

ARCHIVES

OF
OTOLARYNGOLOGY—
HEAD & NECK SURGERY

The ARCHIVES OF OTOLARYNGOLOGY—HEAD & NECK SURGERY is a member of the consortium of AMA journals listed below. The complete text of all AMA journals is available online from Dialog Information Services and Ovid Technologies, Inc.

The Journal of the American Medical Association (JAMA)

Archives of Dermatology

Archives of Facial Plastic Surgery

Archives of Family Medicine

Archives of General Psychiatry

Archives of Internal Medicine

Archives of Neurology

Archives of Ophthalmology

Archives of Otolaryngology—Head & Neck Surgery

Archives of Pathology & Laboratory Medicine

Archives of Pediatrics & Adolescent Medicine

Archives of Surgery

The ARCHIVES OF OTOLARYNGOLOGY—HEAD & NECK SURGERY (ISSN 0886-4470) is published monthly by the American Medical Association, 515 N State St, Chicago, IL 60610-0946, and is an official publication of the Association. The ARCHIVES OF OTOLARYNGOLOGY—HEAD & NECK SURGERY reaches more than 11 000 readers in over 80 countries each month. Periodicals postage rates paid at Chicago, IL and at additional mailing offices. GST registration number: 12622 5556 RT. Canada Post International Publications Mail (Canadian Distribution) Sales Agreement No. 319066.

Printed in the USA.

Official publication for American Academy of Facial Plastic and Reconstructive Surgery, Inc, American Society for Head and Neck Surgery, and American Society of Pediatric Otolaryngology.

SUBSCRIPTION RATES—The personal subscription rates for the ARCHIVES OF OTOLARYNGOLOGY—HEAD & NECK SURGERY are \$195 for 1 year (12 issues) in the United States and US possessions; \$245 in the Americas; £145 outside the Americas. The institution rates for 1 year are \$295 in the United States; \$395 in the Americas; £245 outside the Americas. Special rates for residents and medical students are available. Address all subscription communications to: Subscriber Services Center, American Medical Association, PO Box 10946, Chicago, IL 60610-0946. Phone: (800) 262-2350. Fax: (312) 464-5831. E-mail: ama-subs@ama-assn.org. For mailing addresses outside the United States and US possessions, see International Subscription Information.

CHANGE OF ADDRESS—POSTMASTER, send all address changes to ARCHIVES OF OTOLARYNGOLOGY, c/o Subscriber Services, American Medical Association, 515 N State St, Chicago, IL 60610. Please notify us of address change at least 6 weeks in advance to ensure uninterrupted service. Include both old and new addresses, a recent mailing label, and new ZIP code. For mailing addresses outside the United States and US possessions, see International Subscription Information.

SUBSCRIBER SERVICES—For information about subscribing to any of the AMA publications, change of address, missing issues, or purchasing back issues, please contact Subscriber Services Center, American Medical Association, PO Box 10946, Chicago, IL 60610-0946, or call (800) 262-2350 or (312) 670-SUBS (670-7827) between 8:30 AM and 4:30 PM CST. Fax: (312) 464-5831. E-mail: ama-subs@ama-assn.org. For mailing addresses outside the United States and US possessions, see International Subscription Information.

INTERNATIONAL SUBSCRIPTION INFORMATION—Subscriptions outside the United States and US possessions are served according to geographic region. Please address correspondence to the following 2 offices based on delivery address: (1) For delivery in North America, Central America, and South America, contact Subscriber Services, AMA, PO Box 10946, Chicago, IL 60610-0946. Phone: (312) 670-7827. Fax: (312) 464-5831. E-mail: ama-subs@ama-assn.org. (2) For delivery outside the Americas, contact JAMA & Archives Journals, Reader Services Centre, PO Box 299, London WC1H 9TD, England. Phone: +44 (0)171-383-6270. Fax: +44 (0)171-383-6402. E-mail: jama-archives@dial.pipex.com.

REPRINTS—Authors place their reprint order at the time the edited typescript is reviewed and should allow 4 to 6 weeks for delivery following publication. Requests for individual reprints should be sent directly to the author at the address shown in the article.

