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Head and Neck Surgery & Skull Base Surgery

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Laryngology & Care of the Professional Voice

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Otolaryngology-Head and Neck Surgery

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Clinical Associate Professor
Facial Plastic and Reconstructive Surgery

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Facial Plastics and Sinus Surgery

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Clinical Associate Professor
Head and Neck Surgery-
Microvascular Reconstruction

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Professor
Pediatric Otolaryngology

Thomas "T.C." Flowers, MD, MPH
Assistant Professor
Pediatric Otolaryngology

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Stephen C. Hernandez, MD
Associate Professor and Program Director
Rhinology, Head and Neck Oncology &
Skull Base Surgery

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Professor and Vice Chair
Facial Plastic and Reconstructive Surgery

Sagar G. Kansara, MD
Assistant Professor
Head and Neck Surgery –
Microvascular Reconstruction

Melda Kunduk, PhD
Adjunct Professor
Speech Pathology

Kevin E. McLaughlin, MD
Clinical Assistant Professor
Sinus Surgery & Sleep Medicine

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Professor and Vice Chair for Development
Laryngology & Care of the Professional Voice

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Otology, Neurotology & Rhinology

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Rhinology & Skull Base Surgery

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Facial Plastic and Reconstructive Surgery
Craniofacial Surgery

Rula Mualla, MD
Assistant Professor
Head and Neck Surgery –
Microvascular Reconstruction

Alyssa K. Ovaitt, MD
Assistant Professor
Facial Plastic & Reconstructive Surgery

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Clinical Associate Professor
Otolaryngology-Head and Neck Surgery

Laura Pelaez, MD
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Otolaryngology-Head & Neck Surgery

Mark C. Petitjean, MD
Assistant Professor
Otolaryngology-Head and Neck Surgery

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Assistant Professor
Pediatric Otolaryngology

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Pediatric Otolaryngology

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Otolaryngology-Head and Neck Surgery

Vilija J. Vaitaitis, MD
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Head and Neck Surgery –
Microvascular Reconstruction

Rohan R. Walvekar, MD
Professor and Vice Chair for Head and
Neck Oncology Services
Head and Neck Surgical Oncology,
Robotic Surgery, Sialendoscopy &
Skull Base Surgery

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Research Associate

Hamilton E. Farris, PhD
Assistant Dean for Student Affairs
and Records
Associate Professor/Research

Takeshi Ikuma, PhD
Instructor – Research

Jennifer J. Lentz, PhD
Professor/Research

Leslie S. Son, PhD
Academic Research Director

LSU Health
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School of Medicine
Department of Otolaryngology
Head and Neck Surgery

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Department of Otolaryngology
Head and Neck Surgery

The Twenty-Eighth Annual
Resident Research and Alumni Day
Dedicated to Mervin L. Trail, MD

Invited Guest Lecturer:

Theda C. Kontis, MD, FACS
Associate Professor
Department of Otolaryngology - Head & Neck Surgery and
Department of Plastic and Reconstructive Surgery
Johns Hopkins Medical Institutions

CONGRATULATIONS

Adam J. Blancher, MD
LSU Health Shreveport
Shreveport, Louisiana

Christine A. Matthews, MD
Facial Plastic & Reconstructive Surgery Fellowship
Charlottesville, Virgina

Kurt C. Mueller, MD
Rhinology & Skull Base Surgery Fellowship
Atlanta, Georgia

J. Logan Sobiesk, MD
Private Practice
Hattiesburg, Mississippi

Dear Alumni, Faculty, Residents and Friends of the Department:

It is with great pleasure that we welcome you to the 28th Annual LSU Department of Otolaryngology- Head and Neck Surgery **Resident Research and Alumni Day**, dedicated since 2003 to Mervin L. Trail, MD. This special event recognizes the scholarly activities of our residents, students, fellows and faculty, and acknowledges the contributions made by the alumni of our Department in support of the educational process.

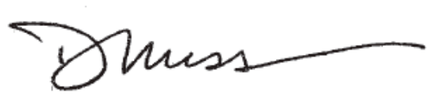
This program booklet contains a summary of presentations of original research conducted by LSU Otolaryngology residents and fellow. Every year, each resident is required to conduct a scientific research project. Upon completion of the project, the resident is required to write a summary manuscript that is fit for submission to a peer-reviewed journal. We emphasize the principles of research that are important for clinical practice, including focus, strategy, planning, scientific reasoning, problem solving, critique, documentation and presentation skills. The research must conform to generally accepted standards of experimental design, data collection and analysis. The enclosed abstracts illustrate and add to the tradition of excellence that has been the hallmark of our Department for many years.

I thank the many people in our Department who make this event possible. We are grateful to Lacey Adkins, MD, our Director of Clinical Research, and Leslie Son, PhD, our Academic Research Coordinator. The Department's Faculty mentors, whose names are listed as co-authors with each individual abstract, deserve special recognition for providing guidance and mentorship to our residents in their research endeavors.

Finally, I would like to express our sincere thanks to the administrative staff in our Department, including Alison Kern, CPA, Andrelle Causey, MSHCM, Annette Barnes, RN, Elizabeth Yanes, MPH, Emilie Gauthier, MHA, and Dylan Hawkins, MFA, who have all been a tremendous help to our residents in this process.

We welcome and appreciate your participation in this event.

Sincerely,



Daniel W. Nuss, MD, FACS
George D. Lyons Professor and Chairman
Department of Otolaryngology
Head and Neck Surgery

2025 GRADUATES

Guest of Honor

Theda C. Kontis, MD, FACS

Associate Professor, Department of Otolaryngology – Head & Neck Surgery
Department of Plastic and Reconstructive Surgery
Johns Hopkins Medical Institutions

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1997 Austin I. King, MD, FACS
1998 E. Gaylon McCollough, MD, FACS
1999 Carl H. Snyderman, MD, FACS
2000 Moisés A. Arriaga, MD, FACS
2001 Ricardo L. Carrau, MD, FACS
2002 Dean M. Toriumi, MD, FACS
2003 Charles W. Cummings, MD, FACS
2004 George D. Lyons, MD, FACS
2005 Pierre N. Lavertu, MD
2008 David W. Eisele, MD
2009 Berrylin J. Ferguson, MD, FACS
2010 James Y. Suen, MD
2011 Keith E. Blackwell, MD
2012 Cherie-Ann O. Nathan, MD, FACS
2013 Guido V. DeJesus, MD
2014 Eugene N. Myers, MD, FACS
2015 Richard W. Waguespack, MD
2016 Paul A. Levine, MD
2017 Travis T. Tollefson, MD, MPH, FACS
2018 Harold C. Pillsbury, MD, FAC
2019 Gresham T. Richter, MD, FACS, FAAP
2020 Scott P. Stringer, MD, MS
2021 Mark S. Courey, MD
2022 Scott P. Stringer, MD, MS
2023 James L. Netterville, MD
2024 Elizabeth H. Toh, MD, MBA

