

Vírtual Alumní Day & Resídent Graduatíon Symposíum

June 18, 2021



Department of Otolaryngology-Head Neck Surgery University of Illinois Chicago School of Medicine



Department Head

Barry Wenig, MD, MBA, MPH, FACS Mario D. Mansueto Professor

Moderator

Heather M. Weinreich, MD, MPH Assistant Professor, Otolaryngology – Head and Neck Surgery

Judges

UIC ENT Faculty, Sharon Cushing, MD, & Taher Valika, MD

Burton J. Soboroff, MD Lecturer Sharon Cushing, MD

Alumnus of the Year

Taher Valika, MD

Supported By

Burton J. Soboroff, MD Lectureship Fund

Burton J. Soboroff, MD



Dr. Burton J. Soboroff, a beloved physician and teacher in the UIC Otolaryngology Department, established the endowment that makes this Lectureship and Resident Research Symposium possible. His dedication to this department as well as the practice of Otolaryngology will be remembered for years to come. It is an honor for us to have this day to recognize the contributions of this great individual.

Dr. Soboroff was educated at Northwestern University where he was Phi Beta Kappa, and received a Bachelor of Science degree in 1938. He attended Northwestern University Medical School, receiving his M.D. degree in 1942.

Dr. Soboroff then interned at Cook County Hospital from 1941-43; Residency at the Eye and Ear Infirmary at the University of Illinois College of Medicine and Cook County Hospital from 1946-1949 and Residency in Head and Neck Surgery at Hines VA Hospital in 1949-1951. He served in the Air Force Medical Corps from 1943-46.

He became a Senior Attending in the Department starting in 1951 and was Interim Department Head in 1975-76 and 1977-79. After his retirement in 1988, at the age of 70, he held an Emeritus position in this department until he passed away in 2004.

The Burton J. Soboroff Lectureship was established in 2001 and continues to be funded through gifts from former residents, colleagues, friends and admirers. We honor Dr. Soboroff and his contributions through this Lectureship.

The 20th Soboroff Lectureship

"Restoration of 3-D Perception in Children after Labyrinthine Implantation: Auditory and Vestibular Effects" Sharon Cushing, MD



Dr. Sharon Cushing is a full time paediatric otolaryngologist at The Hospital for Sick Children in Toronto, Canada, and an Associate Professor and Clinician Investigator in the Department of Otolaryngology Head and Neck Surgery at the University of Toronto. She is the Director of the Cochlear Implant Program at the Hospital for Sick Children. Dr. Cushing has a clinical and surgical interest in disorders of the external, middle and inner ear, including hearing loss and vestibular dysfunction. Her research interest include vestibular and balance function and dysfunction in children, and its association with hearing loss and cochlear implantation.

Dr. Cushing completed her undergraduate degree at Queen's University in Kingston, followed by Medical School and Residency training in Otolaryngology Head and Neck Surgery at the University of Toronto. In addition, Dr. Cushing completed a Master's in Science degree examining vestibular function and balance in children with hearing loss through the Surgeon Scientist Program at the University of Toronto. She completed her fellowship training in Paediatric Otolaryngology at Seattle Children's Hospital prior to returning to Sick Kids in Toronto.

Alumnus of the Year Taher Valika, MD



Taher Valika, MD, is a pediatric otolaryngologist at Ann & Robert H. Lurie Children's Hospital of Chicago. His academic expertise is in pediatric airway reconstruction and managing complex sleep related airway disorders. Dr. Valika's clinical interests include multilevel airway obstruction in patients with obstructive sleep apnea, laryngeal clefts and feeding disorders, complex laryngotracheal stenosis, and tracheostomy management.

Dr. Valika's research focuses on improving patient outcomes through innovation. His lab based research focuses on 3D printing for airway reconstruction using biologic implants. Additional areas of work include improving tracheostomy outcomes using machine learning.

He received his medical degree from The Chicago Medical School at Rosalind Franklin University and completed his residency in Otolaryngology Head and Neck Surgery at The University of Illinois Hospital of Health & Sciences. Dr. Valika then completed a fellowship in Pediatric Otolaryngology at Ann & Robert H. Lurie Children's Hospital in Chicago, and subsequently joined the division as a member of the Airway Team, where he is the Director of Upper Airway Surgery.

