2-3)

In this issue

The Voice Disorders Center at the University of Utah

The University of Utah Voice Disorders Center is a multi-disciplinary collaboration between laryngology, speech-language pathology, and vocal pedagogy. The Voice Disorders Team is focused on the evaluation and treatment of voice and laryngeal based breathing disorders, research, and community education. The Center also works with neurology, gastroenterology, pulmonology, and other specialties within the University of Utah Health Sciences Center. This multi-disciplinary team has several areas of interest in clinical and basic science research. Currently, we have received funding to investigate the treatment for presbylaryngis, explore the epidemiology of spasmodic dysphonia, and establish diagnostic markers of superior laryngeal nerve paralysis. (Cont p2)

Accomplishments

Dr. Kristina Tansvatdi gave an oral presentation titled Cross-linked hydrogel and polyester resorbable ventilation tubes in a Chinchilla model. (Cont p2)

PEDS OTO CORNER

CASE HISTORY:

A six-year-old male presented to the hearing assessment clinic with progressively worsening hearing loss. Their primary care physician initially diagnosed bilateral serous otitis media six months ago. An audiogram illustrated bilateral thresholds of 40 dB at 500, 1000, 2000 and 4000 Hz. He had the child reassessed monthly then referred when the hearing did not improve. (Cont p3)

Spotlight on alumni

Matt Jepsen, MD

I finished my residency in 2003 with the distinction of having the division grow exponentially. From the era of Haller, Hoffmann and Kelly to Mobley and Muntz (and everyone in between) (Cont p3)

The Voice Disorders Center at the University of Utah cont.

In collaboration with bioengineering, and with NIH support, we are studying the use of electrode arrays in laryngeal paralysis. Community education efforts include an annual Singer's Workshop and frequent educational lectures to various groups interested in vocal health. In 2008, we hosted the National Spasmodic Dysphonia Association conference in Salt Lake City.

Voice disorders seen at the Center include benign vocal fold lesions (polyps, cysts, nodules), papilloma, laryngeal paralysis/paresis, vocal fold hemorrhages, vocal fold bowing, spasmodic dysphonia and muscle tension dysphonia. Laryngeal airway disorders such as functional stridor, subglottic stenosis, and exercise induced paradoxical vocal fold motion are also commonly seen. The multi-disciplinary team approach provides well-coordinated and complete care, including voice care for singers and professional voice users. Rigid and flexible laryngostroboscopy are used to assess vocal fold vibratory characteristics that can not be observed with traditional laryngoscopy. Marshall Smith, MD, laryngologist, provides many surgical and in-office procedures that are not available elsewhere in the Intermountain West. These include laryngeal re-innervation, vocal fold phonomicrosurgery for benign lesions, in-office vocal fold medialization injection, in-office laser treatment of vocal fold varices, and laryngeal electromyography. Many patients seen at the Voice Disorders Center do not require surgery. They receive medical care, voice therapy and singing voice rehabilitation. Speech language pathologists, including Cara Sauder, MA, Dan Houtz, MA, Nelson Roy, PhD, and Kristine Tanner, PhD., are trained to provide many types of therapy for all voice disorders responsive to behavioral intervention and have excellent success rates with many types of disorders. Faye Muntz, MM, a singing voice specialist, provides voice rehabilitation as a primary means of treatment, and post-operative care. The Voice Disorders Center is an internationally recognized center for evaluation and treatment of all laryngeal disorders, basic and clinical research, and a valued community educational resource.

Accomplishments cont.

Dr. Higgins presented a poster on A systematic review of topical vasoconstrictors in pediatric sinus surgery. Dr. Richard Orlandi gave an oral presentation titled Immunologic Response to Fungus is not Uniformly Associated with Rhinosinusitis. All these presentations were given at last fall's American Academy of Otolaryngology- Head and Neck Surgery meeting. Dr. Abdel-Aziz Elsherif will be presenting a poster titled Airway Obstruction May be a Harbinger of a More Complicated Clinical Course for Pediatric Retropharyngeal Abscesses. Dr. Ryan McCool will be presenting a poster titled Management of Pediatric Adenotonsillectomy-Associated Airway Fire. Dr. Stanley Kimball will be presenting a poster titled A Review of Esophageal Disc Battery Ingestions and a Protocol for Management. Dr. Thomas Gifford will be giving an oral presentation on Development of Cytomegalovirus Mediated Sensorineural Hearing Loss in a Guinea Pig Model. All these presentations will be given at the upcoming American Society of Pediatric Otolaryngology meeting in Seattle. Dr. Gifford's presentation is especially noteworthy since only 61 of 149 submissions were accepted for a podium presentation.

A Message from the Chairman cont.

pansion will also provide a larger area for staff support and storage. We are adding a third audiology booth and expanding our hearing aid services. This change not only enhances the environment for us to provide these services but also provides room for us to continue to grow.

Recently, we have had several foreign visitors. Abdel-Aziz Elsherif, M.D., from Al-Azhar University, Egypt, spent nine months with us in a Post-Doctoral Fellowship position. His research culminated in his presentation, "Should All Newborns Who Undergo PDA Ligation Be Examined For Vocal Fold Mobility?" at the annual meeting of the American Society of Pediatric Otolaryngology. He won first place for this presentation. Dr. Elsherif has returned to his Faculty position at Al-Azhar University.