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1997 Ray J. Lousteau, MD
1998 Joseph J. Creely, MD
1999 Louis G. Cucinotta, MD
2000 Herbert W. Marks, MD
2001 Douglas B. Webster, PhD
2002 Charles I. Berlin, PhD
2003 R. Patrick Cecola, MD
2004 Bradley J. Chastant, MD
2005 Robin J. Barry, MD
2006 Peter L. Rigby, MD
2007 Jeffery J. Joseph, MD
2008 Michael D. DiLeo, MD
2009 Evelyn A. Kluka, MD
2010 R. Graham Boyce, MD, FACS
2011 Michael A. Hagmann, MD
2012 George D. Lyons, MD
2013 Robert G. Peden, MD
2014 Daniel W. Nuss, MD, FACS
2015 Laura T. Hetzler, MD, FACS
2016 Justin M. Tenney, MD
2017 Kevin McLaughlin, MD
2018 Anna M. Pou, MD
2019 Jennifer Daigle-Hanby, MD
2020 Mary A. Fazekas-May, MD
2021 Andrew J. McWhorter, MD
2022 Rohan R. Walvekar, MD
2023 Stephen C. Hernandez, MD
2024 Rahul Mehta, MD

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2008 James Garitty, MD
2009 Robert G. Peden, MD
2010 Justin M. Tenney, MD
2011 Jennifer Daigle, MD
2012 Kevin E. McLaughlin, MD
2013 Daniel W. Nuss, MD, FACS
2014 Rohan R. Walvekar, MD
2015 Phillip G. Allen, MD
2016 Bradley J. Chastant, MD
2017 Robert G. Peden, MD
2018 Jennifer Daigle-Hanby, MD
2019 Michael E. Dunham, MD, FACS
2020 Rahul Mehta, MD
2021 Lacey K. Adkins, MD
2022 Andrew R. Fuson, MD
2023 Michael D. DiLeo, MD
2024 Mark C. Petitjean, MD

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1997 Matthew K. Money, MD & Kathy L. Chauvin, MD
1998 Michael J. Hammett MD
1999 Chen Xie, MD
2000 P. Elise Scallan-Lalonde, MD
2001 Matthew H. Steele, MD
2002 Darryl T. Mueller, MD
2003 Jason P. Hunt, MD
2004 Robert E. Ostendorf, MD
2005 Justin M. Tenney, MD
2007 Emily L. Burke, MD
2008 Amy G. Rabalais, MD
2009 Brad W. LeBert, MD
2010 Jacques E. Gaudet, MD
2011 Jacques E. Gaudet, MD
2012 Jacques E. Gaudet, MD
2013 Neal M. Jackson, MD
2014 Kevin Taheri, MD
2015 Evan Longfield, MD
2016 Rachel A. Barry, MD
2017 Tyler W. Crosby, MD
2018 Tyler W. Crosby, MD
2019 Vilija Vaitaitis, MD
2020 Tyler W. Crosby, MD
2021 Tyler W. Crosby, MD
2022 Kody G. Bolk, MD
2023 J. Nicholas Poche, MD
2024 Kurt C. Mueller, MD

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Associate Program Director

Lacey K. Adkins, MD
Associate Professor and
Director of Clinical Research

Leslie S. Son, PhD
Academic Research Coordinator
Departments of Surgery and Otolaryngology
Our Lady of the Lake Regional Medical Center
Office of Research

Panel of Judges

Marcus Hershey, MD
Otolaryngology – Head & Neck Surgery

Anandraj Kanwar, MD
Assistant Professor
Neuroradiology

Theda Kontis, MD, FACS
Associate Professor
Facial Plastic and Reconstructive Surgery

Sarah Peña, MD
Otolaryngology – Head & Neck Surgery

Mell Schexnaildre, MA, CCC-SLP
Speech-Language Pathology

Program

8:00 **Registration and Breakfast**

8:30 - 8:35 **Welcome: Richard DiCarlo, MD**
Dean, LSUHSC School of Medicine

8:35 - 8:45 **Welcome and Opening Remarks**
Daniel W. Nuss, MD, FACS
Stephen C. Hernandez, MD

Resident Presentations – Session I — Moderator: Michael E. Dunham, MD, MS

8:45 - 8:53 *Risk Stratification for Serious Ocular Injury in Orbital Fractures: A Single Institution Retrospective Study*
Adam J. Blancher, MD; Michael Simons; Taylor Smiley; Leslie S. Son, PhD; Stephen C. Hernandez, MD

8:55 - 9:03 *Trends in Reimbursement for Rhinoplasty Procedures*
Christine A. Matthews, MD; Victoria Vincent, BS; Alyssa K. Ovaitt, MD

9:05 - 9:13 *Comparison of Inhalational Anesthesia Versus Total Intravenous Anesthesia in Endoscopic Tympanoplasty*
Kurt C. Mueller, MD; Jacob Hagen, BS; Rahul Mehta, MD

9:15 - 9:23 *Feasibility of Sialendoscopy Implementation in Private Practice Otolaryngology: National Survey Feedback and Financial Reimbursement Analysis*
J. Logan Sobiesk, MD; Rohan R. Walvekar, MD

9:25 - 9:33 *Eyes-On: Artificial Intelligence Assisted Home Monitoring for Tracheostomy Dependent Children*
Colleen F. Cecola, MD; Holly LeBlanc, RT; Michael E. Dunham, MD, MS

9:35 - 9:43 *Delayed Facial Nerve Weakness Following Middle Fossa Tegmen Repair*
Armand A. Jacques, MD; Katelyn N. Robillard, MD, PhD; Ethan Hoasjoe, BS, MS; Moisés A. Arriaga, MD, MBA, FACS

9:45 - 9:55 **Discussion**

Honored Guest Lecturer

9:55 - 10:40 *Leadership and the Art of Injectables*
Theda C. Kontis, MD, FACS

10:40 - 11:00 **Visit Our Exhibitors**

Resident Presentations – Session II — Moderator: Stephen C. Hernandez, MD

11:00 - 11:08 *Analysis of Non-Narcotic and Narcotic Pain Management in Adults and Children Following Endoscopic Ear Surgery*
I. Shradha Mamidi, MD; Michael Simons; Rahul Mehta, MD

11:10 - 11:18 *Computational Fluid Dynamics Evaluation of Sinonasal Flow During Respiration and Nasal Irrigation Following Transnasal Endoscopic Surgery*
John N. Poche, MD, MS; Stephen C. Hernandez, MD; Katie L. Melder, MD; Michael E. Dunham, MD, MS; Daniel W. Nuss, MD

11:20 - 11:28 *Preoperative Predictors of Length of Hospitalization Following Head and Neck Free Flap Reconstruction*
Caroline A. Bonaventure, MD; Rula Mualla, MD; Zhide Fang, PhD; Reed Smith, BS; Sagar G. Kansara, MD

11:30 - 11:38 *Role of Perinasal Musculature in Ipsilateral Nasal Obstruction During Synkinesis Progression*
Carley E. Boyce, MD; Jonathan Joseph, MD; Reed Smith, BS; Zhide Fang, PhD; Sara MacDowell, PT, DPT; Laura T. Hetzler, MD, MBA, FACS

11:40 - 11:48 *Nasal Surgical Site Aspirator – A Device to Clear the Surgical Field During Trans-Nasal Endoscopic Surgery*
J. Christian Lemoine, MD; Katie L. Melder, MD; Stephen C. Hernandez, MD; Michael E. Dunham, MD, MS

11:50 - 12:00 **Discussion**

Research Spotlight

12:00 - 12:10 *Search for Acoustic Signatures of Laryngeal and Vocal Disorders*
Takeshi Ikuma, PhD

Resident Presentations – Session III — Moderator: Lacey K. Adkins, MD

12:10 - 12:18 *Postoperative Outcomes and Survivorship After Lateral Temporal Bone Resection: A Single Center Retrospective Chart Review*
Katelyn N. Robillard, MD, PhD; Cassidy Nguyen; Moisés A. Arriaga, MD, MBA, FACS; Rahul Mehta, MD

