CONTENTS

585  An Exact Analytical Model for the Relationship Between Flow Resistance and Geometric Properties of Tubes Used in Semi-occluded Vocal Tract Exercises
Andrey R. da Silva, Ana Carolina Ghirardi, Matheus Rutzen Reiser and Stephan Paul

591  An Objective Parameter to Classify Voice Signals Based on Variation in Energy Distribution
Boquan Liu, Evan Polce and Jack Jiang

603  The Effects of Stress Type, Vowel Identity, Baseline f0, and Loudness on the Relative Fundamental Frequency of Individuals With Healthy Voices
Yeonggwang Park and Cara E. Stepp

611  Quantitative Measurement of the Three-dimensional Structure of the Vocal Folds and Its Application in Identifying the Type of Cricoarytenoid Joint Dislocation
Xinlin Xu, Yong Wang, Jingen Wang, Jacob F. Reiss, Li Zhou, Jack J. Jiang and Peiyun Zhuang

620  Comparative Anatomy of Pig Arytenoid Cartilage and Human Arytenoid Cartilage
Nan Gao, Xidong Cui, Guangbin Sun, Guoliang Zhang, Guomin Zhou and Xia Zhao

627  Effects of Angle of Epiglottis on Aerodynamic and Acoustic Parameters in Excised Canine Larynges
Qingkai Zeng, Yanchao Jiao, Xuge Huang, Ruiqing Wang, Huijing Bao, Jim R. Lamb, Jiazhen Le, Peiyun Zhuang and Jack Jiang

634  Detection of Pathological Voice Using Cepstrum Vectors: A Deep Learning Approach
Shih-Hau Fang, Yu Tsao, Min-Jing Hsiao, Ji-Ying Chen, Ying-Hui Lai, Feng-Chuan Lin and Chi-Te Wang

(continued on next page)

Cover image: A. Normal vocal fold. B. Scarred vocal fold. Increase in the inflammatory response (blue star) and thinning of the epithelial layer (yellow arrow) are observed (H&E × 100). See M. Yildiz, et al, p. 760.

Listed in Index Medicus/MEDLINE, Current Contents/Clinical Medicine, Scisearch, Research Alert, EMBASE/Excerpta Medica, BIOSIS, Sociological Abstracts, PsychInfo, Institute For Scientific Information, and Cinahl Information Systems


YEARLY SUBSCRIPTION RATES: United States and possessions: Individual $259; Student/Resident: $148. All other countries (prices include airspeed delivery): Individual $363; Student/Resident $201.

POSTMASTER: Send address changes to Elsevier, Journal Returns, 1799 Highway 50 East, Linn, MO 65051
An Innovative Voice Analyzer “VA” Smart Phone Program for Quantitative Analysis of Voice Quality
Tsuyoshi Kojima, Shintaro Fujimura, Ryusuke Hori, Yusuke Okanoue, Kazuhiro Shoji and Masato Inoue

The Effect of Telephone Transmission on Voice Quality Perception
Renata Regina Passetti and Ana Carolina Constantini

Feasibility of the Fake Phone Call: An iOS App for Covert, Public Practice of Voice Technique for Generalization Training
Eva van Leer and Nick Porcaro

Mara Behlau

Dysphonia, Perceived Control, and Psychosocial Distress: A Qualitative Study
Stephanie Misono, Caroline Haut, Liza Meredith, Patricia A. Frazier, Ali Stockness, Deirdre D. Michael, Lisa Butcher and Eileen M. Harwood

Assessment and Management of Preoperative Anxiety
Isabel Tulloch and John S. Rubin

Dual pH Probes Without Proximal Esophageal and Pharyngeal Impedance May Be Deficient in Diagnosing LPR
Lawrence F. Borges, Walter W. Chan and Thomas L. Carroll

Does Pepsin Play a Role in Etiology of Laryngeal Nodules?
Hamdi Tasli, Burcu Eser, Mehmet Burak Asik and Hakan Birkent

Prevalence of Dysphagia in Patients With Non-neoplastic Vocal Fold Pathology
Abdul-Latif Hamdan, Elie Khalifee, Hussein Jaffal, Anthony Ghanem, Samer Abou Rizk and Aya El Hage

A Grading System for Transnasal Flexible Laryngoscopy
Hamdi Tasli, Omer Karakoc and Hakan Birkent

Voice Quality and Orofacial Strength as Outcome of Levodopa Effectiveness in Patients with Early Idiopathic Parkinson Disease: A Preliminary Report
Jérôme R. Lechien, Serge Blecic, Yves Ghosez, Kathy Huet, Bernard Harmenegies and Sven Saussez

Quality of Life and Voice Changes After a Single Injection in Patients With ADSD Over Time
Maryam Faham, Farhad Torabinezhad, Thomas Murry, Payman Dabirmoghaddam, Jamileh Abolghasemi, Mohammad Kamali and Meysam Asgari

Botox Injection for Laryngeal Dysfunction in Alexander Disease
Amy Rutt and Selmin Karatayli Ozgursoy

An Unusual Etiology of Vocal Tremor in a Professional Singer
Bridget L. Hopewell, Cristen Paige and David O. Francis

