

Volume 7

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Advances in  
Otolaryngology-  
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# Advances in Otolaryngology— Head and Neck Surgery®

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**Advances in Otolaryngology—  
Head and Neck Surgery®**  
Volume 7

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# **Advances in Otolaryngology— Head and Neck Surgery®**

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## Preface

Volume 7 of *Advances in Otolaryngology—Head and Neck Surgery* provides an interesting selection of topics that will have a wide appeal to all members of our specialty. The opening chapter by Andrew Blitzer entitled “Evaluation and Management of Hyperfunctional Muscular Disorders of the Head and Neck” brings us information about the wonderful advances in the diagnosis and management of some common and some very uncommon neuromuscular abnormalities. Advances in diagnostic methods and the use of the Botox vaccine is a major step forward in the management of these problems. Dr. James Koufman’s chapter, “The Otolaryngologic Manifestations of Gastroesophageal Reflux Disease (GERD),” is a continuation of his studies on this problem and he outlines advances in the management of this disease with the very latest medications. Michael Stevens has written a very nice summary of what is known about the diagnosis and management of toxic shock syndrome in otolaryngology. There have been isolated case reports but Dr. Stevens is the only one who has set this down in a orderly and comprehensive manner and the chapter is full of information about the management of this dangerous problem.

For those interested in head and neck problems, Dr. Jonas Johnson has detailed advances in the management of deep infections in the head and neck. Although these problems are not as common as they were at one time, the mechanism of development of such problems as well as the treatment have changed over the years. Dr. John Zitelli, a dermatologist who trained with Dr. Mohs, has considerable experience in cutaneous surgery and outlines the advances in this field together with a summary of his extensive experience in his chapter, “Mohs Micrographic Surgery for Skin Cancer.” Over the years, the management of rhabdomyosarcoma of the head and neck, particularly in children, has undergone a remarkable development that has resulted in vastly improved cure rates, particularly in early-stage disease. Dr. Trevor McGill acquaints us with the role of the surgeon in the management of head and neck rhabdomyosarcoma given that chemotherapy and radiation therapy are now the mainstays for the management of many of these tumors.

The chapters written by Drs. Kenneth Grundfast and Patrick Brookhouser will appeal to those of our readers interested in pediatric otolaryngology as well as otology as they deal with the evaluation of sensorineural hearing loss in infants and children, and Dr. Grundfast’s chapter points out new studies which will acquaint us with advances in the diagnosis of hereditary hearing impairment in children. The chapter by Drs. Reilly and Castillo on the advances in the management of airway infections in children will be useful to those with a particular interest in airway problems in children.

Dr. Dean Toriumi has presented a very nice chapter acquainting us with



the current status of rhinoplasty. Drs. Nelson and Johnson have written a chapter that summarizes very well the state-of-the-art in the management of androgenetic alopecia and makes very understandable an area that is quite complex.

Another cluster of chapters will appeal very much to individuals interested in otology. The chapter by Dr. Jeffrey Harris gives us excellent information about the advances in the new field of autoimmune diseases affecting the inner ear. Certainly this is an area driven by advances in technology and basic science and should be appealing for everyone interested in this area. Dr. Yvonne Sininger acquaints us with the clinical applications of otoacoustic emissions, the importance of which has been discovered in recent years. In their chapter, Dr. Edwin Monsell and colleagues acquaint us with the current status of aminoglycoside treatment for vertigo.

I want to thank my colleagues on our editorial board, Drs. Charles Bluestone, Derald Brackmann, and Charles Krause, for providing great help and guidance in selecting the topics and authors and in reviewing and critiquing the chapters. The fact that our editorial board has been able to maintain the high quality of these volumes together with an apparently never-ending variety of topics is a great tribute to their depth of knowledge in the field and an awareness of who are the active contributors in our specialty.

Barbara A. Sigler, R.N., M.N.Ed., our editorial coordinator, and Mary Jo Tutchko, my administrative assistant, should receive much of the credit for keeping the organization and production of this volume on time.

We welcome Diana Dodge who has succeeded Amy Reynaldo as assistant managing editor assigned to *Advances in Otolaryngology—Head and Neck Surgery*. We thank Amy for the outstanding job that she's done and welcome Diana who we're certain will be very important to our activities during her time in office.

Eugene N. Myers, M.D.

