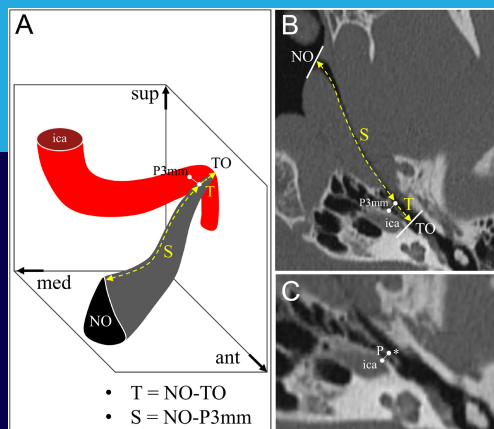


The Journal of International Advanced JIAO Otology



A) The paths of the internal carotid artery (ICA) and Eustachian tube (ET).
B) Oblique computed tomography image of the left ear.
C) Shortest perpendicular distance (P) between the osseous ET and ICA. (Page 156)

Official Journal
of the European
Academy of
Otology and
Neurotology

Vol.20 • Issue 2 • March 2024

The Journal of International
Advanced Otology is fully
sponsored and owned by

EAONO
European Academy of
Otology & Neuro-Otology



Indexed In

PubMed

SCI EXPANDED

www.advancedotology.org

EDITOR

O. Nuri Özgirgin

Department of Otolaryngology-Head and Neck Surgery, Bayındır Hospital, Ankara, Turkey

ASSOCIATE EDITORS

Francisco Cabral

Department of Surgery, ENT, University School of Medicine of UFRN, Natal, Brazil

Froukje Cals

Radboud University Medical Center, Nijmegen, Netherlands

Chunfu Dai

Eye Ear Nose & Throat Hospital, Fudan University, Shanghai, China

Arun Gadre

University of Louisville, Louisville, USA

ORCID ID: 0000-0002-7784-5533

Arata Horii

Niigata University, Niigata City, Japan

Ja-Won Koo

Seoul National University Bundang Hospital, Seongnam-si, Korea

Shakeel R. Saeed

University College London Ear Institute, London, UK

Bülent Satar

University of Health Sciences, Gülhane Medical School, Ankara, Turkey

ORCID ID: 0000-0002-1079-2393

Morgana Sluydts

Sint-Augustinus Antwerp European Institute For ORL, Wilrijk, Belgium

The Journal of International Advanced Otology
is fully sponsored and owned by



European Academy of
Otology & Neuro-Otology



Address for correspondence

Mailing address: 2610 Antwerp,

Oosterveldlaan 24, Belgium

URL: www.advancedotology.org

E-mail: jiao@advancedotology.org

Founded by MSOA



The Journal of International Advanced Otology
(J Int Adv Otol)

Copyright © All rights reserved.

ISSN 1308-7649

E ISSN 2148-3817

ADMINISTRATIVE ADVISORY BOARD

Manohar Bance
University of Cambridge, Cambridge, UK

Maurizio Barbara
Sapienza University, Sant'Andrea Hospital, Rome, Italy

Rubens de Brito
University of Sao Paulo, Sao Paulo, Brazil

Arnaud Deveze
Clinique Clairval, Marseille, France

Neil Donnelly
Spire Cambridge Lea Hospital, Cambridge, UK

Arun Gadre
University of Louisville, Louisville, USA

Karl-Bernd Huttenbrink
University of Koln, Köln, Germany

Dan Jiang
The London Bridge Hospital, London, UK

Mohan Kameswaran
Madras Ear Nose Throat Research Foundation, Chennai, India

Thomas Lenarz
Medizinische Hochschule Hannover, Hannover, Germany

Simon Lloyd
University of Manchester, Manchester, UK

Jacques Magnan
Causse Ear Clinic, Beziers, France

Jef Mulder
Radboud University Hospital, Nijmegen, The Netherlands

Codruta Neumann
One Ashford Hospital, Ashford, UK

Gerry O'Donoghue
Queens Medical Centre, Nottingham, UK

F. Erwin Offeciers
Sint-Augustinus Hospital University, Wilrijk, Belgium

Seung Ha Oh
Seoul National University Hospital, Seoul, South Korea

Milan Profant
Department of Otorhinolaryngology, Bratislava University, Bratislava, Slovakia