Topical Anesthesia for Endoscopic Office-based Procedures of the Upper Aerodigestive Tract
David J. Wellenstein, Raymond A.B. van der Wal, Henrieke W. Schutte, Jimmie Honings, Frank J.A. van den Hoogen, Henri A.M. Marres, Robert P. Takes and Guido B. van den Broek
Contents

747  Office-Based Autologous Fat Injection Laryngoplasty for Glottic Insufficiency in Patients Under 50 Years Old
Hao-Chun Hu, Yi-Ting Hung, Shu-Yi Lin, Tao-Hsin Tung and Shyue-Yih Chang

751  Endoscopic Partial Arytenoidectomy for Bilateral Vocal Fold Paralysis: Medially Based Mucosal Flap Technique
Taner Yilmaz

759  Effects of Intracordal Estradiol and Dexamethasone Injection on Wound Healing in Vocal Fold Injuries
Muhammet Yildiz, Ozigür Yigit, Ahmet Volkan Sünter, Deniz Tun Edizer, Nevra Dursun and Oguzhan Okcu

767  Efficacy of Intraleisonal Steroid Injection in Small Benign Vocal Fold Lesions
Anurag Snehi Ramavat, Harsimran Tiwana, Nagamani Banumathy, Jaimanti Bakshi, Naresh Panda and Ashish Goel

773  Injectable Silk Protein Microparticle-based Fillers: A Novel Material for Potential Use in Glottic Insufficiency
Joseph E. Brown, Christopher P. Gulka, Jodie E.M. Giordano, Maria P. Montero, Anh Hoang and Thomas L. Carroll

781  Effects of Gender-confirming Pitch-raising Surgery in Transgender Women a Long-term Follow-up Study of Acoustic and Patient-reported Data
Victoria Kelly, Stellan Hertegård, Jenny Eriksson, Ulrika Nygren and Maria Södersten

792  New Vocal Fold-shortening Procedure: External Approach to Anterior Vocal Fold Plication
Ryota Tomioka, Kazuhiro Nakamura, Kazuhiro Hattori, Niro Tayama and Kiyoaki Tsukahara

795  Comparison of Pitch Strength With Perceptual and Other Acoustic Metric Outcome Measures Following Medialization Laryngoplasty
Adam D. Rubin, Cristina Jackson-Menaldi, Lisa M. Kopf, Katherine Marks, Jean Skeffington, Mark D. Skowronski, Rahul Shrivastav and Eric J. Hunter

801  Personality Traits of Children With Vocal Fold Nodules
Ingrid Verduyckt, Caroline Rhéault, Marc Remacle and Dominique Morsomme

801  The Impact of Dysphonic Voices on Children's Comprehension of Spoken Language
Johnny C.-H. Chui and Estella P.-M. Ma

801  Evaluation of Pediatric Voice Handicap Index in Children With Allergic Rhinitis
Serkan Filiz, Ömer Tarik Selçuk and Rıza Taner Baran

801  Respiratory Tract Infections and Voice Quality in 4-Year-old Children in the STEPS Study
Emma Kallvik, Laura Toivonen, Ville Peltola, Anne Kaljonen and Susanna Simberg

802  Influence of Noise Resulting From the Location and Conditions of Classrooms and Schools in Upper Egypt on Teachers' Voices
Ketaki Vasant Phadke, Ahmed Abo-Hasseba, Jan G. Švec and Ahmed Geneid

802  The Effect of Smoking on the Fundamental Frequency of the Speaking Voice
Marie Reine Ayoub, Pauline Larrouy-Maestri and Dominique Morsomme
e802 Effect of Chant Training on the Morphology of the Lateral Thyrohyoid Ligament: A Biometric and Acoustic Assessment
Meliha Berdan, Emine Petekkaya and Ahmet Hilmi Yücel

Acoustic and Aerodynamic Characteristics of Choral Singers
Sunil Kumar Ravi, Srushti Shabnam, Krupa Saira George and T. Saraswathi

Aerodynamic Characteristics of Growl Voice and Reinforced Falsetto in Metal Singing
Marco Guzman, Karol Acevedo, Fernando Leiva, Vasti Ortiz, Nicolas Hormazabal and Camilo Quezada

Comparison Study of Vocal Attack Time in Patients With Cleft Palate With and Without Glottal Stop in Mandarin
Zhen Ren, Xia Zhou, Lian Ma and Jiangping Kong

Acoustic-Perceptual Correlates of Voice in Indian Hindu Purohits
Radish Kumar Balasubramaniam, Sudhin Karuppali, Gagan Bajaj, Anuradha Shastry and Jayashree Bhat

A Comparison of Voice Activity and Participation Profiles Among Etiological Groups
Seung Jin Lee, Hong-Shik Choi and HyangHee Kim

Immediate Impact of Vocal Demand on Musical Theater Singers in Brazil
Claudia Pacheco and Mara Behlau

Prevalence of and Risk Factors for Self-reported Voice Problems Among Hindu Temple Priests
Usha Devadas, Manisha Hegde and Santosh Maruthy