12:20 - 12:28 *Implementation of an OSA Screening Protocol in Pediatric Patients Undergoing Vagal Nerve Stimulator Implantation*
Joshua J. LaHaye, MD; Garrison Lowder; Lauren S. Buck, MD

12:30 -12:38 *Evaluating Vaping Outcomes and Healing of Facial Reconstruction Following Mohs Surgery*
Alexandra H. Rose, MD; Sara Be; Alyssa K. Ovaitt, MD

12:40 - 12:48 *Steroid Timing for Facial Nerve Injury in Temporal Bone Fractures*
Jacob L. Seicshnaydre, MD; Suraj Patel, BS; Celeste C. Gary, MD

12:50 - 12:58 *Locoregional Recurrence in Sentinel Lymph Node–Positive Head and Neck Melanoma: A Retrospective Cohort Study Evaluating the Impact of Adjuvant Immunotherapy*
Adam C. Turry, MD; Rula Mualla, MD

1:00 - 2:00 **Discussion**

1:10 - 2:10 **Lunch and Judges' Review of Papers**
Visit our Exhibitors

Research Spotlight

2:10 - 2:30 *Updates in H&N Investigations: Machine Learning Approaches and Tumor Immunology*
Sagar G. Kansara, MD

Awards

2:30 - 3:00 *Presentation of Awards*
Daniel W. Nuss, MD, FACS

Dedication

Mervin L. Trail, MD (1934-2001)

Former Chancellor of LSU Health Sciences Center
Former Residency Director and Chairman of Otolaryngology

Mervin Lee Trail grew up in a rural mining town in Maryland, and went on to earn his MD degree from the University of Maryland School of Medicine. After service in the U.S. Navy, he trained as a resident in Otolaryngology at Johns Hopkins University.

"Merv", as he insisted on being called, came to New Orleans in 1968 to join the faculty of the LSU School of Medicine. A staunch proponent of interdisciplinary medical education, he helped expand the boundaries of Otolaryngology, and became a widely acclaimed expert in advanced head and neck surgery. In addition to being a superb clinician, Merv was a tireless advocate for the education of students and residents. During his LSU career of over 30 years, Dr. Trail served initially as Residency Director, then Chairman of Otolaryngology, and ultimately as Chancellor of the LSU Health Sciences Center.

Those who knew Dr. Trail remember his boundless love for New Orleans. Beyond his medical career, he became one of New Orleans' most famous citizens by championing tourism, economic development and sports. In fact, he was instrumental in promoting New Orleans as a "destination city", and through his personal efforts, New Orleans became host to such high-profile events as the NCAA Final Four, the Super Bowl, the US Olympic Trials, and the Republican National Convention. He was a founding member of the Morial Convention Center and the Mardi Gras Krewe of Bacchus, and founding chair of the New Orleans Sports Foundation.

Dr. Trail passed away suddenly in 2001, with the legacy of having changed LSU, New Orleans, and the specialty of Otolaryngology as well. In 2003, the annual Resident Research and Alumni Day was dedicated in his name. The focus of this day is to honor Dr. Trail's memory by showcasing the research conducted by LSU Otolaryngology Residents.

Guest Speaker

Theda Kontis, MD, FACS

Associate Professor
Department of Otolaryngology - Head & Neck Surgery and
Department of Plastic and Reconstructive Surgery
Johns Hopkins Medical Institutions

Dr. Theda C. Kontis has been a local, national and international leader in facial plastic surgery for more than 20 years, with expertise in industry, private and clinical practice, and higher education.

After receiving her M.D. from Wake Forest University, Dr. Kontis completed her Otolaryngology Residency and Facial Plastic Surgery Fellowship at Johns Hopkins University. Dr. Kontis is Board certified in both Facial Plastic and Reconstructive Surgery and Otolaryngology-Head and Neck Surgery, currently practicing at the Aesthetic Center at Woodholme in Baltimore. She also serves as an Associate Professor at Johns Hopkins Medical Institutions in the Departments of Otolaryngology-Head and Neck Surgery and Plastic Surgery, where she trains residents and fellows in facial plastic surgery techniques.

Dr. Kontis combines practice with education, contributing to medical literature and working to advance best practices and innovative techniques in facial plastics. Her best-selling textbook, Cosmetic Injection Techniques, is in its second edition and has been translated into 5 foreign languages. In October 2022, she became the second woman president of the American Academy of Facial Plastic and Reconstructive Surgery, and she is currently president of the American Board of Facial Plastic and Reconstructive Surgery.

DEPARTMENT OF OTOLARYNGOLOGY

RESEARCH ABSTRACTS

HEAD AND NECK SURGERY

Risk Stratification for Serious Ocular Injury in Orbital Fractures: A Single Institution Retrospective Study

Adam J. Blancher, MD; Michael Simons; Taylor Smiley; Leslie S. Son, PhD; Stephen C. Hernandez, MD

Introduction: Orbital fractures are a frequent consequence of facial trauma, occasionally accompanied by vision-threatening ocular injuries. However, no standardized tool currently exists to guide non-ophthalmologists in triaging these patients for urgent ophthalmology consultation. This study aims to identify clinical and radiographic predictors of serious ocular injury and to develop a bedside risk stratification tool to improve triage accuracy.

Methods: This retrospective chart review will be conducted at Our Lady of the Lake Regional Medical Center, evaluating patients ≥ 18 years old who presented with CT-confirmed orbital fractures between January 2016 and December 2024. Inclusion criteria requires ophthalmology consultation within 24 hours. Patients with penetrating trauma or delayed evaluation will be excluded. Data abstraction is ongoing and includes demographic information, mechanism of injury, clinical signs (visual acuity, diplopia, afferent pupillary defect, conjunctival hemorrhage or chemosis, extraocular movements, eyelid swelling), fracture type, and presence of retrobulbar hemorrhage. The primary outcome is the presence of serious ocular injury requiring urgent intervention. Statistical analysis will include multivariate logistic regression to identify predictive features.

Results: Due to delays in IRB approval, data collection is ongoing. Preliminary case review suggests that factors such as impaired visual acuity, diplopia on primary gaze, subconjunctival hemorrhage or chemosis, and roof fractures may be associated with an increased risk of serious ocular injury. These variables are being evaluated for inclusion in a predictive scoring model.

Conclusions: This study aims to develop a clinically useful tool to guide non-ophthalmologists in identifying orbital fracture patients who require urgent ophthalmic evaluation. Once validated, this tool has the potential to optimize triage decisions, improve patient outcomes, and reduce unnecessary specialty consultations.

Adam J. Blancher, MD

Trends in Reimbursement for Rhinoplasty Procedures

Christine A. Matthews, MD; Victoria Vincent, BS; Alyssa K. Ovaitt, MD

Introduction: Since its initial conception in 1965, Medicare has expanded significantly with 64 million people enrolled in 2022. As one of the largest payers in the country, reimbursement schedules are based on a complex formula and often serve as a guide for reimbursement used by both state funded Medicaid plans and private insurance companies alike. Multiple studies both within otolaryngology and plastic surgery subspecialties have recently analyzed trends in Medicare reimbursement rates, noting that inflation-adjusted reimbursements have declined over the years despite increasing healthcare costs. No such papers thus far have investigated the reimbursement for functional rhinoplasties. Recently, absorbable nasal implants (e.g. Laterra®) and radiofrequency treatment of the nasal valve provide alternative options for select patients with nasal obstruction. Instead of an open surgery under general anesthesia, these are quicker in-office procedures performed while awake. Laterra® received FDA approval for use in 2016 and was granted its own current procedure terminology (CPT) code, 30468, in January of 2021. As technologies evolve and new products come to market, they can influence insurance reimbursement by providing more cost and time efficient alternatives.