He is currently an Assistant Professor in Otolaryngology Head and Neck Surgery at Northwestern University Feinberg School of Medicine. Dr. Valika is involved in both medical student and resident education and has received numerous teaching awards over the years. He is the resident site director for the pediatric rotations for both the University of Illinois at Chicago and Northwestern Otolaryngology residency programs.

Graduate Sarah Khayat, MD



Dr. Sarah Khayat attended the University of Louisville where she earned a Bachelor of Arts in Biology and minors in Political Science and Middle Eastern and Islamic Studies. Sarah received her medical degree from the University of Louisville College of Medicine in 2016. Upon completion of her Otolaryngology-Head and Neck Surgery residency training, Sarah is heading to Salt Lake City, Utah for a Facial Plastic and Reconstructive Surgery fellowship under the auspices of Dr. P. Daniel Ward. After fellowship, she plans to pursue facial plastics and general Otolaryngology in an academically affiliated practice in Louisville, Kentucky, her hometown.

I enjoy exploring all the cultural attractions, museums, foodie havens, and natural parks that Chicago has to offer. We welcomed our first born, Dalia Altoos, during my chief year of residency and she is our world. Dalia will be hiking the mountains and skiing the slopes with her mommy in Utah during fellowship.

Residency has taught me that resilience is a quality to which one has to re-commit on a daily basis and one that is made possible by the support of friends, family, and colleagues. My fondest memories involve the people of this department, aka my work family- my coresidents, attendings, and ancillary staff. They are what make us great. Their support on this journey has not been overlooked and will be remembered for posterity.

These past five years have flown by; From the growing pains of first and second year managing the floor and consults on call to honing my operative skills during third and fourth year and finally to embracing a sense of leadership of the service while managing complex surgical patients during fifth year, this period of my life has been one of immense growth and learning and one which I hope to continue on during fellowship.

I would like to thank my husband, Basel Altoos, who has supported and seen me through all the trials and tribulations of a busy surgical residency while offering levity in times of stress. He gets my undying gratitude for being there for me and our daughter, Dalia, as we navigate life and the challenges that come with a busy two physician household. I would also like to thank my parents- my mother for teaching me that I have all the strength I will ever need to accomplish my dreams and for always supporting those dreams and my father for bestowing upon me his meticulous surgical attention to detail and for showing me how to practice as a compassionate physician. UIC has given me the requisite skills and confidence to succeed; it will always hold a near and dear place in my heart.

Graduate Alex B. Labby, MD



Dr. Alex Labby attended Pitzer College Claremont, California in where he earned a Bachelor of Arts in Science and Management in 2010. He received his medical degree from Oregon Health & Science University School of Medicine in 2016. Upon completion of his Otolaryngology-Head and Neck Surgery residency training, Alex will be in a one-one-year fellowship in Sinus and Skull Base Surgery at Vanderbilt University Medical Center in Nashville, Tennessee.

I like to think that I've experienced multiple forms of professional growth during the last five years in addition to my surgical expertise. In concordance with my medical training, my culinary tastes have matured as well. In between the late work days transitioning into nights of call, my girlfriend Rebecca and I have steadily increased the diversity of both our spice drawer and our cookbooks. I'm also an amateur barista now. My gleaming espresso machine I brought back from a trip to Portland has me wowing apartment guests with artisanal coffee drinks - though my latte "flowers" conspicuously look more like garlic bulbs. Through a labor of love, residency wasn't allowed to dull my bicycle maintenance savvy. Twice in the last five years I've been able to convert a corner of my apartment into a miniature bicycle shop, giving me the chance to rebuild two bikes from the frame up. As it has always been, being outside remains a passion. Though forests and mountains may be out of everyday reach, the peace of a run or bike ride along the lake front at dusk has kept me grounded season after season. In one definite upgrade, however, gloomy winter cycling with child fingers has been replaced with more civilized Peloton rides where the temperature is always perfect. Finally, there is no question that my greatest win in during the last five years has been my relationship with my lovely girlfriend, Rebecca Gold.

What impact do you think you made on the residency program?