The Vocal Score Profile in Verdi’s Characters
Nicole Pizzorni, Antonio Schindler, Matteo Sozzi, Massimo Corbo and Marco Gilardone

Perceived Desirability of Vocal Fry Among Female Speech Communication Disorders Graduate Students
Claire Ligon, Carrie Rountrey, Noopur Vaidya Rank, Michael Hull and Aliaa Khidr

Prevalence and Associated Factors With Voice Disorders in Brazilian Community-dwelling Older Adults
Amanda C.B. Góis, Leandro Pernambuco and Kenio Costa de Lima

Investigating Laryngeal “Tilt” on Same-pitch Phonation—Preliminary Findings of Vocal Mode Metal and Density Parameters as Alternatives to Cricothyroid-Thyroarytenoid “Mix”
Mathias Aaen, Julian McGlashan and Cathrine Sadolin

Translation and Validation of the Reflux Symptom Index to Spanish
Christian Calvo-Henríquez, Alberto Ruano-Ravina, Pedro Vaamonde, Kaelon Lattomus, Alicia Sebio, Raquel Fernández-Rodríguez and Carlos Martín-Martín

Aging Voice Index (AVI): Reliability and Validity of a Voice Quality of Life Scale for Older Adults
Nicole M. Etter, Edie R. Hapner, Julie M. Barkmeier-Kraemer, Jackie L. Gartner-Schmidt, Emily V. Dressler and Joseph C. Stemple

Translation, Adaptation, and Preliminary Validation of Dacakis and Davies’ “Transsexual Voice Questionnaire (Male to Female)” in French
Dominique Morsomme, Joana Revis and Elisabeth Thomas
CONTENTS

e808  Effects of Therapy With Semi-occluded Vocal Tract and Choir Training on Voice in Adult Individuals With Congenital, Isolated, Untreated Growth Hormone Deficiency

Voiced High-frequency Oscillation and LaxVox: Analysis of Their Immediate Effects in Subjects With Healthy Voice
Angélica Emygdio da Silva Antonetti, Vanessa Veis Ribeiro, Pâmela Aparecida Medeiros Moreira, Alcione Ghedini Brasolotto and Kelly Cristina Alves Silverio

Effects of a Variably Occluded Face Mask on the Aerodynamic and Acoustic Characteristics of Connected Speech in Patients With and Without Voice Disorders
Shaheen N. Awan, Jackie L. Gartner-Schmidt, Lauren K. Timmons and Amanda I. Gillespie

Dynamically Monitoring Vocal Fatigue and Recovery Using Aerodynamic, Acoustic, and Subjective Self-Rating Measurements
Chao Xue, Jing Kang, Calvin Hedberg, Yi Zhang and Jack J. Jiang

Effectiveness of Vocal Therapy for the Elderly When Applying Conventional and Intensive Approaches: A Randomized Clinical Trial
Juliana Godoy, Kelly Silverio and Alcione Brasolotto

Assessment of Resonant Voice Therapy in the Treatment of Vocal Fold Nodules
Ziya Saltürk, Erdi Özdemir, Hüseyin Sari, Seda Keten, Tolgar Lütfi Kumral, Guler Berkiten, Belgin Tutar and Yavuz Uyar

Lingering Effects of Straw Phonation Exercises on Aerodynamic, Electroglottographic, and Acoustic Parameters
Jing Kang, Chao Xue, David Piotrowski, Ting Gong, Yi Zhang and Jack J. Jiang

Outcome Measurement in the Treatment of Spasmodic Dysphonia: A Systematic Review of the Literature
Anna Rumbach, Patrick Aiken and Daniel Novakovic

Dependencies and Ill-designed Parameters Within High-speed Videoendoscopy and Acoustic Signal Analysis
Patrick Schlegel, Michael Stingl, Melda Kunduk, Stefan Kniesburges, Christopher Bohr and Michael Döllinger

The Effect of Electronic Cigarettes on Voice Quality
Birgül Tuhanioğlu, Sanem Okşan Erkan, Talih Özdaş, Çağrı Derici, Kemal Tüzün and Özgül Akın Şenkal

The Role of Allergy in Phonation
Nikolaos Spantideas, Anastasia Bougea, Eirini Drosou and Dimitrios Assimakopoulos

Vocal Health Practices Among School Teachers: A Study From Chennai, India
Monica Sathyantarayanan, Prakash Boominathan and Aishwarya Nallamuthu

Primary Laryngeal Tuberculosis: Our Experiences at a Tertiary Care Teaching Hospital in Eastern India
Santosh Kumar Swain, Ishwar Chandra Behera and Mahesh Chandra Sahu
### CONTENTS

<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>e812</td>
<td>Muscle Tension Dysphonia: Which Laryngoscopic Features Can We Rely on for Diagnosis?</td>
<td>Octavio Garaycochea, Juan Manuel Alcalde Navarrete, Beatriz del Río and Secundino Fernández</td>
</tr>
<tr>
<td>e813</td>
<td>Imaging Modalities in the Etiologic Evaluation of Unilateral Vocal Fold Paralysis</td>
<td>Suat Bilici, Muhammet Yıldız, Ozgur Yigit and Esra Misir</td>
</tr>
</tbody>
</table>