Methods: In conjunction with the billing department, we performed a retrospective review of all functional open septorhinoplasty cases performed by six facial plastic surgeons at our institution over the last 10 years. We identified all cases billed to Medicare or Medicaid plans using the CPT codes: 30410, 30420, 30435, 30450, 30465, and 30520. Cost analyses were performed by our statistics department to identify trends in reimbursement, specifically comparing 2016-2020 to 2021-2025 (before and after the introduction of CPT code 30468).

Results: We identified 177 total procedures performed for patients with Medicare and Medicaid plans, 79 cases from 2016-2020 and 98 cases from 2021-2025. The majority of cases, 73 in total, were billed using the primary CPT code of 30465 with secondary CPT code of 30520. The average charge for these procedures over the 10 years was $29,845.07; average charge from 2016-2020 was $24,402.03 and from 2021-2025 was $37,989.76. The average calculated expected payment was $4,768.74; average calculated expected payment from 2016-2020 was $4,239.32 and from 2021-2025 was $5,560.94. The average actual payment was $1,886.00; average payment from 2016-2020 was $1,800.59 and from 2021-2025 was $2,013.79.

Conclusions: The charges for these procedures significantly increased over the ten years as did the calculated payment expected by our institution's billing department. While the actual reimbursement from years 2021-2025 increased compared to years 2016-2020, it occurred at a disproportionately lower rate than the charges associated with the cost of the procedure. This discrepancy likely represents an inadequate increase in reimbursement per CPT code to reflect the relative rate of inflation and the rising associated costs. While quality healthcare remains the main priority, understanding the financial cost of surgery is important for physicians to understand in order to remain advocates for policy change.

Christine A. Matthews, MD

Comparison of Inhalational Anesthesia Versus Total Intravenous Anesthesia in Endoscopic Tympanoplasty

Kurt C. Mueller, MD; Jacob Hagen, BS; Rahul Mehta, MD

Introduction: Over the past several years, there has been an increase in the popularity of endoscopic approaches to middle ear surgery instead of the traditional microscopic approach. One disadvantage of the endoscopic approach is a one-handed technique, during which maintaining surgical field visualization is more difficult than the two-handed microscopic approach. In other otolaryngology procedures, total intravenous anesthesia (TIVA) has been shown to be superior to inhalational anesthesia (IA) in terms of surgical field quality, surgeon satisfaction, intraoperative blood loss, and ease of recovery. To date, there is a paucity of data regarding the effects of these two types of anesthesia in endoscopic ear surgery.

Objective: This study aims to assess whether the use of TIVA or IA is more effective in optimizing surgical field quality, surgeon satisfaction, postoperative analgesia, and emergence agitation for endoscopic tympanoplasty.

Methods: This is a prospective, double-blinded randomized control trial consisting of both adult and pediatric subjects undergoing endoscopic tympanoplasty. Subjects in the control group received inhalational anesthesia while subjects in the study group received total intravenous anesthesia. The endoscopic view of each surgery was documented in its entirety. Surgeon satisfaction scores were recorded on a Likert scale, where 0 is the least satisfied and 5 is the most satisfied. Additionally, duration of anesthesia, duration of surgery, number of pledgets used, Riker Sedation-Agitation Scale (RSAS) scores, Richmond Agitation-Sedation Scale (RASS) scores, and pain scores at three different time points in the post-anesthesia recovery unit (PACU) were recorded.

Results: Twenty patients were enrolled in the study. Thirteen received IA and 7 received TIVA. 11 subjects (55%) were adults. Surgeon satisfaction scores did not significantly differ between the TIVA group and the IA group (3.05 0.57 vs. 2.40 0.89, p = 0.193). When comparing the study group (TIVA) to the control group (IA), there was no statistically significant difference in duration of surgery (57.9 17.7 min vs. 61.8 17.1 min, p = 0.643), duration of anesthesia (88.0 24.5 min vs. 92.1 21.0 min, p = 0.716), number of pledgets used (3.33 1.11 vs. 3.55 1.23, p = 0.746), RSAS score (-4.0 1.0 vs. -4.15 1.1, p = 0.778), RASS score (2.0 0.8 vs. 1.77 0.7, p = 0.531), opioid use in PACU (57.1% vs 53.9%, p = 0.763). When comparing the TIVA group to the IA group, there was no statistical difference in pain score on arrival in PACU (1.86 2.64 vs. 1.25 2.48, p = 0.117), after 30 minutes in PACU (3.71 2.64 vs. 4.00 3.00, p = 0.878), and after 60 minutes in PACU (5.00 2.00 vs 4.00 3.32, p = 0.215).

Conclusion: These preliminary data do not support a significant difference in surgeon satisfaction, emergence agitation, or postoperative pain between subjects receiving TIVA and those receiving IA after endoscopic tympanoplasty. Further studies with greater sample sizes will be better powered to elucidate differences between these two anesthetic techniques in patients undergoing endoscopic tympanoplasty.

Kurt C. Mueller, MD

Feasibility of Sialendoscopy Implementation in Private Practice Otolaryngology: National Survey Feedback and Financial Reimbursement Analysis

J. Logan Sobiesk, MD; Rohan R. Walvekar, MD

Objective: To assess the clinical feasibility and financial sustainability of sialendoscopy within private practice otolaryngology through nationwide physician feedback and a detailed reimbursement analysis.

Methods: A mixed-methods study was conducted. Qualitative and quantitative data were gathered via a national survey distributed to otolaryngologists across the United States using FanVoice AI to assess perspectives on clinical adoption, logistical barriers, and perceived value of sialendoscopy in private practice. In parallel, a financial reimbursement analysis was performed at Our Lady of the Lake Regional Medical Center, examining CPT code 42699, which was used to bill for sialendoscopy procedures. Data points collected included total charges levied, insurance reimbursements (charges collected), insurance payer types, unpaid amounts, and documentation of appeal processes when required.

Results: Data collection is ongoing.

Conclusion: We anticipate sialendoscopy to be clinically feasible and potentially viable in private otolaryngology practices, though broader adoption may be hindered by financial and logistical barriers. Standardizing procedural coding and improving reimbursement could enhance its accessibility and integration into community care.

J. Logan Sobiesk, MD

Eyes-On: Artificial Intelligence Assisted Home Monitoring for Tracheostomy Dependent Children

Colleen F. Cecola, MD; Holly LeBlanc, RT; Michael E. Dunham, MD, MS

Introduction: Tracheostomy is often performed in children to bypass upper airway obstructions or support chronic lung conditions requiring ventilators. These children need continuous care to maintain airway and respiratory function.

Over the past decade, the number of children with tracheostomies needing home care has tripled. About 20% face serious complications like death or anoxic brain injury due to airway obstruction, often from accidental tube dislodgement when unattended. The national shortage of home care nurses makes 24/7 monitoring difficult, especially in rural or underserved areas, leading to prolonged hospital stays or long-term facility placement. There's a pressing need for reliable home monitoring solutions.