I hope that I've impressed upon every resident I've had the privilege to work with – from my fourth years to my interns – that we aren't just here to order labs and make clinical decisions. Somewhere past the thousands of clicks or lines of text that seem to steal the hours of our residency, I want them to believe that there is something worthwhile in their role as a healer. I hope that I've reminded them that we remain bound to our patients through not only a professional relationship as their medical provider but also through the shared human experience of suffering. Our patients are often seen at their most desperate or vulnerable, and it is our

privilege to be able to tap into those moments and if not provide physical comfort at least the comfort of understanding. Of course, not every interaction has this opportunity – but even the smallest moments can remind patients that they are supported, and remind us that there is meaning in the work we do.

What will you be most remembered for?

What I know I will be remembered for by my residents are my rounds that "go on forever" and "spending too much time" with patients during clinic visits. I, of course, interpret this as justifying how thorough and careful I am as a physician. By my attendings, I think I will be remembered for always being willing to work, for caring about my patients, for being trustworthy in both junior and senior roles, and for really wanting my other residents to succeed. In reality, years from, I'm sure they will remember me for how much I talk about coffee and bicycles.

What are your toughest memories?

A moment of great loss and pain during residency was losing my mother. Knowing I was far away from her and my family as she slowly succumbed to a degenerative illness gnawed at me through my earlier residency, mostly from an undeserved personal guilt, and this ache grew into an anxious panic as I left clinic one January day to rush home in time to see her in her final moments with us. The grieving I experienced after her death during my second year in residency continues to this day but in another form, and will continue to change with me, and will always influence how I view my journey in residency.

What are your fondest memories?

I have all type of wonderful memories during residency. They range from those of professional success to that of personal fulfilment. I remember counting the 8 minutes of my shortest tonsillectomy (I'm sure some of my co-residents have beaten me), teaching other residents and medical students how to perform surgery and seeing their own confidence build. I enjoy the moments when a patient feels like I did them well, which as often as not is simply by making them feel simply listened to. Then I have my other memories - my first date with Rebecca and being mesmerized by her intelligence and beauty as we savored cocktails on a snowy evening, moments gliding through the crackling leaves of a Midwest forest by bicycle on a golden fall afternoon, or even remembering the tastes of all the best espressos to be found at Chicago's coffee shops.

Is there anyone you want to thank?

There are innumerable people to thank, and each has a special place in my sentimental heart. Foremost I thank my mother, who can't be with me as I graduate but who was and would have been immeasurably proud of me. I thank my dad and my brother for being with me through my entire journey in medicine and who were always there to listen to me as I struggled or to share in my successes. I thank my girlfriend Rebecca for being my most brilliant adviser and partner for the last two and a half years. I thank her mother, father, grandmother, and brother for making me feel like I have a family when I'm far from my own. I thank my co-residents – each in a different way – for sharing in this odyssey together and helping keep each other afloat. I thank my attending surgeons for trusting me in taking care of their patients as well as in their own patience in teaching me, and without them I wouldn't be the confident, but careful, physician-surgeon that I am today. I finally thank the support staff that have worked behind the scenes in their own special manner to make my education possible.

Graduate Ashley L. Soaper, MD



Dr. Ashley Soaper attended The Ohio State University where she earned a Bachelor of Sciences in Pharmaceutical Sciences. Ashley received her medical degree from the University of Cincinnati College of Medicine in 2016. Upon completion of her Otolaryngology-Head and Neck Surgery residency training, Ashley will return to Cincinnati for a Pediatric Otolaryngology fellowship at the Cincinnati Children's Hospital Medical Center. She hopes to pursue a career in academic pediatric otolaryngology in Ohio following fellowship. Ashley has been married to Matt since 2019 and they have a newborn son, Greyson, and a labradoodle named Crunch. She enjoys travelling, Ohio State football, and spending time with her family.

What impact do you think you made on the residency program?

I have been very invested in improving our interview day experience for prospective residents and have enjoyed contributing to resident recruitment. I am proud to be a resident at UIC and it is important to me to share the strengths of this program to incoming residents.

What are your toughest memories?

Navigating life as a new mom and maintaining a work-life balance during residency has been tough, but I am lucky to be part of such a supportive department that has made it possible for me to become a surgeon while also prioritizing my family.

What are your fondest memories?

Definitely spending time with my co-residents. Whether it be operating together or going out for happy hour after work, they have made my residency experience so enjoyable. I will miss you all and wish everyone the best of luck in the future!