Angel Ramos
University Hospital Insular, Las Palmas, Spain

Jay T. Rubinstein
Virginia Merrill Bloedel Hearing Research Center, Washington, USA

Shakeel Saeed
University College London Ear Institute, London, UK

Masafumi Sakagami
Hyogo College of Medicine, Hyogo, Japan

Bülent Satar
University of Health Sciences, Gülhane Medical School, Ankara, Turkey

Samuel H Selesnick
Weill Cornell Medical College, New York, USA

Graziela Souza Queiroz Martins
University of Sao Paulo, Sao Paulo, Brasil

Holger Sudhoff
Bielefeld Academic Teaching Hospital, Muenster University, Bielefeld, Germany

Per Caye Thomasen
Gentofte University Hospital, Hellerup, Denmark

Franco Tralbalzini
University of Siena, Siena, Italy

Robby Vanspauwen
Department of Ear Nose Throat, Sint-Augustinus Antwerp European Institute For ORL, Wilrijk, Belgium

Andrzej Zarowski
Sint-Augustinus Antwerp European Institute For ORL, Wilrijk, Belgium

Ashley Wackym
Ear and Skull Base Institute, Portland, Oregon, USA

EDITORIAL CONSULTANTS

Fatthi Abdel Baki
University of Alexandria, Alexandria, Egypt

Mehmet Ada
University of Istanbul, Istanbul, Turkey

Hemant Ahluwalia
ENT Institution - Uttar Pradesh University of Medical Sciences, Etawah, India

Songül Aksoy
Department of Audiology, Hacettepe University School of Medicine, Ankara, Turkey

Mesut Akyol
Yildirim Bayazit University, Ankara, Turkey

Aynur Aliyeva
Otology-Neurotology Clinical Fellow, The Catholic University of the Korea St. Mary Hospital, Seoul, South Korea

Cüneyt Alper
University of Pittsburg, Pennsylvania, USA

Fazil Necdet Ardiç
Pamukkale University, Denizli, Turkey

Miguel Aristegui
Hospital General Universitario Gregorio Marañon, Madrid, Spain

Bernard Ars
University of Antwerp, Antwerp, Belgium

Nenad Arsovic
Belgrade Otorhinolaryngology Clinic, Belgrade, Serbia

Asım Aslan
Celal Bayar University, Manisa, Turkey

Ahmet Ataş
Istanbul University, Istanbul, Turkey

Paul Avan
Université d'Auvergne, Clermont-Ferrand, France

Manohar Bance
University of Cambridge, Cambridge, UK

Maurizio Barbara
Sapienza University, Sant'Andrea Hospital, Rome, Italy

Saba Battelino
University Medical Centre, Ljubljana, Slovenia

Yıldırım Bayazit
Medipol University, Istanbul, Turkey

Aziz Belal
Alex Ear Center, Alexandria, Egypt

Ricardo Bento
University of Sao Paulo, Sao Paulo, Brazil

Daniele Bernardeschi
GH Pitié Salpêtrière, Paris, France

Dirk Beutner
HNO-Universitätsklinik Köln, Köln, Germany

Anirban Biswas
Neurotology Center, Kolkata, India

Bruce Black
Royal Children's Hospital, Brisbane, Australia

Srecko Branica
University of Zagreb, Zagreb, Croatia

Robert Briggs
Royal Victorian Eye and Ear Hospital, Melbourne, Australia

Italo Cantore
Asl Roma 1, San Filippo Neri Hospital, Rome, Italy

Augusto Casani
Pisa University, Pisa, Italy

Ricardo Ceballos-Lizarraga
ABC Medical Center, Cuajimalpa, Mexico

Carlos Cenfor Espanol
Fundacion Jimenez Diaz - Clinica Nuestra Senora Concepcion, Madrid, Spain