We aim to address this with "Eyes-On," an AI-driven technology combining continuous vital sign monitoring, pulse oximetry, and live video, all analyzed by deep learning algorithms tailored to tracheostomy-dependent children. This study explores the feasibility of using AI to enable safe, continuous home monitoring.

Objective: To demonstrate the feasibility of an AI–enabled computer–vision model for continuous home monitoring of tracheostomy–dependent infants.

Study Design: Prototyping.

Methods: Using a dataset of images that depict tracheostomy–dependent infants in varied positions, lighting conditions, and camera angles, we trained a deep–learning model to detect tracheostomy–tube dislodgement in continuous crib video streams. We also presented a prototype system that combines a video–equipped crib with integrated vital–sign and pulse–oximetry monitoring.

Results: Images extracted from 17 videos of infants undergoing scheduled tracheostomy–tube changes were used to train the deep–learning model. After patient–specific fine–tuning, the model accurately detects four states—tracheostomy–tube cannulation, tracheostomy–tube decannulation, stomal decannulation, and a null state (tube not visible)—in real–time crib video streams of tracheostomy–dependent.

Conclusion: An AI–enabled, computer–vision infant–monitoring system can provide continuous home surveillance of tracheostomy–dependent infants and reduce tracheostomy–related complications.

Delayed Facial Nerve Weakness Following Middle Fossa Tegmen Repair

Armand A. Jacques, MD; Katelyn N. Robillard, MD, PhD; Ethan Hoasjoe, BS, MS; Moisés A. Arriaga, MD, MBA, FACS

Introduction: While middle fossa encephaloceles can be incidental, most are found when investigating intracranial hypertension, chronic otitis media, cholesteatoma, temporal bone trauma, and/or pulsatile tinnitus. Diagnostic workup of middle fossa encephaloceles begins with a thorough history and physical exam, focusing on history meningitis or persistent middle ear effusion. Routine imaging includes CT of the temporal bones, as well as MRI of the temporal bones with T1 and T2 weighted images. The authors' preference for surgical management includes a preauricular approach to the middle fossa, which exposes the entire tegmen and petrous apex. As a result, the greater superficial petrosal nerve (GSPN), geniculate ganglion and labyrinthine segment of the facial nerve are potentially exposed with increased risk of injury resulting in facial weakness.

Objective: Identify the incidence and risk factors associated with delayed facial nerve weakness after middle fossa repair of tegmen dehiscence.

Study Design: This is a cross-sectional study from a tertiary referral center from a cohort of 594 middle fossa tegmen repairs (MFTR) between 2017 and 2024. 15 cases (13 patients) experienced ipsilateral delayed facial paresis (DFP) and 0 immediate paralysis. Two patients underwent bilateral surgery on different dates and developed DFP following both surgeries. Average age was 49 years and 10 cases (66.7%) were female. Main outcome measured was presence of delayed facial nerve paralysis, defined as House-Brackmann (HB) grade II – VI, beginning ≥ 1 day following surgery, as well as pneumatization patterns of the overlying tegmen tympani and mastoideum.

Results: DFP mean operative time was 52.6 minutes (SD = 16.4) and onset of weakness was 5.1 days (SD = 3.2). None had aberrant intraoperative facial nerve activity, and all had normal GSPN stimulation. No cases had postoperative CSF leakage, intracranial complications, or wound complications. Facial nerve function reached a nadir of HB grade II in 4 (26.7%), III in 7 (46.7%), IV in 1 (6.7%), V in 2 (13.3%), and VI in 1 (6.7%). DFP was treated with steroids, antivirals, and eye care. The final recovery was HB grade I in all cases reported. For patients in the control group, the proportion of multiple distinct defects (60%, 95% CI = 50.40%, 69.90%) is significantly higher than the proportion of honeycomb (40%, 95% CI = 30.40%, 49.6%) ($p = 0.023$). For patients who developed facial nerve weakness, the proportion of multiple distinct defects (73.3%, 95% CI = 44.90%-92.21%) was marginally higher than the proportion of honeycomb defects (26.57%, 95% CI = 7.79, 55.10%). ($p = 0.059$). Preoperative imaging shows 4 patients (40%) with geniculate ganglion dehiscence. There was no statistically significant difference between either group and pattern of pneumatization. ($p = 0.3218$).

Conclusions: While the incidence is low (2.5% overall, 0.5% HB grade V/VI) and recovery complete, DFP is distressing. Repair of middle fossa encephaloceles are overall well tolerated surgeries with low morbidity. Despite this, patients can develop facial nerve weakness post-operatively. Further investigation into pre-operative imaging and patient characteristics is needed to better elucidate risk factors to reduce post-operative morbidity from facial nerve weakness.

Colleen F. Cecola, MD

Armand A. Jacques, MD

Analysis of Non-Narcotic and Narcotic Pain Management in Adults and Children Following Endoscopic Ear Surgery

Ishwarya S. Mamidi, MD; Michael Simons; Rahul Mehta, MD

Introduction: Endoscopic tympanoplasties (ET) have emerged as an efficient and effective technique to repair tympanic perforations. While traditional tympanoplasties require a post-auricular incision, the endoscopic method allows for fewer and smaller incisions. Due to the improved visualization attained by an endoscope, patients do not require additional procedures such as a canaloplasty. Given these benefits, patients often do well post-operatively with minimal pain. This study is an observational study designed to identify patients who may require narcotics after endoscopic tympanoplasties.

Hypothesis: Tylenol and ibuprofen are sufficient for post-operative pain control after endoscopic tympanoplasties. Given the shorter duration of endoscopic tympanoplasties and smaller incision, pain is well tolerated after surgery.

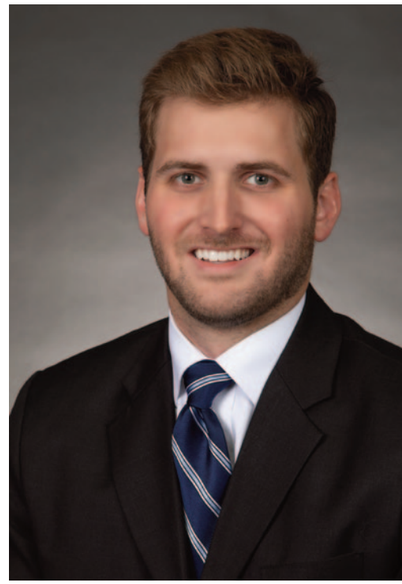
Methods: This is an observational study that will be conducted on patients undergoing endoscopic tympanoplasties by one surgeon (RM). Patients undergoing ET will all be prescribed Tylenol and ibuprofen post-operatively. No narcotics will be prescribed immediately after surgery. Patients will be asked to report their pain using the Wong Baker Scale and the Visual Analog Scale on post-operative day 1, 2, and 3. Pre-operative variables such as demographics, past medical history, and previous opioid use will be collected. Patients requiring additional pain medication will be recorded.

Results: Data will be collected and analyzed upon approval from the IRB. However, we have observed in the past that most patients undergoing ET do not require additional narcotics and pain is generally well tolerated. Factors predisposing patients to requiring opiates after surgery include chronic opioid use, previous psychiatric history, or autism.