Is there anyone you want to thank?

I would like to thank my husband, Matt, for his endless support throughout residency. He has been my rock and I would have not been able to get through residency without him. I would also like to thank my parents, Scott and Charlene Altman, for always supporting and encouraging me as I pursue my dreams.

Vírtual Alumní Day Lecture and Symposíum Schedule

UI Health Department of Otolaryngology - Head & Neck Surgery Friday, June 18, 2021

9:00 a.m. Welcome

Barry Wenig, MD, MBA, MPH, FACS

9:10 a.m. Burton J. Soboroff, MD Lecture

Sharon Cushing, MD

"Restoration of 3-D Perception in Children after Labyrinthine Implantation: Auditory and Vestibular Effects"

10:15 a.m. Resident Research Symposium

Heather M. Weinreich, MD, MPH - Moderator

10:20 a.m. Rob Cristel, MD

Quantitative Analysis of Tranexamic Acid Effects on Ecchymosis in Rhinoplasty

10:27 a.m. Cody Jeu, MD

Alternative COVID-19 Nasal Swab Testing in a Cadaveric Head Model

10:34 a.m. Johanna Wickemeyer, MD

Following the Guidelines: Prescribing Practices for Acute Otitis Media in Children at an Academic Health Center

10:41 a.m. Alex Caniglia, MD

Evaluation of Fibrin Sealant and Postoperative Hematoma-Seroma Rate in Rhytidectomy

10:48 a.m. Elliot Koo, MD

Surgical Management of Parotid Non-Tuberculous Mycobacteria Lymphadenitis in Children: a Pediatric Tertiary-Care Hospital's Experience.

10:55 a.m. Chris Mularcyzk, MD

The Evolution of Perioperative Pain Management in Otolaryngology-Head and Neck Surgery

10:05 a.m. Break

11:15 a.m. Brittany Abud, MD

Assessing the Impact of a Training Initiative for Nasopharyngeal and Oropharyngeal Swabbing for COVID-19 Testing

Vírtual Alumní Day Lecture and Symposium Schedule

UI Health Department of Otolaryngology - Head & Neck Surgery Friday, June 18, 2021

11:22 a.m. Natalia Hajnas, MD Alterations of the Sinonasal Microbiome in Common Variable Immune Deficiency

- 11:29 a.m. John Wilson, IV, MD Assessing Perceptions of Otolaryngology among Primary Care Physicians at UI Health
- 11:36 a.m. Sarah Khayat, MD & Ashley Soaper, MD Bovies and Babies: Our Reflections on Motherhood and Residency
- 11:50 a.m. Alex Labby, MD Déraill'd or: How I Learned to Stop Worrying and Love the Ride
- 12:00 p.m. *Alumnus of the Year Award* Taher Valika, MD
- 12:10 p.m. *Closing Remarks* Barry Wenig, MD, MPH
- 12:20 p.m. Adjournment
- 3:00 p.m. Graduation Celebration Tatiana Dixon, MD - Host Resident Research Award Resident Teaching Award

ABSTRACTS

Quantitative Analysis of Tranexamic Acid Effects on Ecchymosis in Rhinoplasty

Robert T. Cristel¹, MD, Daniel Demesh, MD¹, Manish J. Patel², BS, Anil R. Shah³ ¹University of Illinois at Chicago, Department of Otolaryngology-Head & Neck Surgery, Division of Facial Plastic & Reconstructive Surgery, 1855 W. Taylor, Suite 2.42, Chicago, IL 60612 ²University of Illinois College of Medicine at Chicago, 1853 W. Polk St, Chicago, IL 60612 ³Shah Facial Plastic Surgery, 845 N. Michigan Ave, Suite 934E, Chicago, IL 60611

Background/Introduction: Many methods have been described to reduce postoperative ecchymosis in rhinoplasty with tranexamic acid (TXA) remaining controversial. TXA remains a consideration for surgeons, however, may have serious side effects including seizures, blood clots, and vision changes.

Methods: A prospective study of primary rhinoplasty patients was performed from March 2019 to June 2019. TXA was used in 50 patients and postoperative ecchymosis was compared to 50 control patients. Adobe Photoshop was used to quantitate postoperative ecchymosis using multiple objective color scales including the Red, Green, Blue (RGB) and L*a*b* modes.