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# Contents

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Contributors . . . . .	v
Preface . . . . .	vii
<b>Evaluation and Management of Hyperfunctional Muscular Disorders of the Head and Neck.</b>	
<i>By Andrew Blitzer and Mitchell F. Brin . . . . .</i>	<b>1</b>
Dystonia . . . . .	1
Blepharospasm . . . . .	5
Oromandibulo-lingual Dystonia . . . . .	6
Spasmodic Dysphonia . . . . .	8
Torticollis . . . . .	14
Hemifacial Spasm . . . . .	15
Tremor . . . . .	16
Stuttering . . . . .	17
Myoclonus . . . . .	18
Tic Disorder . . . . .	19
Hyperfunctional Facial Lines . . . . .	19
Botulinum Toxin Therapy . . . . .	20
Pharmacology of Botulinum Toxin . . . . .	20
<b>Hereditary Hearing Impairment in Children.</b>	
<i>By Kenneth M. Grundfast . . . . .</i>	<b>29</b>
Diagnosis . . . . .	30
Suspicion . . . . .	30
Physical Examination . . . . .	33
Audiologic Assessment . . . . .	33
Familiarity With Inherited Hearing Disorders . . . . .	35
Synthesis . . . . .	35
Commonly Encountered Disorders . . . . .	36
Facio-Auriculo-Vertebral Dysplasia (Goldenhar Syndrome, Hemifacial Microsomy) . . . . .	37
Mandibulofacial Dysostosis (Treacher-Collins Syndrome) . . . . .	38
Usher Syndrome . . . . .	38
Pendred Syndrome . . . . .	38
Jervell and Lange-Nielsen Syndrome . . . . .	38
Stickler Syndrome . . . . .	39
Alport Syndrome . . . . .	39
Waardenburg Syndrome . . . . .	39

Branchio-Oto-Renal Syndrome . . . . .	39
X-Linked Recessive Mixed Deafness With Perilymphatic Gusher. . . . .	40
Autosomal Dominant Delayed Onset Progressive Sensorineural Deafness . . . . .	40
Diagnostic Studies . . . . .	40
Genetic Evaluation and Counseling . . . . .	41
Genetic Mapping . . . . .	41
What the Otologist Can Do. . . . .	43
Conclusion . . . . .	43
<b>The Role of the Surgeon in Management of Head and Neck Rhabdomyosarcoma.</b>	
<i>By Trevor J. McGill and Kathleen Sie</i> . . . . .	<b>45</b>
Clinical Features . . . . .	46
Staging . . . . .	47
Histopathologic Findings . . . . .	48
Treatment . . . . .	49
Surgery . . . . .	50
Radiation Therapy . . . . .	54
Chemotherapy. . . . .	55
Discussion . . . . .	56
<b>Autoimmune Diseases Affecting the Inner Ear.</b>	
<i>By Jeffrey P. Harris.</i> . . . .	<b>59</b>
Case Reports . . . . .	59
Case 1. . . . .	60
Case 2. . . . .	60
Case 3. . . . .	61
Case 4. . . . .	61
Case 5. . . . .	62
Case 6. . . . .	62
Clinical Autoimmune Disease of the Inner Ear . . . . .	63
Organ-Specific Autoimmune Inner Ear Disease . . . . .	63
Diagnosis. . . . .	64
Pathologic Findings . . . . .	66
Manifestations of Disease. . . . .	66
Meniere's Disease . . . . .	66
Nonorgan-Specific Autoimmune Inner Ear Disease. . . . .	67
Polyarteritis Nodosa. . . . .	67
Cogan's Syndrome . . . . .	68
Wegener's Granulomatosis . . . . .	69

Behcet's Syndrome . . . . .	70
Relapsing Polychondritis . . . . .	70
Systemic Lupus Erythematosus . . . . .	70
Rheumatoid Arthritis . . . . .	71
Treatment . . . . .	72
Summary . . . . .	73
<b>The Current Status of Rhinoplasty.</b>	
<i>By Dean M. Toriumi . . . . .</i>	<b>79</b>
Anatomical Segments of the Nose . . . . .	81
Surgery of the Nasal Septum . . . . .	82
Approaches to the Nose . . . . .	84
Management of the Upper One Third of the Nose . . . . .	89
Management of the Middle Third of the Nose. . . . .	94
Management of the Lower Third of the Nose . . . . .	97
Postoperative Considerations . . . . .	107
Final Comments . . . . .	107
<b>The Otolaryngologic Manifestations of Gastroesophageal Reflux Disease (GERD).</b>	
<i>By James A. Koufman . . . . .</i>	<b>115</b>
The Antireflux Barrier . . . . .	116
Lower Esophageal Sphincter . . . . .	116
Esophageal Acid Clearance . . . . .	117
Esophageal Epithelial Resistance . . . . .	118
Upper Esophageal Sphincter . . . . .	118
Pathogenesis of Gastroesophageal Reflux Disease . . . . .	119
Decreased Lower Esophageal Sphincter Pressure . . . . .	119
Abnormal Esophageal Motility . . . . .	123
Decreased Mucosal Resistance. . . . .	124
Delayed Gastric Emptying . . . . .	124
Increased Intra-gastric Pressure. . . . .	125
Gastric Hypersecretion. . . . .	125
Diagnostic Tests for Gastroesophageal Reflux Disease . . . . .	125
Tests for Esophagitis . . . . .	126
Tests Demonstrating or Measuring Reflux . . . . .	128
The Otolaryngologic Manifestations of Gastroesophageal Reflux Disease. . . . .	130
Double-Probe 24-Hour pH Monitoring in Otolaryngologic Patients . . . . .	131
Indications for Double-Probe pH Monitoring and Clinical Implications . . . . .	134