Ishwarya S. Mamidi, MD

Computational Fluid Dynamics Evaluation of Sinonasal Flow During Respiration and Nasal Irrigation Following Transnasal Endoscopic Surgery

J. Nicholas Poche, MD, MS; Stephen C. Hernandez, MD; Katie L. Melder, MD; Michael E. Dunham, MD, MS; Daniel W. Nuss, MD



Introduction: During transnasal endoscopic sinus surgery (TNES), surgeons remove diseased tissue, polyps, and other obstructions that impede airflow and mucus drainage. The procedure aims to restore normal sinus ventilation and enhance mucociliary function. The extent of the surgery can significantly affect a patient's nasal airflow and mucus clearance. However, excessively removing healthy tissue may disrupt airflow patterns and damage the protective mucosal lining, potentially causing dryness, crusting, and changes in sensitivity. In some cases, patients may develop empty nose syndrome—an issue likely caused by impaired neurosensory feedback and mucosal function—resulting in a persistent sensation of nasal obstruction despite having widely open nasal cavities. Additionally, variations in the TNES technique and the extent of dissection can influence a patient's ability to maintain adequate sinonasal hygiene during postoperative nasal irrigation.

Methods: Using CAD software, representative models were fitted with an inlet at the pyriform aperture to simulate nasal irrigation flow. In a separate study, we modified a normal sinonasal airway model to simulate flow alterations in the maxillary sinus after isolated surgical changes to the osteomeatal complex and lateral nasal wall. Qualitative flow changes were evaluated by examining flow streamlines and visualizing penetration into the nasal and sinus cavities. Quantitative parameters included airway resistance, airway pressure, and lateral wall shear pressure.

Computational fluid dynamics (CFD) were used to simulate changes in sinonasal aerodynamics and postoperative irrigation patterns following TNES. We analyzed 11 three-dimensional sinonasal models constructed from CT scans, representing normal anatomy, standard functional endoscopic sinus surgery (FESS) with ethmoidectomy and maxillary sinusotomy, FESS with extended maxillary sinusotomy (FESS-EMS), and FESS with a modified EMS that preserves the anterior inferior turbinate (FESS-MEMS).

Results: Our findings indicate a significant increase in inspiratory flow into the maxillary sinus cavities, with a corresponding potential for environmental irritant and pathogen deposition that grows proportionally to the extent of TNES. Airway resistance and pressure decrease in relation to the extent of lateral wall resection. The inspiratory velocity profiles are altered, displaying reduced flow around the sinus cavity openings. Sinus wall shear forces remain low in normal and postoperative simulations, suggesting they do not contribute to sinus mucosal changes or mucociliary dysfunction. Intraluminal pressures are highest in the FESS-MEMS cases, followed by FESS-EMS and standard FESS. Irrigant penetration into the maxillary sinus appears similar in FESS-EMS and FESS-MEMS cases and is substantially greater than in normal and standard FESS models.

Conclusions: Our findings elucidate changes in aerodynamics and irrigation patterns in the postoperative sinonasal cavity. These results give insight into potential postoperative complications and the efficacy of postoperative irrigations specific to the degree of the maxillary sinus surgery performed, allowing surgeons to further tailor endoscopic sinus surgery to patient pathology and symptomatology.

J. Nicholas Poche, MD

Preoperative Predictors of Length of Hospitalization Following Head and Neck Free Flap Reconstruction

Caroline A. Bonaventure, MD; Rula Mualla, MD; Zhide Fang PhD; Reed Smith, BS; Sagar G. Kansara, MD

Background: Microvascular free tissue transfer is a primary method for reconstruction in patients with large or complex defects of the head and neck, with success rates of 95-99%. Average length of hospitalization following these procedures has been reported between 8-26 days. Many free flap patients have significant medical comorbidities, socioeconomic factors, or postoperative complications leading to increased length of hospitalization. Studies have reported peri- or post-operative factors predictive of increased length of hospitalization, including increased operative time, flap takeback, wound breakdown, surgical site infection, and postoperative pneumonia. A few preoperative and demographic factors have been shown to correlate with increased length of stay; however, there remains a significant knowledge gap. The present study aims to determine preoperative factors correlating to increased length of hospitalization for patients undergoing free flap reconstruction for head and neck defects.

Methods: A retrospective chart review was performed of patients undergoing free flap reconstruction for head and neck defects at a single institution from 2022-2024. A multivariate analysis was conducted to determine preoperative factors predictive of length of hospitalization, including age, gender, race, ethnicity, BMI, primary insurance type, distance from patient's primary residence to the hospital, preoperative laboratory values, history of surgery or radiation therapy, and smoking or alcohol use history. A descriptive table was created to summarize demographic factors, including mean (standard deviation), median (interquartile range), or frequency (percentages). Parametric or nonparametric approaches were used for comparison between continuous factors, and Chi-square tests for the association between categorical variables. Generalized linear models were fitted to investigate the impact of chosen factors, with logistic regression for the binary outcomes and Poisson/Negative Binomial regression for the count numbers. The level of statistical significance is set as 0.05. All computations were carried out in SAS 9.4 (Cary, North Carolina).

Results: 99 patients were included in analysis. 76 were men (76.8%) and 23 were women (23.2%). Mean age at surgery was 60.6 years. Most common insurance type was Medicare (47.5%), followed by Medicaid or Self Pay (28.3%), and Private insurance (24.2%). 29 patients had undergone prior radiation, and 15 patients had received prior surgery. 77 patients had significant smoking history. Median Charleston Comorbidity Index was 5. Most common free flap type was ALT (47 patients), followed by radial forearm (26), fibula (19), and latissimus dorsi (3); 4 patients had another type. Average length of hospitalization was 11.5 days. On multivariate analysis, distance from patient's primary residence to the hospital ($p = 0.0391$), Charleston Comorbidity Index ($p = 0.0036$), preoperative albumin ($p = 0.0013$), preoperative hemoglobin ($p = 0.0006$), and smoking history ($p = 0.0366$) had a statistically significant impact on length of hospitalization. Primary insurance had marginally significant impact on the length of hospitalization ($p = 0.0740 < 0.1$).

Conclusion: Several preoperative factors are associated with increased length of hospitalization for patients undergoing microvascular reconstruction of head and neck defects, including distance from the hospital, preoperative albumin, preoperative hemoglobin, and history of smoking. Primary insurance had marginally significant impact on length of hospitalization. Notably, history of prior radiation or surgery did not have an impact.

Caroline A. Bonaventure, MD

Role of Perinasal Musculature in Ipsilateral Nasal Obstruction During Synkinesis Progression

Carley E. Boyce, MD; Jonathan Joseph, MD; Reed Smith, BS; Zhide Fang, PhD; Sara MacDowell, PT, DPT; Laura T. Hetzler, MD, MBA, FACS

Introduction/Objectives: This study aims to recognize the role of perinasal musculature in post-recovery facial nerve pathology and its contribution to ipsilateral nasal obstruction. The primary objective is to evaluate the effectiveness of chemodenervation targeting the perinasal muscular sling in alleviating nasal obstruction associated with synkinesis progression.

Methods: A retrospective review was conducted at a multidisciplinary facial nerve disorders clinic. Patients presenting with synchronous progression of ipsilateral nasal obstruction and synkinesis were documented. Botulinum toxin was administered to the perinasal musculature, specifically targeting the nasalis and depressor septi muscles, varying between 1-3u. Symptom improvement was assessed during follow-up visits 4 weeks post-injection. Subjective patient-reported improvement was documented through clinical follow-up, where patients described postinjection changes in breathing and symptom relief. Additionally, objective assessment was conducted using the validated Nasal Obstruction Symptom Evaluation (NoSE) scale, obtained both pre- and post-treatment. Photographic analysis was also performed.