Results: One hundred subjects were enrolled in the study. Eighty-four females and 16 males were included. Photographs were taken on postoperative day 7. There were no significant differences among any of the RGB and L*a*b* color subgroups with p>0.05. There were no adverse events with TXA.

Conclusion: In this study, TXA did not reduce postoperative ecchymosis in rhinoplasty when use both through intravenous and intraoperative injections on postoperative day 7.

Alternative COVID-19 Nasal Swab Testing in a Cadaveric Head Model

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Background/Introduction: During the surge of COVID-19 infections and development of rapid testing there was an identified bottleneck, a lack of available commercial swabs at multiple points in time. This led to the development of 3D printed alternatives that could be locally produced in times of need. A methodology was needed to compare these swabs against the commercial standards in a safe yet high fidelity scenario.

Objective: Develop a testing protocol using cadaveric nasopharynx and then use said protocol to compare 3D printed nasal swabs against commercial standard swabs for feasibility of use in potential future materials shortages.

Methods: Using cadaveric heads apply inactive noninfectious lentivirus to the nasopharynx and swab using a battery of various types of nasal swabs. Extracted amounts of virus were analyzed with qPCR and compared among the swabs and against the commercial standards.

Results: Preliminary data shows comparable virus extraction with the 3D printed swabs compared to the commercial standards. The cadaveric head testing protocol was successful and could be adjusted for future testing of this type.

Conclusions: Pending final data analysis

Following the Guidelines: Prescribing Practices for Acute Otitis Media in Children at an Academic Health Center

Johanna L Wickemeyer MD¹, Margaret Schmit BS², Heather M Weinreich MD, MPH¹ ¹ University of Illinois at Chicago, Department of Otolaryngology-HNS, 1855 W. Taylor, Suite 2.42, Chicago, IL 60612 ² University of Illinois College of Medicine at Chicago, 1853 W. Polk St, Chicago, IL 60612

Background/Introduction: Acute otitis media (AOM) is the second most common cause of primary care visits and most common cause of pediatric antibiotic prescription in the United States. According to the Clinical Practice Guidelines created by the American Academy of Otolaryngology, prescribers should treat uncomplicated AOM with three months of watchful waiting, and, if a medication is indicated, amoxicillin or a cephalosporin is the treatment of choice. The guidelines recommend against use of oral and intranasal steroids and antihistamines. This study investigates the adherence to these guidelines across different care settings and between different types of clinicians.

Methods: Study Design: Analysis of administrative database comprising inpatient ambulatory visits for patients evaluated in the University of Illinois Hospital System, a large urban academic health center. Study Population: Children diagnosed with AOM between ages of 2-12 years of age, evaluated and diagnosed between January 2016 and May 2020. Outcome Variable: Percentage of children treated with watchful waiting approach (did not receive antibiotic) versus prescription for antibiotic. Independent Variable: Demographic information, location of the visit and prescriber qualifications

Results: A total of 949 cases of uncomplicated AOM were identified. From the study group, only 107 out of 858 treated children (15.2%) did not receive an antibiotic (watchful waiting) at the patients' initial encounter. Adherence to watchful waiting was particularly low in the emergency room (5.7%) and urgent care (0.8%), and the highest in otolaryngology clinic (56.5%) settings. Watchful waiting practices were the lowest in APRN (7.3%) and PA (0%) prescribers, who make up a significant portion of prescribers in PCP (APRN-23.9%) and Urgent Care (APRN-58.2%, PA-16.2%) settings. Otolaryngology clinics (100%), Emergency Rooms (95.5%) and PCP offices (71.3%) are predominantly staffed by physicians. When a medication was prescribed, the guidelines for medication class were followed 87.2% of the time, but notably only followed by otolaryngologists 62.1% of the time. Of the medications used to treat AOM, the most frequently inappropriately prescribed were macrolides (2.9%), steroids (3.5%) and antihistamines (3.8%).