Udi Cinamon
Edith Wolfson Medical Center, Cholon, Israel

Marcel Cosgarea
University of Medicine and Pharmacy "Iuliu Hatieganu", Cluj-Napoca, Romania

Vincent Cousins
The Alfred Hospital, Melbourne, Australia

Sebahattin Cüreoğlu
University of Minnesota, Minneapolis, USA

Onur Çelik
Celal Bayar University, Manisa, Turkey

Chunfu Dai
University of Shanghai, Shanghai, China

Vincent Darrouzet
Hopital Pellegrin, Bordeaux, France

Rubens de Brito
University of Sao Paulo, Sao Paulo, Brazil

Olivier Deguine
University of Toulouse, Toulouse, France

Angel Ramos de Miguel
Las Palmas University, Las Palmas de Gran Canaria, Spain

Antonio della Volpe
Santobono Paediatric Hospital, Naples, Italy

Arnaud Deveeze
Clinique Clairval, Marseille, France

İrfan Devranoğlu
İstanbul University, İstanbul, Turkey

Aarno Dietz
Kuopio University Hospital, Kuopio, Finland

Norbert Dillier
University Hospital Zürich, Zurich, Switzerland

Neil Donnelly
Spire Cambridge Lea Hospital, Cambridge, UK

John Dornhoffer
UAMS Medical Center Little Rock, USA

Bruce M. Edwards
University of Michigan, Ann Arbor, USA

Antonio Lopez Escamez
Universidad de Granada, Granada, Spain

Mario Faralli
University of Perugia, Perugia, Italy

Jose Fayad
Saudi Aramco, Dhahran, Saudi Arabia

Roberto Filipo
Sapienza University, Rome, Italy

Peter Franz
Rudolfstiftung Teaching Hospital, Vienna, Austria

Bernard Fraysse
University of Toulouse, Toulouse, France

Henning Frenzel
Universitätsklinikum Schleswig-Holstein, Lübeck, Germany

Arun Gadre
University of Louisville, Louisville, USA

Michael Gaihede
Aarhus University, Aarhus, Sweden

Aydan Genç
Department of Audiology Hacettepe University School of Medicine, Ankara, Turkey

Imre Gerlinger
Department of Ear Nose Throat University Pécs, Pécs, Hungary

Mislav Gjuric
SINTEZA Health Center, Zagreb, Croatia

Wilko Grolman
University of Utrecht, Utrecht, Netherlands

Kemal Görür
Mersin University, Mersin, Turkey

Jean-Philippe Guyot
University of Geneva, Geneva, Switzerland

Enis Alpin Güneri
Dokuz Eylül University İzmir, Turkey

İbrahim Hızalan
Novomet Ear Nose Throat Center, Bursa, Turkey

Margriet A. Huisman
Leiden University, Leiden, The Netherlands

Malou Hultcrantz
University of Karolinska, Stockholm, Sweden

Karl-Bernd Huttenbrink
University of Köln, Köln, Germany

Yukiko Iino
Jichi Medical University Saitama Medical Center, Saitama, Japan

Armağan İncesulu
Eskişehir Osmangazi University, Eskişehir, Turkey

Adrian James
The Hospital for Sick Children, Ontario, Canada

Herman Jenkins
University of Colorado, Aurora, USA

Daniel Jiang
St Thomas' Hospital, London, UK

Seiji Kakehata
Yamagata University, Yamagata, Japan

Mohan Kameswaran
Madras Ear Nose Throat Research Foundation, Chennai, India

Daniel Kaplan
Ben Gurion University, Beer Sheva, Israel

Herman Kingma
University of Maastricht, Maastricht, The Netherlands

Tayfun Kirazlı
Ege University, İzmir, Turkey

Mete Kiroğlu
Çukurova University, Adana, Turkey

Hiromi Kojima
Jikei University, Tokyo, Japan

Nazım Korkut
İstanbul University, İstanbul, Turkey

Sergey Kosyakov
Russian Medical Academy for Postgraduate Education, Moscow, Russia