Adam Gorrie is a medical student from the University of Aberdeen, in Scotland and is currently on a six week rotation with us. Besides observing surgery and patient care, he is performing research with the Department of Radiology investigating vascular loops in the cerebellopontine angle. Adam has enjoyed being in Utah, but says it's much different than Scotland. He did say he was thankful he could do a rotation in a foreign country and not have to learn a new language.

Dr. Ricardo Aburto will be visiting our division for one month this year. He is from Vina del Mar, Chile and will be observing both pediatric and adult cases while he is here. He has visited our division several times.

The 2008 Steven Gray M.D. Research Award was awarded to Joshua Yorgason, M.D. He received his award for his presentation: "Can Lortab Cause Hearing Loss? Lessons From Radio Personalities And Mice". I am also pleased to announce the winner of the 2008 Leland P. Johnson Resident Teaching Award. This awardee is chosen by a popular vote of the Residents, and this year it is Frank Warren, M.D.. As an educator one can receive no higher award.

Please mark your calendars for the Annual Otolaryngology Update. This year it is held on Friday, June 19, and Saturday, June 20, 2009. It is a day and one-half of continuing medical education. The guest speakers for 2009 are: Andrew Blitzer, MD, from the New York Head and Neck Institute, the Steven Gray Memorial Lecturer; Terry Day, MD, from the Medical University of South Carolina, the David Dolowitz Memorial Lecturer; and Richard Miyamoto, MD, from Indiana University Medical Center, the James Parkin Lecturer. We plan an exciting and informative program and hope to see you there.

Spotlight on alumni cont.

I learned from the best! Monique and I loved Utah and it was hard to leave. I spent one more year in a facial plastics fellowship with Dr. Sullivan in Columbus, OH before joining a practice in Minneapolis.

We are a department of eight, soon to be nine, physicians and two PA's. We provide care for a large multispecialty group called 'Park Nicollet' that has grown to over 500 providers based in the west suburbs of Minneapolis. My practice interests are obviously facial plastics but also skin cancer reconstruction and melanoma surgery, head and neck cancer and sinus surgery. One exciting development has been our group's selection to have a yearly rotation with one otolaryngology resident from the U of Minnesota.

Monique and I and our two children Sarah(6) and Sam(4) live in the suburb city of Edina, known for its excellent schools and close proximity to downtown Minneapolis. Life in Minnesota revolves around the lakes in the summer and snow sports in the winter. It's a great place to call home.

PEDS OTO CORNER cont.

The child's mother had noticed that he was not responsive to most sounds around him. The television had to be kept at a very high volume. Teachers at preschool had observed that the child was increasingly frustrated by his inability to hear. He could not hear the telephone and did not notice when a fire alarm went off. There was no history of recurrent otitis media or a family history of hearing loss. Examination was notable for the bilateral serous otitis media. An audiogram revealed bilateral severe mixed hearing loss with 60 dB thresholds. His work-up for the sensorineural hearing loss included an ophthalmologic evaluation, genetic testing and a temporal bone CT scan which were normal. He subsequently under-

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PEDS OTO CORNER cont.

went bilateral myringotomy and tube insertion and a middle ear exploration. Findings were notable for bilateral mucoid serous fluid and no evidence of a perilymphatic fistula. His postoperative course was unremarkable, and he is currently hearing much better with hearing aids.

COMMENTS:

Sensorineural hearing loss should be considered in any child with hearing loss. This tenet is often forgotten because of the greater frequency of serous otitis media in children. The frequency of newborn and infant hearing loss is estimated to be 1.5-6.0 per 1000 births and is more prevalent than phenylketonuria and congenital hypothyroidism combined. The primary care physician and otolaryngologist will see children with unrecognized sensorineural hearing loss. Early detection is critical to prevent future speech and behavioral problems. Data have shown that children with even mild to moderate hearing loss have problems with speech and language acquisition1-2.

When this child developed the sensorineural hearing loss is impossible to determine. Rarely, one can develop such a loss from an otitis media. It is conceivable that the sensorineural loss was present since birth and did not become apparent until the serous otitis media developed to worsen his hearing loss. The etiology for the loss is also unknown. A nonsyndromic genetic cause, and/or inner ear anomalies are becoming increasingly recognized as potential etiologies with the greater availability of genetic testing and high resolution MRI imaging.

A multidisciplinary hearing assessment clinic was developed at Primary Children's Medical Center in June 2006 to provide family's access to the many pediatric subspecialists needed for treatment. Each member of the team provides important insight to the cause and treatment of hearing loss. Drs. Steven Bleyl and John Carey are pediatric geneticists and counsel families on the rapidly developing role of genetic testing. A genetic cause is generally believed to account for about 50% of hearing loss. Adrienne Jackson is a pediatric audiologist who can conduct the myriad of hearing tests available or help child effectively use hearing aids when indicated. Dr. Albert Park is a pediatric otolaryngologist (ENT) who is involved in detection of middle ear fluid, the role of imaging and surgical treatment of hearing loss. Primary care physicians, ophthalmology (eye), early intervention, and social services participate in this clinic in a more informal manner but provide crucial input for patient management.

The team reviews the child's medical history and works with the referring physician or audiologist to develop a treatment plan and find a cause of the hearing loss. Our hope is that this resource will help families find the best treatment for their child's hearing loss, speed the evaluation process and establish research opportunities to improve hearing outcomes and care. Appointments can be made by calling the Primary Children's ENT clinic number (662-1740).

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