Conclusions: Adherence to a watchful waiting approach for AOM is still not followed especially in primary and acute care settings. When antibiotics are prescribed, adherence is high regarding the type of medications prescribed. Further efforts are needed to understand the limited adoption of watchful waiting practices in the management of uncomplicated AOM

Evaluation of Fibrin Sealant and Postoperative Hematoma-Seroma Rate in Rhytidectomy

Alexander Caniglia, MD¹, Taylor Pollei, MD², Ronald Caniglia, MD³ ¹University of Illinois Chicago, Dept. of Otolaryngology-HNS, 1855 W. Taylor, Suite 2.42, Chicago, IL 60612 ²Form MD—Pollei Facial Plastic Surgery, 26921 Crown Valley Pkwy Suite 130, Mission Viejo, CA 92691 ³Caniglia Facial Plastic Surgery, 7102 E. Acoma Drive, Scottsdale, AZ 85254

Background/Introduction: Rhytidectomy, known as a "face-lift" to the public, is a common cosmetic procedure used to correct skin and subcutaneous laxity in the aging face. Hematoma and seroma formation can cause severe consequences if not addressed and managed in a timely fashion. In the medical literature, hematoma rates in rhytidectomy typically range from 0.2-9% 1-8. Seroma rates are less established with ranges reported from 0.37-8.01% depending on technique 1-2. Average seroma size is not routinely reported. During recent meta-analysis, the use of tissue sealants was shown to decrease hematoma rate, however, had no effect on seroma rate 3. Once complete, this study aims to accurately report hematoma and seroma rate and management in 1,917 patients undergoing rhytidectomy with the use of Tisseel fibrin sealant, with or without concomitant procedures, over the previous 13 years by the senior author.

Methods: A retrospective chart review is being conducted on all patients undergoing rhytidectomy with or without additional procedures by the senior author between 2007 and 2020. The data from 2007 to 2012 has been collected and analyzed. The data from 2013 to 2020 is in the data collection phase. From 2007 to 2012 there were 792 patients who underwent skin flap elevation and suspension with superficial musculoaponeurotic system (SMAS) imbrication/plication and submentoplasty. In all patients aerosolized fibrin glue was used at the time of skin flap re-draping. Surgical drains were not utilized. Postoperative development of seroma or hematoma was documented, classified, and their management with aspiration, fibrin glue placement and/or compressive dressing was reviewed.

Results: The results presented are of the 792 patients from the years 2007 to 2012. Average age was 61.5 years old with females accounting for 89.5% of procedures. Revision rhytidectomy accounted for 24.7% of all cases with concurrently performed procedures included blepharoplasty (48%), browlift (38%), full face laser resurfacing (30%), chin/prejowl implant (18.4%), submalar implants (14%), filler injections (8.4%) and rhinoplasty (5%). Overall rate of hematoma development was 0.13% (1/792), requiring operative intervention. Rate of seroma formation was 18.3% (144/792) with 97.5% occurring in the post auricular region. 3.0% (24/792) of patients had a seroma 5 milliliters or greater. The average size of seroma was 2.76 milliliters. Average time for seroma diagnosis was 2.6 days following surgery (mode = day 1). Forty percent of seromas were bilateral and 60% unilateral, with a significantly greater number occurring on the left side (62.5%) compared to the right (37.5%). All seromas were aspirated and managed conservatively with observation (56%), compression dressing replacement (24.4%), or fibrin sealant reinjection (19.6%). Compression dressing and fibrin sealant reinjection were also used for seromas that recurred following aspiration. No correlation was seen between seroma formation rate and patient age, gender, or primary verses revision rhytidectomy. Rate of urgent return to the operating room for complication management was 0.13%. All patients had a good outcome despite hematoma or seroma formation, with no patients developing skin flap necrosis or skin sloughing.

Conclusions: Rhytidectomy is a safe procedure with a very low rate of severe complication. Minor seroma formation is not uncommon and can easily be addressed with in office aspiration and conservative management. Further analysis is to be performed once data collection is finished on the 1125 patients where rhytidectomy was performed by the senior author from the years 2013 to 2020. Other areas of study will also include safety, efficacy, and complication rate of rhytidectomy patients who underwent concomitant full face laser resurfacing.

Surgical Management of Parotid Non-Tuberculous Mycobacteria Lymphadenitis in Children: a Pediatric Tertiary-Care Hospital's Experience.