Results: Over a 31-month period, 282 clinic evaluations were performed. Of 99 unique patients treated, 23 patients (23.5%) presented with new ipsilateral nasal obstruction. Following chemodenervation, 65.2% of patients reported improvement, 4.35% reported no improvement, and 30.4% were indeterminate. Treatment with botulinum toxin significantly reduced nasal obstruction symptoms in synkinetic patients ($p < 0.01$). Mean NoSE scores decreased significantly from 45.4 pre-treatment to 24.3 post-treatment ($p = 0.023$).

Conclusion: Chemodenervation of the perinasal musculature is a highly effective intervention for addressing progressive ipsilateral nasal obstruction related to synkinesis progression, significantly improving the quality of life for this patient population.

Carley E. Boyce, MD

Nasal Surgical Site Aspirator – A Device to Clear the Surgical Field During Trans-Nasal Endoscopic Surgery

J. Christian Lemoine, MD; Katie L. Melder, MD;
Stephen C. Hernandez, MD; Michael E. Dunham, MD, MS

Introduction: Transnasal endoscopic surgery (TNES) offers several advantages over open surgical approaches, including reduced morbidity, improved patient comfort, faster recovery, and the absence of visible scars. A persistent challenge, however, is maintaining a clear operative field within the narrow confines of the nasal cavity. Bleeding is the most common problem; even minimal blood can coat the endoscope lens and obscure the view. Mucus and other debris likewise cloud the visualization. In addition, powered instruments used during TNES create aerosols that hinder visibility and disseminate infectious material throughout the operating room, an issue exacerbated in patients with active sinus infections.

Objective: To address these obstacles, we developed the Nasal SurgicalSite Aspirator (NSSA), which continuously removes blood, secretions, and aerosols during nasal, sinus, and endonasal skullbase procedures. This project proposes a device that sits in the nasopharynx and is connected to a standard wall suction. The device provides continuous suction to clear blood and other debris from the nasopharynx, providing the surgeon with a clearer surgical field and improving operative efficiency.

Methods: We investigated several NSSA geometries based on dimensions of the nasopharynx measured from CT scans using Fusion 360 software, evaluating flow parameters and clearance through computational fluid dynamics (CFD) simulations and bench testing. Subsequently, surgical field clarity was assessed in cadaveric TNES simulations, using a bloodmucus surrogate to replicate intraoperative conditions.

Results: Based on monophasic and biphasic CFD simulation the most effective configuration was a funnelshaped cannula positioned in the nasopharynx immediately posterior to the choanae and connected to standard wall suction. Simulations under these parameters confirmed laminar flow conditions. Prior cadaveric testing has demonstrated that surgical field clarity is higher in an evacuated field compared to a non-evacuated field using the Endoscopic Surgical Field Clarity Index.

Conclusion: Our findings confirm that nasopharyngeal evacuation with the NSSA is a feasible adjunct to ESS for maintaining a clear surgical field. Through careful simulation and preclinical testing, we have demonstrated the safety and effectiveness of nasopharyngeal aspiration. Further evaluation should proceed with clinical testing in surgical patients.

J. Christian Lemoine, MD

Postoperative Outcomes and Survivorship After Lateral Temporal Bone Resection: A Single Center Retrospective Chart Review

Katelyn N. Robillard, MD, PhD; Cassidy Nguyen;
Moisés A. Arriaga, MD, MBA, FACS; Rahul Mehta, MD

Background: Temporal bone malignancy is rarely a primary neoplasm but more often the result of advanced periauricular skin cancer or parotid gland tumors. These occur in all age groups but typically affect older men. Younger patients are more likely to be diagnosed with a sarcoma and older patients a carcinoma. While radiation therapy is a treatment option, the standard of care is surgery. Lateral temporal bone resection (LTBR) removes the bony external auditory canal (EAC) en bloc lateral to the facial nerve to achieve negative margins. The goal of this project was to determine postoperative outcomes in patients undergoing LTBR for definitive management of temporal bone cancer.

Methods: The overall research question was as follows: "For patients with malignancy who undergo LTBR, what are the postoperative outcomes, complications, and duration of follow up?" A single-center, retrospective chart review was performed on all patients at our institution who underwent LTBR (CPT 36595) for definitive cancer excision between January 2012 and June 2024. Data collection included demographics, presenting symptoms, primary tumor site and laterality, tumor histology, type of LTBR and adjuvant therapy, length of follow up, disease-free survival, and overall survival.

Results: A total of 49 patients (50 procedures) were included in our analysis, most of whom were male (90%) and white (88%). Common presenting symptoms included hearing loss, otalgia, bloody otorrhea, ulcerative lesions, parotid masses, and facial weakness. The primary lesion was more often found on the right side (58%) and involved the periauricular skin (34%), auricle (26%), EAC (20%), parotid gland (16%), temporal bone (2%), or scalp (2%). Histology revealed squamous cell carcinoma in the majority of cases (60%), followed by basal cell carcinoma (16%), salivary duct carcinoma (6%), melanoma (4%), and others. The average age at time of surgery was 68 (range 42 to 91). A traditional LTBR was performed in all patients except two who underwent subtotal LTBR and one who underwent modified LTBR. Postoperatively, 66% of patients received adjuvant radiation and 16% adjuvant chemotherapy. Early complications included wound dehiscence, wound infection, facial pain, tinnitus, and vertigo, although these were rare. The average length of follow up was 23 months. There were 12 (24%) local or distant recurrences with an average disease-free survival of 21 months. At the time of this study, the overall survival rate was 81%. For the nine patients known to be deceased, the average postoperative survival was 19 months.

Conclusions: Temporal bone malignancy typically affects older white men and begins as a tumor of the periauricular skin, EAC, or parotid gland. Presenting symptoms are similar to those of benign ear conditions, making early diagnosis difficult. The mainstay of treatment is LTBR with most patients receiving adjuvant radiation and/or chemotherapy. This is generally well-tolerated and leads to disease-free survival in the majority of patients.

Katelyn N. Robillard MD, PhD

Implementation of an OSA Screening Protocol in Pediatric Patients Undergoing Vagal Nerve Stimulator Implantation

Joshua J. LaHaye, MD; Garrison Lowder; Lauren S. Buck, MD

Introduction: Vagal Nerve Stimulation (VNS) is a viable treatment option for medically intractable epilepsy. VNS implantation increases risk for sleep-disordered breathing (SDB) and obstructive sleep apnea (OSA). The deleterious effects of vagal nerve stimulation on children with SDB and OSA are due to glottic narrowing via vocal cord stimulation—a product of recurrent laryngeal nerve firing. OSA can have a negative effect on seizure control. A protocol for preemptive screening before VNS implantation can identify OSA or SDB in patients and reduce post-implantation risk.

Hypothesis: Exacerbated SDB/OSA is a risk for those receiving VNS and requires screening prior to implantation. We hypothesize that developing an SDB/OSA screening protocol for patients receiving VNS implantation can improve the likelihood of early identification and post-operative treatment. Early identification of SDB/OSA can possibly improve the efficacy of VNS by decreasing the incidence of deleterious side effects from stimulation.

Methods: This study will compare patients who received VNS implantation before protocol initiation and those who received VNS after protocol initiation. A retrograde post-operative data collection will be performed for patients who received VNS Implantation from January 1, 2023, to March 1, 2025, at Our Lady of the Lake Children's Hospital, Baton Rouge, LA, analyzing data on 1) age at time of surgery, 2) documented OSA pre-operative risk factors, 3) any previous sleep workup, and 4) complications after implantation, among other variables.