For bulk reprint orders for distribution by commercial organizations, please contact Wanda Bartolotta, 500 Fifth Ave, #2210, New York, NY 10110. Phone: (212) 354-0050. Fax: (212) 354-1169. E-mail: wanda_bartolotta@ama-assn.org. For reprint orders in limited quantities for distribution by educational organizations and for author reprints, please contact Reprint Coordinator, 515 N State St, Chicago, IL 60610. Phone: (312) 464-4594. Fax: (312) 464-4849.

PERMISSIONS—Contact Rhonda Bailey, Permissions Assistant, 515 N State St, Chicago, IL 60610. Phone: (312) 464-2513.

ADVERTISING PRINCIPLES—Each advertisement in this issue has been reviewed and complies with the principles governing advertising in AMA scientific publications. A copy of these principles is available on request. The appearance of advertising in AMA publications is not an AMA guarantee or endorsement of the product or the claims made for the product by the manufacturer.

WORLD WIDE WEB ADDRESS—<http://www.ama-assn.org>

OTOLARYNGOLOGY HOME PAGE—<http://www.archoto.com>

Publication Staff

Offices: 515 N State St, Chicago, IL 60610

**Editorial Processing Department,
Archives Journals**

Director: Paula Glitman

Manager: Lise M. Stevens

Freelance Manager: Diane L. Cannon

Freelance Coordinators:

Mark Berthold

Connie Manno

Electronic Editing Specialist:

Paul Frank

Assistant Electronic Editing Specialist:

Monica Mungle

Senior Copy Editors:

Dee E. Egger

Brande Martin

Copy Editors:

Keith Huff

John McFadden

Jennifer L. Reddy

Editorial Assistant: Wanda Hill

**Scientific Information
& Multimedia Group**

Staff Assistant: Helga Fritz

Scientific Online Resources

Director: Margaret Winker, MD

Electronic Media Department

Director: Marty Suter

Assistant Editors:

Neil Shankman

Wendi Williams

Staff Assistant: Marla A. Hall

Production & Distribution Division

Manager, Budgets & Costs:

Bonnie Van Clevon

Publishing Manufacturing Analyst:

Diane Darnell

Office Manager: Karen Branham

Production Assistant: Shannon Epplert

**Advertising & Production
Department**

Director: Karen Adams-Taylor

Production Specialist: Terri Hanley

Manager, Advertising Services:

Carole Piszker

Manager, Production Services:

Susan Price

Supervisor, Production Services:

Betty Frigerio

Production Associates:

Mary Anne Donley

Mari Guizzetti

Sarah Powell

Denise Steinhauser

Jo Anne Turner

Production Assistant:

Bryan Irzyk

Distribution

Distribution Manager: Paul Gasiiecki

Distribution Analyst:

Michelle Robinson

Traffic Control Specialist:

Victoria Buckner

Specialty Journal Division Office

Assistant to the Publisher:

Christine Hearne

Circulation & Content

Marketing Division

Administrative Assistant:

Millette Jackson-Bates

Circulation Processing Department

Director: Beverly Martin

Subscriber Services Manager:

Susan Stoken

Circulation Systems Manager:

Alfred Tomaselli

Circulation Specialists:

Reginald Jordan

Kathryn Osten

**Circulation Development
Department**

Director: Bina Oza

Circulation Marketing Managers:

Robert Herling

Audrey Mathies

Timothy Ryan

Circulation Marketing Specialists:

Sandra Garzon

Michael McGraw

Licensing & Permissions Department

Director: Norman Frankel

Permissions: Rhonda Bailey

International Coordinator: Sharon Ali

Electronic Production Department

Director: Linda Knott

Manager, Composition & Pagination:

Phil Arko

Electronic Production Specialists:

Brenda Chandler-Grayer

Heather Crego

Karl Elvin

Amy Evers

Mary Ann Kuranda

Sandra Lopez

Manager, Graphics: Charl Richey

Electronic Imaging Specialists:

Joe Amft

Noel Chaparro

Carolyn Hall

Maria Kowalkowski

Chris Meyer

JoAnne Weiskopf

Manager, Proofreading:

Teresa H. Omiotek

Proofreaders:

David Antos

Daniel James

Rachel Novickas

Mary Kay Tinerella

Barbara Wojtowicz

Manager, Database & New Media:

Mary Ellen Johnston

Indexer: Kathy Gaydar

New Media Specialists:

Gail Barrett

Paul Boscoe

Joel Brammeier

Regina Brownlee

La'son J. Diggs

Anne McBride

Melanie Parenti

Angela Smits

Production Assistant: Ruth Sprague



ARCHIVES

OF

OTOLARYNGOLOGY- HEAD & NECK SURGERY

VOL 125 NO. 10, OCTOBER 1999

ORIGINAL ARTICLES

- The American Board of Otolaryngology, 1924-1999: 75 Years of Excellence** 1071
Robert W. Cantrell, MD; Jerome C. Goldstein, MD
- Biochemoprevention for Dysplastic Lesions of the Upper Aerodigestive Tract** 1083
Vali A. Papadimitrakopoulou, MD;
Gary L. Clayman, MD; Dong M. Shin, MD;
Jeffrey N. Myers, MD; Ann M. Gillenwater, MD;
Helmuth Goepfert, MD; Adel K. El-Naggar, MD;
Jan S. Lewin, PhD; Scott M. Lippman, MD;
Waun K. Hong, MD
- Use of Topical Ascorbic Acid and Its Effects on Photodamaged Skin Topography** 1091
Steven S. Traikovich, DO
- The Role of Image-Guidance Systems for Head and Neck Surgery** 1100
Ralph Metson, MD; Mathew Cosenza, RPh, DO;
Richard E. Gliklich, MD;
William W. Montgomery, MD
- Electroglottography in the Pediatric Population** 1105
Harold A. Cheyne; Roger C. Nuss, MD;
Robert E. Hillman, PhD
- Surgery for Cervicofacial Nontuberculous Mycobacterial Adenitis in Children: An Update** 1109
David E. Tunkel, MD

- The Microbiology of Recurrent Rhinosinusitis After Endoscopic Sinus Surgery** 1117
Neil Bhattacharyya, MD; Lynn J. Kepnes, RNP
- IgE-Mediated Reactions and Hyperreactivity in Pregnancy Rhinitis** 1121
Eva Ellegård, MD; Göran Karlsson, MD, PhD
- Ten Days' Use of Oxymetazoline Nasal Spray With or Without Benzalkonium Chloride in Patients With Vasomotor Rhinitis** 1128
Peter Graf, MD, PhD; Jakob Enerdal, MD;
Hans Hallén, MD, PhD
- Evolution of the Bacteriologic Features of Persistent Acute Otitis Media Compared With Acute Otitis Media: A 15-Year Study** 1134
Natalie Loundon, MD; Gilles Roger, MD;
Hoang Vu Thien, MD; Pierre Bégué, MD;
Erea N. Garabédian, MD

CLINICAL NOTES

- Intralesional Cidofovir for Recurrent Respiratory Papillomatosis in Children** 1143
Seth M. Pransky, MD; Anthony E. Magit, MD;
Donald B. Kearns, MD; D. Richard Kang, MD;
Newton O. Duncan, MD
- Venous Valves in the Neck: Implications for Microvascular Free Flap Reconstruction** 1151
Joseph L. Edmonds, MD; Janet M. Woodroof, MD;
Douglas A. Girod, MD

American Medical Association

Physicians dedicated to the health of America



Copyright 1999 by the American Medical Association. All rights reserved. Reproduction without permission is prohibited.

All articles published, including editorials, letters, and book reviews, represent the opinions of the authors and do not reflect the policy of the American Medical Association, the Editorial Board, or the institution with which the author is affiliated, unless this is clearly specified.

E. Ratcliffe Anderson, Jr, MD
Executive Vice President,
Chief Executive Officer

Lynn E. Jensen, PhD
Chief Operating Officer

Paul J. Blackney
Senior Vice President,
Publishing & Business Services

Robert L. Kennett
Vice President, Publishing

Peter L. Payerli
Publisher

Peter G. Messina
National Sales Manager

Geoffrey A. Flick
Manager, Marketing Services

Cheryl Iverson
Director, Editorial Processing Division

Vanessa Hayden
Director, Production &
Distribution Division

James A. Skowrenski
Director, Circulation &
Content Marketing Division

Advertising Offices: East: Philip G. Soufleris,
119 Cherry Hill Rd, 3rd Flr, Parsippany,
NJ 07054 (973)263-9191.

Midwest/West: J. P. Cahill & Associates,
341 S Waiola Ave, La Grange, IL 60525
(708) 352-0322.