Elliot Y Koo, MD^{1,3}, Matthew T Maksimoski, MD^{2,3}, Monica M Herron, MPAS, PA-C³, Bharat Bhushan, PhD^{2,3}, Meredith A Reynolds, MD⁴, Ben Z Katz, MD⁵, Douglas R Johnston, MD^{2,3}, Jeffrey C Rastatter, MD^{2,3}, John Maddalozzo, MD^{2,3}

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Background/Introduction: Non-tuberculous mycobacteria (NTM) represents an important etiology of cervicofacial lymphadenitis (CFL) and skin/soft tissue infections in children. It can also affect the salivary glands, including the parotid gland, which is unique due to the presence of intra-salivary lymph nodes. There are no established guidelines for treatment of NTM CFL. NTM lymphadenitis was historically surgically treated; recently the literature supports initial medical treatment. Treatment decisions have been dependent on the extent of disease, preference of providers, and risk of surgical complications. The goal is to report our experience in surgical outcomes of NTM CFL with involvement of the parotid gland after pre-operative medical management.

Methods: A retrospective case series of patients with NTM affecting the parotid gland at a tertiary care pediatric hospital between 2004 and 2020.

Results: Seventy-two patients were referred for surgical evaluation of possible parotid NTM. Thirtythree patients underwent surgical excision. Fifteen patients were identified with presumed NTM infection involving the parotid gland. There were twelve females and three males with a mean age of 2.0 years (SD 1.55; range 1-6 days) at the time of surgery. All underwent surgical excision with parotidectomy. The most common pre-operative antimycobacterial therapy used was a combination of clarithromycin and rifampin. All 15 patients had pathological findings consistent with NTM infection (granulomatous lymphadenitis). Forty percent (n=6) of patients had positive stains with acid-fast bacilli (AFB), with Mycobacterium avium as the most common species (n=5). The majority of patients, 86.67% (n=13), had complete resolution of infection after surgery. Clarithromycin and rifampin were the most common post-operative antimycobacterial treatment (mean 81.5 days, SD 110.14, range 2-411 days). The most common complication experienced was acute (<3 months) lower facial nerve paresis (40%, n=6), but no patient had permanent facial paralysis.

Conclusion: Parotidectomy is a safe and efficacious treatment in patients with NTM CFL affecting the parotid gland after incomplete resolution with antimycobacterial therapy. Further investigation to optimize duration of antimycobacterial treatment is necessary. We highlight the experience of a high-volume tertiary care pediatric hospital with surgical management of this disease.

The Evolution of Perioperative Pain Management in Otolaryngology-Head and Neck Surgery

Chris Mularczyk¹, MD; Brittany Abud¹, MD; Virginie Achim^{1,2}, MD ¹Department of Otolaryngology and HNS, University of Illinois at Chicago, 1855 W. Taylor, Suite 2.42, Chicago, IL 60612 ²Head and Neck Surgery, Columbia Surgical Specialists, 217 W Cataldo Ave, Spokane, WA 99201

Background/Introduction: Present day perioperative pain management strategies available to the otolaryngologist have historically included the use of opioid and non-opioid analgesics such as acetaminophen, non-steroidal anti-inflammatory drugs (NSAIDs), anticonvulsants, and corticosteroids.¹ Of the opioid medications utilized, acetaminophen-hydrocodone is the most commonly prescribed by otolaryngologists.² Various promising multimodal strategies have demonstrated a decrease in opioid requirements, and procedure specific Enhanced Recovery After Surgery (ERAS) protocols have been developed within the field of otolaryngology to include such strategies.³⁻⁶ Institutional implementation of narcotic-free regimens within thyroid and parathyroidectomy procedures have demonstrated successful outcomes, and their utilization may become more widespread within otolaryngology practices as evidence continues to support opioid-free pain regimens.^{7,8} In 2021, The American Academy of Otolaryngology–Head and Neck Surgery (AAO-HNS) introduced a new clinical practice guideline for postoperative pain management after common otolaryngology procedures, with a strong focus on opioids, entitled "Opioid Prescribing for Analgesia After Common Otolaryngology Operations" which represents the culmination of several paradigm shifts in pain management within the field of otolaryngology.⁹

Methods: Literature Review/Book Chapter

Conclusions: Perioperative pain management in otolaryngology-head and neck surgery continues to evolve as attention is directed towards enhanced recovery, multimodal analgesic approaches, and opioid-sparing strategies.