Antireflux Treatment . . . . .	137
Gastroesophageal Reflux in Pediatric Patients . . . . .	139
Conclusions. . . . .	140
<b>Advances in the Management of Airway Infections in Children.</b>	
<i>By Jasper V. Castillo, III and James S. Reilly . . . . .</i>	<b>149</b>
Laryngotracheobronchitis/Croup . . . . .	149
Spasmodic Croup . . . . .	152
Measles Tracheitis/Croup. . . . .	152
Epiglottitis . . . . .	153
Bacterial Tracheitis . . . . .	155
<b>Evaluation of Sensorineural Hearing Loss in Infants and Children.</b>	
<i>By Patrick E. Brookhouser . . . . .</i>	<b>159</b>
Team Evaluation of the Hearing-Impaired Child. . . . .	160
Methods for Detection and Measurement of Hearing Loss . . . . .	163
Otoacoustic Emissions . . . . .	163
Electrocochleography and Auditory Brain Stem Response . . . . .	165
Behavioral Audiologic Evaluation . . . . .	168
Conventional Amplification . . . . .	169
Coexisting Middle Ear Disease . . . . .	170
Changing Patterns of Sensorineural Hearing Loss Etiology. . . . .	171
Nongenetic Causes of Hearing Loss . . . . .	172
<b>Diagnosis and Management of Toxic Shock Syndrome in Otolaryngology.</b>	
<i>By Michael H. Stevens . . . . .</i>	<b>193</b>
Diagnosis. . . . .	193
Prevention . . . . .	195
Treatment . . . . .	196
<b>Aminoglycoside Treatment of Vertigo: Development and Current Status.</b>	
<i>By Edwin M. Monsell, Stephen P. Cass, and Leonard P. Rybak . . . . .</i>	<b>199</b>
Experimental Studies . . . . .	199
Biochemistry and Antibiotic Mechanisms. . . . .	199
Pharmacokinetics. . . . .	200
Mechanisms of Ototoxicity . . . . .	200
Regional Ototoxicity . . . . .	201
Clinical Experience With Systemic Treatment With Streptomycin . . . . .	203

Clinical Experience With Application of Streptomycin to the Lateral Semicircular Canal . . . . . 204

Clinical Experience With Intratympanic Aminoglycoside Therapy . . . . . 206

Summary and Conclusions . . . . . 210

**Advances in the Management of Deep Infection of the Neck.**

*By Jonas T. Johnson* . . . . . **215**

Anatomic Considerations. . . . . 216

    Etiology of Deep Neck Infection . . . . . 218

    Signs and Symptoms . . . . . 220

    Bacteriology. . . . . 221

Treatment . . . . . 222

Complications and Special Considerations . . . . . 224

Conclusions. . . . . 225

**Mohs Micrographic Surgery for Skin Cancer.**

*By John Zitelli.* . . . . **227**

Standard Treatment of Skin Cancer . . . . . 227

Biological Behavior of Skin Cancer. . . . . 230

Surgical Technique of Mohs Micrographic Surgery. . . . . 231

    Modern Techniques. . . . . 231

    History. . . . . 234

Results. . . . . 235

    Basal Cell Carcinoma . . . . . 235

    Squamous Cell Carcinoma . . . . . 236

    Melanoma . . . . . 237

Indications . . . . . 238

Conclusions. . . . . 243

**Clinical Applications of Otoacoustic Emissions.**

*By Yvonne S. Sininger* . . . . . **247**

History. . . . . 247

Active Cochlear Mechanisms . . . . . 249

Otoacoustic Emissions Reflect Active Mechanisms in Outer Hair Cells . . . . . 250