AMA Classified Advertising Department:
Thalia Moss, 800-262-2260.

Cricoid Cartilage Necrosis After Arytenoidectomy in a Previously Irradiated Larynx 1154
Georg Mathias Sprinzl, MD; Hans Edmund Eckel, MD; Stephan Ernst, MD; Kambiz Motamedi, MD

PATHOLOGY FORUM

Quiz Case 1 1158
Pamela C. Roehm, MD, PhD; John K. Niparko, MD

Quiz Case 2 1159
Jeffrey H. Spiegel, MD; Daniel Sudilovsky, MD

CLINICAL CHALLENGES IN OTOLARYNGOLOGY

Removal of the Inferior Half of the Superficial Lobe Is Sufficient to Treat Pleomorphic Adenoma in the Tail of the Parotid Gland 1164
David Myssiorek, MD

Conservative vs Superficial Parotidectomy 1166
Larry J. Shemen, MD, FRCS

Conservative vs Superficial Parotidectomy for Benign Lesions of the Parotid Tail 1166
Christian Helmus, MD

LETTERS TO THE EDITOR

Diagnosis of Allergic Fungal Sinusitis vs a Mucocele 1169
Scott C. Manning, MD

In Reply 1169
William R. Spencer, MD; Matthew W. Shawl, MD; William R. Reisacher, MD; Barbara A. Zeifer, MD

Caution Advised When Using Diluted Phenylephrine Hydrochloride 1170
Michael J. Cunningham, MD

In Reply 1170
Jerald S. Altman, MD; Michael S. Hauptert, DO; Ronda A. Hamaker, MD; Walter M. Belenky, MD

REGULAR DEPARTMENTS

ARCHIVES Web Forum 1140

Products & Services 1171

Classified Advertising 1172

Index to Advertisers 1180

Instructions for Authors—
See January 1999 issue, page 5, or visit the Web site at www.archoto.com.

ARCHIVES OF **OTOLARYNGOLOGY— HEAD & NECK SURGERY**

Editor:

Michael E. Johns, MD
Emory University
Woodruff Health Sciences
Administration Building
Suite 408
1440 Clifton Rd NE
Atlanta, GA 30322

Assistant Editors:

John K. Niparko, MD
Baltimore, Md
William J. Richtsmeier, MD, PhD
Durham, NC

K. Thomas Robbins, MD
Memphis, Tenn

Editorial Assistant:

Trina L. Johns

Production Manager:

Teresa Brewton
(404) 778-2322
(404) 778-3100 FAX
e-mail: aohns@emory.edu

Editorial Board:

Elliot Abemayor, MD, PhD
Los Angeles, Calif
John G. Batsakis, MD
Houston, Tex
Margaret S. Brandwein, MD
New York, NY
Robin T. Cotton, MD
Cincinnati, Ohio
Marvin P. Fried, MD
Boston, Mass
Patrick J. Gullane, MD
Toronto, Ontario
Lauren D. Holinger, MD
Chicago, Ill
Paul R. Lambert, MD
Charlottesville, Va
Wayne F. Larrabee, Jr, MD
Seattle, Wash
Robert H. Miller, MD
New Orleans, La

H. Bryan Neel III, MD, PhD

Rochester, Minn
Jay F. Piccirillo, MD
St Louis, Mo
Clarence T. Sasaki, MD
New Haven, Conn
Richard J. H. Smith, MD
Iowa City, Iowa
Fred J. Stucker, MD
Shreveport, La

Section Editors:

Clinical Challenges in Otolaryngology
Karen H. Calhoun, MD
Galveston, Tex
Ronald B. Koppersmith, MD (Assistant)
Seattle, Wash
Online Editor
Michael A. Rothschild, MD
New York, NY

Radiology Forum

R. Nick Bryan, MD
S. James Zinreich, MD
Baltimore, Md

Pathology Forum

Frederic B. Askin, MD
William H. Westra, MD
Baltimore, Md

American Academy of Facial Plastic and Reconstructive Surgery News

Becky McGraw-Wall, MD
Houston, Tex

Maisie Shindo, MD

Los Angeles, Calif
American Society for Head and Neck Surgery News

David W. Eisele, MD
Baltimore, Md

American Society of Pediatric Otolaryngology News

Sally R. Shott, MD
Cincinnati, Ohio