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Assessing the Impact of a Training Initiative for Nasopharyngeal and Oropharyngeal Swabbing for COVID-19 Testing

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Background/Introduction: The accuracy and reliability of COVID-19 testing are critical to limit transmission. After observing variability in testing techniques, we otolaryngologists at a tertiary medical center initiated and evaluated the impact of nasopharyngeal and oropharyngeal swabbing training, including video instruction, to standardize sampling techniques and ensure high-quality specimens.

Methods: Participants in the training were employees (N = 40). Training consisted of an instructional video on how to perform nasopharyngeal and oropharyngeal swabs and a live demonstration. Participants completed pre- and posttraining surveys assessing their knowledge and confidence in performing nasopharyngeal and oropharyngeal swabs. They then performed swabbing on partners, which was graded per a standardized checklist.

Results: Mean scores for knowledge-based questions and confidence in swabbing were significantly higher after the training session (both P < .001). All participants scored ≥ 6 of 8 on the posttraining checklist. Ninety-five percent rated the video as very or extremely useful.

Conclusion: Specialized instruction for nasopharyngeal swabbing improved participants' knowledge specifically, the appropriate head position and minimum swab time in nasopharynx—and their confidence. After the training, their swabbing execution scores were high. Implications for Practice: Video-assisted hands-on instruction for nasopharyngeal swab sampling can be used to standardize teaching. When prompt and accurate testing is paramount, this instruction can optimize procedural technique and should be used early and often. In addition, there may be a professional responsibility of otolaryngologists to participate in such initiatives.

Project Proposal: Alterations of the Sinonasal Microbiome in Common Variable Immune Deficiency

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Background/Introduction: Common Variable Immune Deficiency (CVID) is the most common symptomatic primary immunodeficiency. It is broadly defined by a decrease in immunoglobulins, impaired vaccination responses and increased susceptibility to infections. Agammaglobulinemia or hypogammaglobulinemia predisposes to sinopulmonary disease, including chronic rhinosinusitis (CRS). Decreased diversity in the sinonasal microbiome has been shown in CRS. The dysbiosis hypothesis has been proposed as at least a part of the pathophysiology of CRS in the general population, however studies have not specified whether this mechanism holds true when CRS is associated with an immunodeficiency like CVID. There is existing data that shows a reduction in microbial diversity within the stool microbiome in CVID and an association with immune dysfunction and more severe disease, however there are no studies that describe the sinonasal microbiome in CVID. We aim to (1) characterize the sinonasal microbiome composition and diversity (e.g., bacterial load, taxon differences, alpha and beta diversity) in patients with CVID with and without concurrent CRS; and (2) specifically in patients with CVID and concurrent CRS, examine the relationships between sinonasal microbiome composition and diversity and other markers of disease (serum immunoglobulin levels, memory B cells, Sinonasal Outcome Test-22 and Lund-Kennedy endoscopic scores). This study will improve our understanding of the composition and diversity of the sinonasal microbiome in CVID, which will increase our understanding of dysbiosis and pathophysiology as it relates to sinonasal disease in CVID, and ultimately aid in developing novel microbial-derived biologics to direct personalized therapeutic regimens.

Assessing Perceptions of Otolaryngology among Primary Care Physicians at UI Health

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Objective: To better characterize the perceptions of Otolaryngology – Head & Neck Surgery (OHNS) among primary care physicians at a single institution.

Methods: In this cross-sectional study, a 45-question survey was distributed via email to attending and resident physicians at UI Health. Eligible participants were currently employed within the departments of Family Medicine, Internal Medicine, Emergency Medicine, or Pediatrics. Survey content focused on comparisons with other specialties including Oral and Maxillofacial Surgery, Plastic Surgery, General Surgery, Ophthalmology, and Dermatology with regards to expertise in specific clinical domains, proficiency at specific procedures, and overall capability/propensity for surgical management of disease. Additional questions explore underlying factors including exposure to OHNS during medical school and residency training, quality of relationships with OHNS faculty and residents, and previous experiences requesting consultation with the OHNS service.

Results: Data collection are ongoing and results will be updated in the final version of this abstract. There are currently 156 responses.

Conclusions: Pending further data collection.