Read all three of our prestigious publications, each offering high-quality content to keep you informed with the latest developments in the field.

**Laryngoscope**

Founded in 1896

Editor-in-Chief: Michael G. Stewart, MD, MPH

The leading source for information in head and neck disorders.

[Laryngoscope.com](http://Laryngoscope.com)

**Investigative Otolaryngology**

Open Access

Editor-in-Chief: D. Bradley Welling, MD, PhD, FACS

Rapid dissemination of the science and practice of otolaryngology-head and neck surgery.

[InvestigativeOto.com](http://InvestigativeOto.com)

**ENTtoday**

A publication of the Triological Society

Editor-in-Chief: Alexander Chiu, MD

Must-have timely information that Otolaryngologist-head and neck surgeons can use in daily practice.

[Enttoday.org](http://Enttoday.org)
TRIOLOGICAL SOCIETY BEST PRACTICE

1489  When Should Pediatric Septoplasty Be Performed for Nasal Airway Obstruction?  
Natalie Justicz, MD; Sukgi Choi, MD, MBA

1491  Is Routine Genetic Testing Warranted in Head and Neck Paragangliomas?  
Nidhi Gupta, MD; Scott E. Strome, MD; Kyle M. Hatten, MD

ALLERGY/RHINOLOGY

1494  Multiple Bioabsorbable Corticosteroid-Eluting Stent Placement With Associated Skull Base Injury  
Dennis M. Tang, MD; Christopher R. Roxbury, MD; Raj Sindwani, MD; Varun R. Kshettry, MD; Pablos Recinos, MD;  
Troy D. Woodard, MD

1497  The Role of Free Tissue Transfer in the Management of Chronic Frontal Sinus Osteomyelitis  
Ryan A. Rimmer, MD; Alexander N. Duffy, BS; Alexander M. Knops, BA; Mindy R. Rabinowitz, MD; Ian J. Koszewski, MD;  
Marc R. Rosen, MD; Timothy Ortlip, MD; Ryan N. Heydelfinger, MD; Hermes G. Garcia, MD; James J. Evans, MD;  
Garston G. Nyquist, MD; Joseph M. Curry, MD

1505  Construct Validity of a Low-Cost Medium-Fidelity Endoscopic Sinus Surgery Simulation Model  
Yuki Yoshiyasu, BS; Daniel R. Chang, MD; Leon Bunegin, BS; Ryan P. Lin, BS; James K. Aden, PhD; Thomas J. Priboda, PhD;  
Erik K. Weitzel, MD; Kevin C. McManis, MD; Sonya Malekzadeh, MD; Sarah N. Bevee, MD; Philip G. Chen, MD

1510  Factors of Success of Low-Dose Macrolides in Chronic Sinusitis: Systematic Review and Meta-analysis  
Kachorn Seresirikachorn, MD; Nichana Suwanparin; Chanyanuch Srisunthornphanich; Wirach Chitsuthipakorn, MD;  
Dichapong Kanjanawasee, MD; Kornkiat Snidvongs, MD, PhD

BRONCHO-ESOPHAGOLOGY

1520   Measurement Reliability of Phonation Threshold Pressure in Pediatric Subjects  
Matthew R. Hoffman, MD, PhD; Austin J. Scholp, BS; Calvin D. Hedberg, BS; Jim R. Lamb, BS;  
Maia N. Braden, MS, CCC-SLP; J. Scott McMurray, MD; Jack J. Jiang, MD, PhD