Future candidates for VNS (ages 17 years and younger) will undergo pediatric sleep questionnaire (PSQ) screening for SDB/OSA and, for those who meet screening criteria – pre-VNS implantation, polysomnography and laryngoscopy. Further treatment will be administered on case-by-case basis according to patient-specific needs. This population of candidates will be evaluated from March 1, 2025, to April 30, 2027.

Potential Benefits and Risks: This study can improve the identification and prompt treatment of SDB/OSA in patients receiving VNS, improving the outcomes of VNS implantation by limiting effects secondary to implantation. Risks associated with this study are minimal and include the standard risks associated with SDB/OSA screening and data confidentiality breaches – as is with any case review study.

Evaluating Vaping Outcomes and Healing of Facial Reconstruction Following Mohs Surgery

Alexandra H. Rose, MD; Sara Be; Alyssa K. Ovaitt, MD

Background: While the detrimental effects of traditional tobacco use on postoperative wound healing are well established, the influence of vaping and e-cigarettes remains less defined. As vaping continues to rise in popularity, understanding its implications in surgical contexts is critical, particularly in facial plastic and reconstructive surgery, where the delicate tissues and aesthetic demands heighten the impact of even minor healing delays and complications.

Hypothesis: We hypothesize that patients who use e-cigarettes or vapes will exhibit delayed wound healing and a higher incidence of surgical complications, potentially comparable to those observed in traditional tobacco users and other high-risk groups.

Objective: To investigate the impact of e-cigarette and vaping use on wound healing and surgical outcomes in patients undergoing facial reconstruction following Mohs surgery.

Methods: A retrospective chart review will be conducted on patients who underwent facial reconstruction after Mohs surgery. Data collection will include patient demographics, comorbidities, smoking and vaping history, surgical technique, and postoperative outcomes such as wound healing time, infection, necrosis, and need for revision surgery.

Conclusion: Anticipated findings will support the need to screen for vaping use during preoperative consultations, as part of a comprehensive risk assessment protocol in facial plastic and reconstructive surgery.

Joshua J. LaHaye, MD

Alexandra H. Rose, MD

Steroid Timing for Facial Nerve Injury in Temporal Bone Fractures

Jacob L. Seicshnaydre, MD; Suraj Patel, BS; Celeste C. Gary, MD

Background: Facial nerve injury commonly occurs in conjunction with temporal bone fractures in blunt and penetrating head trauma. The facial nerve is especially at risk for injury in the temporal bone because of its winding course and location within a confined bony canal. This manifests as unilateral facial paralysis or paresis. Corticosteroids can be especially effective in reducing traumatic edema of the nerve and therefore reducing axonal compression. Often, these patients suffer other injuries and require early intubation and sedation before formal ENT evaluation. This commonly leads to delayed diagnosis of facial nerve injury, and therefore delayed intervention.

Objective: The objective of this research study is to evaluate rates of facial nerve injury in patients who present with temporal bone fracture, as well as time to intervention, type of intervention, rate of follow up and facial nerve outcome.

Hypothesis: We hypothesize that early administration of corticosteroids in patients with traumatic temporal bone fractures will improve facial nerve outcomes.

Methods: Patients with temporal bone fractures presenting to University Medical Center New Orleans will be identified in LCMC Epic database. The timeline will be from January 1, 2016 and continue through December 31, 2024. Information collected from the EMR include MRN, Name, DOB (excluded from REDCap export), age, gender, date and time of arrival to hospital by first documented vital signs, date and time of administration of first corticosteroid dose, whether or not patient intubated on arrival, hospital day of facial nerve decompression (if performed), House-Brackmann facial nerve function score on first ENT evaluation, did HB score worsen after first evaluation, timing of first outpatient ENT follow up, House-Brackmann score at first ENT follow up, HB score at 6 month follow up, and one-year follow up.

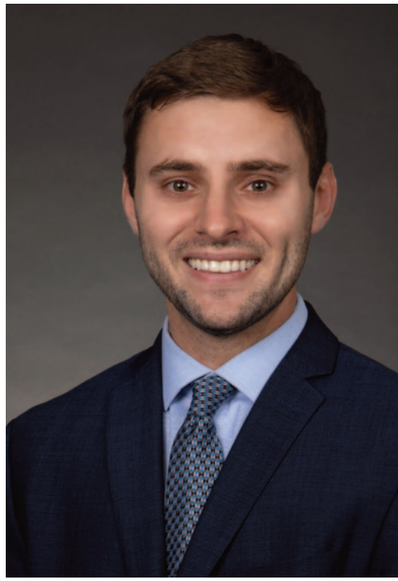
Results: No data collection has occurred for this study given that our IRB is pending approval.

Conclusion: If it is found that early steroid administration correlates with facial nerve outcomes, next steps for this project can be implementation of a quality improvement project to identify traumatic facial nerve injuries early and administer corticosteroids. Time to administration and subsequent facial nerve outcomes can be studied after these changes have been implemented.

Jacob L. Seicshnaydre, MD

Locoregional Recurrence in Sentinel Lymph Node–Positive Head and Neck Melanoma: A Retrospective Cohort Study Evaluating the Impact of Adjuvant Immunotherapy

Adam C. Turry, MD; Rula Mualla, MD



Background: The Multicenter Selective Lymphadenectomy Trials (MSLT-I and MSLT-II) have shaped melanoma management by clarifying the roles of sentinel lymph node biopsy (SLNB) and completion lymph node dissection (CLND) in patients with intermediate-thickness melanoma. MSLT-II demonstrated that while CLND does not improve melanoma-specific survival and disease-free survival in SLNB-positive patients, it significantly reduces locoregional recurrence. As the morbidity of recurrence in the head and neck can be severe while complications from neck dissections are low, some surgeons have advocated for completion lymphadenectomy in head and neck melanoma patients with positive sentinel lymph nodes. Immunotherapy, particularly PD-1 inhibitors, has emerged as a key treatment modality in stage III and IV melanoma. As a result, SLNB-positive patients are often receiving adjuvant immunotherapy alone for treatment without completion lymphadenectomy. However, long term rates of locoregional recurrence after immunotherapy alone in head and neck melanoma have not yet been studied.

Objective: To evaluate the impact of adjuvant immunotherapy on locoregional recurrence in SLNB-positive patients with head and neck melanoma.

Methods: We propose a single-institution, retrospective cohort study of patients with melanoma of the head and neck who underwent WLE and SLNB. Eligible patients will include those found to have a positive sentinel lymph node and subsequently treated with adjuvant immunotherapy. The primary outcome will be the rate of locoregional recurrence.

Adam C. Turry, MD

Credit Information

As a result of participating in this activity, learners should be better able to:

- **Discuss the latest advances in research for ENT procedures**
- Identify potential applications of new research findings to improve patient care in ENT practice
- Gain in-depth knowledge about specific ENT diseases, diagnostics, and treatment modalities
- Describe emerging technologies and their potential impact on ENT diagnosis and treatment

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Credit Information

The following presenters, authors, and planning committee reported no financial relationships with ineligible companies:

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The following presenters, authors, faculty and planning committee members disclosed relationship(s) with the following ineligible companies.
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Name	Ineligible Company	Relationship
Theda Kontis, MD	Abbvie	Investigator
	Galderma	Investigator
Rohan Walvekar, MD	Hood Laboratories	Royalties

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