Rudi Kuhweide
A.Z. St.-Jan Brugge A.V., Bruges, Belgium

Roland Laszig
University of Freiburg, Freiburg, Germany

Thomas Lenarz
Medizinische Hochschule Hannover, Hannover, Germany

Thomas Linder
University of Luzern, Luzern, Switzerland

Simon Lloyd
University of Manchester, Manchester, UK

Daniela Lucidi
University Hospital of Modena, Modena, Italy

Jacques Magnan
Causse Ear Clinic, Beziers, France

Mans Magnusson
University of Lund, Lund, Sweden

Marco Mandala
University of Siena, Siena, Italy

Antonino Maniaci
Department of Medical, Surgical Sciences and Advanced Technologies, ENT Unit, University of Catania, Catania, Italy

Manuel Manrique
University of Pamplona, Pamplona, Spain

Salah Mansour
Lebanese University, Beirut, Lebanon

Daniele Marchioni
University of Verona, Verona, Italy

Paul Merkus
VU University Medical Center Amsterdam, Amsterdam, The Netherlands

Hidemi Miyazaki
Kyosai Hospital, Tokyo, Japan

Constantino Morera
University of Valencia, Valencia, Spain

Badr Eldin Mostafa
Ain-Shams University, Cairo, Egypt

Jef Mulder
Radboud University Hospital, Nijmegen, The Netherlands

Marcus Neudert
Technische Universität Dresden, Dresden, Germany

Thomas Nikolopoulos
University of Athens, Athens, Greece

Daniel Nuti
Università degli Studi di Siena, Siena, Italy

Gerry O'Donoghue
Queens Medical Centre, Nottingham, UK

Michael Joseph O'Leary
Senta Clinic, California, USA

Stephen O'Leary
University of Melbourne, Melbourne, Australia

Onur Odabaşı
Adnan Menderes University, Aydın, Turkey

F. Erwin Offeciers
Sint-Augustinus Hospital University, Wilrijk,
Belgium

Seung Ha Oh
Seoul National University Hospital, Seoul, South
Korea

Levent Olgun
İzmir Bozyaka Hospital, İzmir, Turkey

Carlos A. Oliveira
University of Brasília Medical School, Brasília, Brazil

Ewa Olszewska
Medical University of Białystok, Białystok, Poland

Eva Orzan
Audiology and Otorhinolaryngology Institute for
Maternal and Child Health IRCCS "Burlo Garofolo",
Trieste, Italy

Levent Naci Ozluoğlu
Başkent University, Ankara, Turkey

Blake Papsin
University of Toronto, Toronto, Canada

Ronen Perez
Shaare Zedek Medical Center, Jerusalem, Israel

Nicolas Perez Fernandez
University of Navarra, Navarra, Spain

Stefan Plontke
University Hospital Halle, Saale, Germany

Milan Profant
Department of Otorhinolaryngology University of
Bratislava, Bratislava, Slovakia

Angel Ramos
University Hospital Insular, Las Palmas, Spain

Giampietro Ricci
University of Perugia, Perugia, Italy

John Rutka
Toronto General Hospital, Toronto, Canada

Ayşe Sanem Sahli
Department of Audiology Hacettepe University
School of Medicine, Ankara, Turkey

Masafumi Sakagami
Hyogo College of Medicine, Hyogo, Japan

Issam Saliba
University of Montreal, Quebec, Canada

Mario Sanna
Gruppo Otologico, Piacenza, Italy

Pascal Senn
University of Geneva, Geneva, Switzerland

Avi Shupak
Technion - Israel Institute of Technology, Haifa,
Israel

Henryk Skarzynski
World Hearing Center, Warsaw, Poland

Ad Snik
University of Nijmegen, Nijmegen, The Netherlands

Thomas Somers
Sint-Augustinus Hospital University, Wilrijk, Belgium

Holger Sudhoff
Bielefeld Academic Teaching Hospital, Muenster
University, Bielefeld, Germany