1527   A Pilot Study Assessing Clinic Value in Pediatric Pharyngeal Dysphagia: The OPPS/Cost Method  
Steven Coppess, JD, MBA; Jennifer Stares, MD; Bianca K. Fregner, PhD; Kimberly DeMarre, MS, CCC-SLP;  
Amy Fuberty, MS, CCC-SLP; Jennifer Hoang, AAS; Mabek Shah, MD; Matthew MacKinnon, MD;  
Kaalan Johnson, MD
<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1533</td>
<td>Acute Inflammatory Response to Contrast Agent Aspiration and Its Mechanisms in the Rat Lung</td>
<td>Rumi Ueha, MD, PhD; Nogab Nativ-Zeltzer, PhD; Taku Sato, MD; Takao Goto, MD; Takaharu Nito, MD, PhD; Peter C Bolajczyk, MD, MPH, PhD; Tatsuya Yamaoiba, MD, PhD</td>
</tr>
<tr>
<td>1539</td>
<td>Pharyngobasilar Fascia as a Landmark in Endoscopic Skull Base Surgery: The Triangulation Technique</td>
<td>Diego A. Servian, MD; André Beer-Furlan, MD; Lucas Ramos Lima, MD; Alaa S. Montaier, MD; Matias Gomez Galarec, MD; Ricardo L. Carrau, MD; Daniel M. Prevedello, MD</td>
</tr>
<tr>
<td>1545</td>
<td>Asymptomatic Radiographic Sinonasal Inflammation Does Not Affect Pituitary Surgery Outcomes</td>
<td>Edward C. Kuan, MD, MBA; Srbuth K. Rereddy, MD; Neil N. Patel, BS; Ivy W. Maina, BA; Vaiaiki Triantafilou, BA; Michael A. Zabanski, MD, PhD; Charles C.L. Tong, MD; Seyed A. Nabavizadeh, MD; John Y.K. Lee, MD; M. Sean Grady, MD; Bert W. O'Malley Jr., MD; James N. Palmer, MD; Nithin D. Adappa, MD</td>
</tr>
<tr>
<td>1549</td>
<td>The Epidemiology of Autologous Tissue Grafting in Primary and Revision Rhinoplasty</td>
<td>Linda N. Lee, MD; Olivia Quatela, BS; Neil Bhattacharyya, MD, FACS</td>
</tr>
<tr>
<td>1554</td>
<td>Improvement in Nasal Obstruction and Quality of Life After Septorhinoplasty and Turbinate Surgery</td>
<td>Alisa Yamaoiki, MD; Patricia A. Levesque, BA; Benjamin S. Bleier, MD; Nicolas Y. Busaba, MD; Stacey T. Gray, MD; Eric H. Holbrook, MD; Ahmad R. Sedaghat, MD; Robin W. Lindsay, MD</td>
</tr>
<tr>
<td>1561</td>
<td>The Otolaryngology Match: A Bibliometric Analysis of 222 First-Year Residents</td>
<td>Loka Thangamathesvaran, BA; Nivali M. Patel, BA; Sana H. Siddiqui, BA; Rashana Singh, BA; Robert Wayne Jr, BS; Suat Kiby, MD; Wayne D. Hsueh, MD; Soly Barodes, MD, FACS; Jean Anderson Eshy, MD, FACS, FARS</td>
</tr>
<tr>
<td>1567</td>
<td>Implication of Fusobacterium necrophorum in Recurrence of Peritonsillar Abscess</td>
<td>S. Ahmed Ali, MD; Kevin J. Kovatch, MD; Josh Smith, BS; Emily L. Bellile, MS; John E. Hanks, MD; Paul T. Hoff, MD</td>
</tr>
<tr>
<td>1572</td>
<td>Impact of Head and Neck Cancer Treatment on Survivors’ Mealtime Experience</td>
<td>Karen M. K. Chan, PhD; Herman K. W. Chan, BSc; Jerry Y. L. Siu, BSc; Dai Pu, BSc; Rebecca L. Nund, PhD; Elizabeth C. Ward, PhD</td>
</tr>
<tr>
<td>1579</td>
<td>Cutaneous Squamous Cell Carcinoma Metastasis to the Parotid Region Lymph Nodes</td>
<td>Larry L. Myers, MD, FACS; Chul Abn, PhD</td>
</tr>
<tr>
<td>1587</td>
<td>Robotic Versus Conventional Neck Dissection: A Systematic Review and Meta-Analysis</td>
<td>Daniel C. Sukato, MD; Daniel P. Ballard, MD; Jason M. Abramowitz, MD; Richard M. Rosenfeld, MD, MPH; Stefan Mlot, MD</td>
</tr>
<tr>
<td>1597</td>
<td>Curcumin Gum Formulation for Prevention of Oral Cavity Head and Neck Squamous Cell Carcinoma</td>
<td>Lindsay Boven, MD; Sean P. Holmes, MD; Brian Latimer, MS; Kenneth McMartin, PhD; Xiaohui Ma, MD; Tara Moore-Medlin, BS; Alok R. Khandelwal, PhD; Jerry McLarty, PhD; Cherrie-Ann O. Nathan, MD, FACS</td>
</tr>
<tr>
<td>1604</td>
<td>Cost Comparison of Treatment for Oropharyngeal Carcinoma</td>
<td>Kenric Tam, BA; Ryan K. Oroco, MD; A. Dimitrios Colecas, MD; Nikita Bedi, BA; Heather M. Starmer, MS-SLP; Beth M. Beadle, MD, PhD; F. Christopher Holinger, MD, FACS</td>
</tr>
</tbody>
</table>
The Impact of a Stepwise Approach to Primary Tumor Detection in Squamous Cell Carcinoma of the Neck With Unknown Primary