Recording and Characteristics of Otoacoustic Emissions . . . . . 251

    General Recording Principles . . . . . 251

    Spontaneous Otoacoustic Emissions . . . . . 252

    Transient Evoked Otoacoustic Emissions. . . . . 253

    Distortion Product Otoacoustic Emissions . . . . . 257

    Stimulus Frequency Otoacoustic Emissions . . . . . 259

Clinical Applications . . . . .	260
Middle Ear Considerations . . . . .	260
Infant Screening . . . . .	261
Differential Diagnosis: Sensory vs. Neural . . . . .	261
Differential Diagnosis: Children . . . . .	262
Cochlear Insults: Endolymphatic Hydrops and Meniere's Disease . . . . .	263
Cochlear Insults: Noise Exposure . . . . .	263
Cochlear Insults: Ototoxic Drugs, Hypoxia, Anoxia. . . . .	264
Tinnitus . . . . .	264
Efferent System Function. . . . .	264
Conclusions . . . . .	265
<b>Current Management of Androgenetic Alopecia.</b>	
<i>By Bruce R. Nelson and Timothy M. Johnson . . . . .</i>	<b>271</b>
Etiology/Genetics. . . . .	271
Characteristics . . . . .	275
Hair Growth Cycle . . . . .	275
Histology. . . . .	277
Differential Diagnosis . . . . .	278
Surgical Treatment . . . . .	278
Scalp Reductions (Male Pattern Reductions) . . . . .	280
Tissue Expansion. . . . .	281
Microsurgical Free Flaps . . . . .	283
Synthetic Hair Implants . . . . .	283
Nonsurgical Treatment . . . . .	284
Testosterone . . . . .	284
5 $\alpha$ -Reductase Inhibitors . . . . .	284
Medical Treatment . . . . .	285
Minoxidil . . . . .	285
Diazoxide. . . . .	288
Viprostol . . . . .	288
Cyclosporine . . . . .	288
Hair Attachments. . . . .	289
<b>Index . . . . .</b>	<b>303</b>

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# Evaluation and Management of Hyperfunctional Muscular Disorders of the Head and Neck

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Patients are classified as having movement disorders if they have a disorder of motor programming resulting in either a paucity of movement (akinesia or bradykinesia) or excessive or hyperfunctional movement (hyperkinesia) or a combination thereof. The motor programming error may produce spasms, tremor, jerks or tics, and symptoms related to the body part involved.

For those movement disorders associated with the head and neck, patients are ideally evaluated by an otolaryngologist-head and neck surgeon and by a neurologist specializing in motion disorders. The evaluation should include a complete head and neck examination, neurological examination, videotaping of the functional disability for documentation, and electromyography (EMG), magnetic resonance imaging (MRI), and blood analysis as necessary. In the information that follows, it will be evident that a multidisciplinary approach including an otolaryngologist, a neurologist, and a speech pathologist are key to the successful management of hyperfunctional disorders of the head and neck.

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## **Dystonia**

The dystonias make up a large number of the hyperfunctional conditions of the head and neck. Dystonia is a syndrome dominated by sustained



muscle contractions frequently causing twisting and repetitive movements or abnormal postures that may be sustained or intermittent. Dystonia can involve any voluntary muscle. Because the movements and resulting postures are often unusual and the condition is rare, it is one of the most frequently misdiagnosed neurological conditions.<sup>1</sup> The prevalence of the condition is unknown, but we estimate about 50,000 to 100,000 cases of idiopathic dystonia in this country.<sup>2</sup>

As a clinical syndrome, we can classify patients according to clinical symptoms, age at onset, and etiology. Classification may be important since it can give us clues about prognosis and also an approach to management. The classification scheme is outlined in Table 1.

Dystonia may begin at nearly any age. In our experience at the Dystonia Clinical Research Center with more than 2,500 idiopathic cases, we have seen presenting signs as early as 9 months and as late as 85 years (Fig 1). In general, there is a bimodal age at onset distribution with a peak at ages 8 and 42. Therefore, we classify patients as early onset when the present-

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**TABLE 1.**  
**Classification of Dystonia**

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Etiology

A. Primary

1. Without hereditary pattern
2. With hereditary pattern
  - Autosomal dominant
  - Autosomal recessive
  - X-linked recessive
  - Undefined

B. Symptomatic

1. Associated with other hereditary neurologic disorders (eg, Wilson's disease, Huntington's disease, ceroid lipofuscinosis, progressive supranuclear palsy, Hallervorden-Spatz disease, olivopontocerebellar atrophy, acquired hepatocerebral degeneration, Gilles de la Tourette).
  2. Environmental
    - a. Posttraumatic
    - b. Postinfectious
    - c. Vascular
    - d. Tumor
    - e. Toxic
      - (1). Postantipsychotic drugs (phenothiazines, piperazines, butyrophenones, malindone, thioxanthines)
      - (2). Antiemetics (prochlorperazine, promethazine, metachlopramide)
      - (3). Antiparkinsons drugs (L-DOPA, bromcriptine, lisaride, pergolide)
  3. Dystonia associated with parkinsonism
  4. Hysterical dystonia
-