Witold Szyfter
Poznan University of Medical Sciences, Poznan,
Poland

Bülent Şerbetcioğlu
İstanbul Medipol University, İstanbul, Turkey

Rinze A. Tange
University of Utrecht, Utrecht, The Netherlands

George Tavartkiladze
National Research Centre for Audiology and Hearing
Rehabilitation, Moscow, Russia

Per Caye Thomasen
Gentofte University Hospital, Hellerup, Denmark

Michael Tong
St. Joseph's Health Inc., New York, USA

Tetsuya Tono
Miyazaki Medical College, Miyazaki, Japan

Vedat Topsakal
University of Utrecht, Utrecht, The Netherlands

Franco Trabalzini
University of Siena, Siena, Italy

Eric Truy
University of Lyon, Lyon, France

Nina Bozanic Urbancic
University Medical Centre Ljubljana, Ljubljana,
Slovenia

Cem Uzun
Trakya University, Edirne, Turkey

Paul Van de Heyning
University of Antwerp, Antwerp, Belgium

Frederic Venail
CHU Montpellier, Montpellier, France

Christophe Vincent
Lille University Hospital, Lille, France

Magnus von Unge
Akershus Universitetssykehus, Nordbyhagen,
Norway

Sertac Yetişer
Anadolu Hospital, İstanbul, Turkey

Orhan Yılmaz
Clinic of Otorhinolaryngology, University of Health
Sciences Dışkapı Yıldırım Beyazıt Training and
Research Hospital, Ankara, Turkey

Robin Youngs
Gloucestershire Royal Hospital, Gloucestershire, UK

Diego Zanetti
University of Milano, Milano, Italy

Nicola Quaranta
University of Bari, Bari, Italy

Ashley Wackym
Ear and Skull Base Institute, Portland, Oregon, USA

Stephen Wetmore
University West Virginia Medical Center,
Morgantown, USA



General Manager
Ali ŞAHİN

Finance Coordinator
Sinem Fehime İLHAN

Journal Managers
Deniz KAYA
Irmak BERBEROĞLU

Publications Coordinators

Alara ERGİN
İrem ÖZMEN
Derya AZER
Nisanur ATICI
Şeref Mert GÜCÜN

Web Specialists

Erdem ERCİVAN

Project Assistant
Batuhan KARA

Contact

Address: Büyükdere Cad. 199/6,
34394, Şişli, İstanbul, Türkiye
Phone: +90 212 217 17 00
E-mail: info@avesyayincilik.com

About The Journal of International Advanced Otology

The Journal of International Advanced Otology (J Int Adv Otol) is a peer-reviewed, open-access, online-only journal published by the European Academy of Otology and Neurotology and the Politzer Society.

The Journal of International Advanced Otology is a bimonthly journal that is published in English in January, March, May, July, September, and November.

Journal History

As of 2009, the journal has changed its title to Journal of International Advanced Otology.

Current Title (2009 - ...)

Journal of International Advanced Otology

EISSN: 2148-3817

Previous Titles (2005 - 2008)

Mediterranean Journal of Otology

ISSN: 1305-5267

Abstracting and Indexing

The Journal of International Advanced Otology is covered in the following abstracting and indexing databases;

- Web of Science-Science Citation Index Expanded
- PubMed/Medline
- PubMed Central
- CNKI
- EBSCO
- PROQUEST
- DOAJ
- SCOPUS

All content published in the journal is permanently archived in Portico.

Aims, Scope, and Audience

The Journal of International Advanced Otology aims to publish studies of the highest scientific and clinical value and encourages the submission of high-quality research that advances in otology and neurotology.