John F. Ryan, BS; Kevin M. Metz, MD; Lisa M. Rooper, MD; Wojciech K. Mydlarz, MD; Harry Quon, MD; Christine G. Gourin, MD, MPH; Marietta Tan, MD; David W. Eisele, MD; Carole Fakhry, MD, MPH

LARYNGOLOGY

Glottic Exposure for Transoral Laser Microsurgery: Proposal of a Mini-Version of the Laryngoscore

Fabiola Incandela, MD; Alberto Paderno, MD; Francesco Musale, MD; Andrea Laborai, MD; Marta Filaura, MD; Francesca Mora, MD; Francesca Del Bon, MD; Cesare Piazza, MD; Giorgio Peretti, MD

A Separation of Innate and Learned Vocal Behaviors Defines the Symptomatology of Spasmodic Dysphonia

Samantha Guiry, BA; Alexis Worthley, BA; Kristina Simonyan, MD, PhD

Systemic Safety of Serial Intrathecal Steroid Injection for Subglottic Stenosis

Jonathan Woliansky, MBBS(Hons); Debra Phyland, PhD, FSPAA; Paul Paddle, MBBS(Hons), FRACS

Type I Thyroplasty: A Safe Outpatient Procedure

Attapon Junlapan, MD; C. Kwang Sung, MD, MS; Edward J. Damrose, MD

Safety of Outpatient Unilateral Medialization Laryngoplasty Across Two Academic Institutions

Steven M. Chau, MD; Christine M. Kim, MD; Andrew Vabakhzadeh-Hagh, MD; Sunil P. Verma, MD; Dinesh K. Chhetri, MD

Common Practices in Botulinum Toxin Injection for Spasmodic Dysphonia Treatment: A National Survey

Hagit Shoffel-Havakuk, MD; David E. Resse, MD; Christian K. Lava, BS; Edie R. Hapner, PhD; Michael M. Johns III, MD

Transoral Rigid 70-Degree Laryngoscopy in a Pediatric Voice Clinic

Julina Ongkasuwan, MD; Danielle Devore, CCC-SLP; Sarah Hollis, CCC-SLP; Jennifer Yan, MD

OTOLOGY/NEUROTOLOGY

Vertical Head Impulse and Caloric Are Complementary but React Opposite to Meniere’s Disease Hydrops

Munehisa Fukushima, MD, PhD; Ryobei Oya, MD; Kengo Nozaki, MD; Hirotaka Eguchi, MD; Shiro Akahani, MD, PhD; Hidenori Inohara, MD, PhD; Noriaki Takeda, MD, PhD

Arachnoid Cysts of the Internal Auditory Canal: An Underappreciated Entity?

Omer J. Ungar, MD; Madeline Franck, MS; Joseph B. Nadol, MD; Felipe Santos, MD

Differences in Video Head Impulse Test Gains From Right Versus Left or Outward Versus Inward Head Impulses

Jun Woo Park, MD; Tae Su Kim, MD; Eun Hye Cha, MS; Byung Chul Kang, MD; Hong Ju Park, MD, PhD

Otosyphilis: Resurgence of an Old Disease

Hailey Theeuwen, BS; Mark Whipple, MD, SM, FACS; Jamie R. Litvack, MD, MS, FARS

Vestibular Atelectasis: Decoding Pressure and Sound-Induced Nystagmus With Bilateral Vestibulopathy

Sinisa Maslovara, MD, PhD; Silvia Butkovic-Solde, MD, PhD; Ivana Pajic-Matic, MD, PhD; Anamarija Sestak, MD

Vestibular Atelectasis: Myth or Reality?

Michael Eliezer, MD; Arnaud Attiyé, MD; Jean-Pierre Guichard, MD; Hélène Vittaux, MD; Antoine Guilloumet, MD; Michel Toupet, MD; Philippe Herman, MD, PhD; Romain Kania, MD, PhD; Emmanuel Houdart, MD, PhD; Charlotte Hautefort, MD
PEDIATRICS

1696  Mucocele Formation Following Laryngeal Cleft Injection
C. Burton Wood, MD; Alexis K. Rieber, MD; Edward B. Penn, MD

1699  Safety and Efficacy of Early Injection Laryngoplasty in Pediatric Patients
Caitlin Bertelsen, MD; Lia Jacobson, MD, MS; Beth Osterbauer, MPH, CCRP; Christian Hochstimm, MD, PhD

1706  ▶ Tracheostomy Demographics and Outcomes Among Pediatric Patients Ages 18 Years or Younger—United States 2012
Mark Sakai, MD; Yann-Fieu Kou, MD; Gopi B. Shab, MD, MPH; Renaine F. Johnson, MD, MPH, FACS

SLEEP MEDICINE

1712  Multilevel Palate and Tongue Base Surgical Treatment of Obstructive Sleep Apnea: A Systematic Review and Meta-analysis
Graeme B. Mulholland, MD, FRCSC; Caroline W. Jeffery, MD, FRCSC; Hedyeh Ziai, MD; Varinder Hans, BSc; Hadi Seikaly, MD, FRCSC; Kenny P. Pang, FRCSEd, FRCSSI(OTO); Brian W. Rottenberg, MD, FRCSC

THYROID/PARATHYROID

1722  Incidental Thyroid Papillary Microcarcinoma: Survival and Follow-up
Sophie Gorostis, MD; Thibaut Raguin, MD; Olivier Schneegans, MD; Catherine Takeda, MD; Christian Debry, MD, PhD; Agnèse Dupret-Bories, MD, PhD

E-ONLY ARTICLES

LETTERS TO THE EDITOR

E227  Regarding: A Prospective Study for Treatment of Nasal Valve Collapse Due to Lateral Wall Insufficiency: Outcomes Using a Bioabsorbable Implant
Jeehong Kim, MD; Amit Kochhar, MD; Elisabeth Ference, MD

E228  In Response to Letter to the Editor Regarding: A Prospective Study for Treatment of Nasal Valve Collapse Due to Lateral Wall Insufficiency: Outcomes Using a Bioabsorbable Implant
Pablo Stolovitzky, MD; Douglas M. Sidle, MD; Randall A. Ow, MD; Nathan E. Nachlas, MD; Sam P. Most, MD

BRONCHO-ESOPHAGOLOGY

E229  Lubricin/Proteoglycan 4 Detected in Vocal Folds of Humans and Five Other Mammals
James B. Kohler, PhD; Monica A. Tynan, BS; Steven M. Zeitels, MD; Andrew S. Liss, PhD; Maria T. Gianataazio, BS; Alysa A. Morin, MSc; Tannin A. Schmidt, PhD

HEAD AND NECK

E238  Excessive Inflammation Portends Complications: Wound Cytokines and Head and Neck Surgery Outcomes
Amy Anne D. Lassig, MD, MS, FACS; Bruce R. Lindgren, MS; Rikwan Itabiyi, BS; Anne M. Joseph, MD, MPH; Kalpna Gupta, PhD
Automated Quantification of Vocal Fold Motion in a Recurrent Laryngeal Nerve Injury Mouse Model
Megan M. Haney, DVM; Ali Hamad, MS; Emily Leary, PhD; Filiz Bunyak, PhD; Teresa E. Lever, PhD

Antifibrotic Effect of Mitomycin-C on Human Vocal Cord Fibroblasts
Diána Szabó, MD, PhD; Dávid Kovács, PhD; Valéria Endrész, PhD; Nóra Igaz, MSc; Kitti Jenővai, MSc; Gabriella Spengler, PhD; László Tiszlavicz, MD, PhD; József Molnár, MD, DSc; Katalin Burián, MD, PhD; Mónika Kiricsi, PhD; László Rovó, MD, PhD

On the Cover
Images from treatment plans illustrating differences in radiation treatment for a patient with (A) an identified HPV-positive base-of-tongue primary tumor, (B) an HPV-positive metastasis without identified primary, and (C) an HPV-negative metastasis without identified primary.