The Journal of International Advanced Otology covers a wide range of topics related to otology, neurotology, audiology (excluding linguistics) and skull base medicine. The journal is interested in publishing original research that addresses important clinical questions and advances the understanding and treatment of these conditions. This may include studies on the effectiveness of different treatments, new diagnostic tools or techniques, and novel approaches to preventing or managing orthopedic and traumatic conditions.

The Journal of International Advanced Otology publishes clinical and basic research articles, case reports, reviews, systematic reviews and meta-analyses, short reports, video reports and letters to the editor. Conference proceedings may also be considered for publication.

The target audience of the journal includes physicians and academics who work in the fields of otology, neurotology, audiology and skull base medicine.

Open Access Policy

The Journal of International Advanced Otology is an open access publication.

Starting on April 2019, all content published in the journal is licensed under the Creative Commons Attribution-NonCommercial (CC BY-NC) 4.0 International License which allows third parties to use the content for non-commercial purposes as long as they give credit to the original work.

This license allows for the content to be shared and adapted for non-commercial purposes, promoting the dissemination and use of the research published in the journal.

The content published before April 2019 was licensed under a traditional copyright, but the archive is still available for free access.

All published content is available online, free of charge at <https://www.advancedotology.org/EN>.

Authors retain unrestricted copyrights and publishing rights in The Journal of International Advanced Otology.

When using previously published content, including figures, tables, or any other material in both print and electronic formats, authors must obtain permission from the copyright holder. Legal, financial and criminal liabilities in this regard belong to the author(s).

Copyright Policy

A Copyright Agreement and Acknowledgement of Authorship form should be submitted with all manuscripts. By signing this form, authors agree that the article, if accepted for publication by The Journal of International Advanced Otology, will be licensed under a Creative Commons Attribution-Non Commercial 4.0 International License (CC BY-NC 4.0) which permits third parties to share and adapt the content for non-commercial purposes by giving the appropriate credit to the original work.

When using previously published content, including figures, tables, or any other material in both print and electronic formats, authors must obtain permission from the copyright holder. Legal, financial and criminal liabilities in this regard belong to the author(s).

Authors retain unrestricted copyrights and publishing rights in The Journal of International Advanced Otology.

Publication Fee Policy

The Journal of International Advanced Otology is funded by the European Academy of Otology and Neurotology and the Politzer Society. Authors are not required to pay any fees during the evaluation and publication process.

Disclaimer

The statements or opinions expressed in the manuscripts published in the journal reflect the views of the author(s) and not the views of the editors, editorial board, and/or publisher. The editors, editorial board, and publisher are not responsible for the content of the manuscripts and do not necessarily endorse the views expressed in them. It is the responsibility of the authors to ensure that their work is accurate and well-researched, and the views expressed in their manuscripts are their own. The editors, editorial board, and publisher simply provide a platform for the authors to share their work with the scientific community.

You can find the current version of the Instructions to Authors at <https://www.advancedotology.org/en/instructions-to-authors-1016>.



Editorial Office: Prof. Dr. O. Nuri Ozgirgin

Address: Bayındır Hospital, Söğütözü, Ankara, Turkey

Tel: +90 312 287 90 00 - int: 7811

Fax: +90 312 284 42 76

e-mail: ozgirgin@icloud.com

Publisher: AVES

Address: Büyükdere Cad. 199/6, 34394, Şişli, İstanbul, Türkiye

Phone: +90 212 217 17 00

Web page: avesyayincilik.com

E-mail: info@avesyayincilik.com

Contents

Original Articles

- 94 | **Cochlear Implantation: Predicting Round Window Niche Visibility Using One Measurement in High-Resolution Temporal Bone Computed Tomography**
Laila Telmesani, Mona Al-Ramah, Yassin Abdelsamad, Lena Telmesani
- 101 | **Outcomes of Cochlear Implantation in Patients with Far-Advanced Otosclerosis Who Had Previously Undergone Stapes Surgery**
Piotr H. Skarzynski, Andrzej Pastuszek, Elzbieta Gos, Artur Lorens, Aleksandra Kolodziejak, Anita Obrycka, Marek Porowski, Henryk Skarzynski
- 108 | **Cochlear Implantation: Small Cochlear Diameter May Indicate Degree of Abnormality**
Fahad N. Altamimi, Fatemah AlTheyab, Mariam Al-Amro, Ali Al Montasheri, Sara Al Otaibi, Fida Al Muhawas
- 113 | **Datalogging Findings in Adult Cochlear Implant Recipients Who Never Developed Intelligible Speech**
Manuel Loureiro, Jane Bradley, Jennifer Clemesha, Nishchay Mehta
- 119 | **Auditory Phenotype of a Novel Missense Variant in the *CEACAM16* Gene in a Large Russian Family With Autosomal Dominant Nonsyndromic Hearing Loss**
Tatiana G. Markova, Natalia N. Alekseeva, Oxana P. Ryzhkova, Olga L. Shatokhina, Anna A. Orlova, Viktoriia V. Zabnenkova, Olga S. Groznova, Olesya V. Sagaydak, Svetlana S. Chibisova, Alexander V. Polyakov, George A. Tavartkiladze
- 127 | **Do Otolologists and Other Otolaryngologists Manage Single-Sided Deafness Differently?**
Nurullah Türe, Armağan İncesulu, Badr Eldin Mostafa
- 135 | **Magnetic Resonance Imaging in Prediction of Sensorineural Hearing Loss in Patients with Neuroinfections**
Frej Juul Vilhelmsen, Elisa Skovgaard Jensen, Bodil Damgaard, Per Cayé-Thomasen, Christian Thomas Brandt, Malene Kirchmann
- 142 | **Comparing the Quality of Life and Hearing Thresholds Following Stapedectomy Versus Laser Stapedotomy with NiTiBOND Piston**
Péter Révész, Eszter Kopjár, Zsolt Szakács, Vilmos Warta, Alexandra Csongor, Imre Gerlinger, István Szanyi
- 147 | **Evaluation of the Peritubal Region Between the Osseous Eustachian Tube and the Internal Carotid Artery: Usefulness of Oblique Temporal Computed Tomography with Valsalva Maneuver**
Myung Ho Jin, Ha Youn Kim, Min Young Kwak
- 154 | **Postoperative Late Hearing Deterioration in Cholesteatoma with Labyrinthine Fistulas**
Masahiro Takahashi, Takara Nakazawa, Sho Kurihara, Kazuhisa Yamamoto, Yutaka Yamamoto, Hiromi Kojima
- 158 | **Wideband Absorbance Pattern and its Diagnostic Value in Adults with Middle Ear Effusions and Tympanic Membrane Perforation**
Arunraj Karuppanan, Animesh Barman, Nerale Maraiah Mamatha
- 164 | **Hyperventilation-Induced Nystagmus in Acute Unilateral Vestibulopathy: A Correlation with Vestibulo-ocular Reflex Gain and Clinical Implication**
Alfredo Di Giovanni, Giacomo Lupinelli, Mario Gullà, Giampietro Ricci, Mario Faralli, Ciacca Giacomo

Reviews

- 171 | **Hearing Loss in Space Flights: A Review of Noise Regulations and Previous Outcomes**
Ahmet Uğur Avcı
- 175 | **Effects of Tranexamic Acid on Intraoperative Bleeding and Surgical Field Visualization During Middle Ear Surgery: A Narrative Review**
Vito Pontillo, Mary Daval, Morgane Marc, Denis Ayache

Case Reports

- 182 | **Arsenic Poisoning-Induced Sensorineural Hearing Loss: A Case Report**
Anqi Suo, Yan Wang, Hongyan Niu, Xinxin Yang
- 186 | **Intratympanic Gentamicin Injection for Endolymphatic Hydrops After Cochlear Implantation**
Pietro Canzi, Elena Carlotto, Silvia Quagliari, Maurizio Guida, Domenico Minervini, Ilaria Ottoboni, Cesare Chiapperini, Anna Chiara Stellato, Marco Lucio Manfrin, Marco Benazzo