Contents

1. Face Transplantation **1**
Michael Sosin, Eduardo D Rodriguez
- Introduction and a Brief History *1*
- Defect Classification and Indications *6*
- Operative Planning and Guidance *9*
- Allograft Rejection *16*
- Outcomes of Face Transplantation *17*

2. Minimally Invasive Therapies for the Aging Face **21**
Jason A Moche, Yuna Larrabee
- Skin Photoaging *23*
- Clinical Findings *23*
- Histologic Findings *23*
- Chemical Skin Peels *24*
- General Principles of Skin Peeling *25*
- Histologic Changes Following Peeling *26*
- Superficial Peels *27*
- Medium-Depth Peels *27*
- Deep Chemical Peels *27*
- Chemical Peel Components *28*
- Side Effects and Complications *29*
- Laser Resurfacing *29*
- Ablative Nonfractionated Laser Resurfacing *30*
- Nonablative Laser Resurfacing *32*
- Platelet Rich Plasma (PRP) and Platelet Rich Fibrin Matrix (PRFM) *39*

3. Innovations in Airway Interventions in Craniofacial Surgery **47**
Scott M Rickert
- Common Craniofacial Conditions *48*
- Interventions of the Nasal Airway/Nasopharynx *54*
- Intervention of the Larynx *62*
- Intervention of the Tracheal Airway *63*

4. Microtia Repair **70**
Sivakumar Chinnadurai, Scott J Stephan, Roland D Eavey
- Costal Cartilage-Based Reconstruction *70*
- Recent Advances in Costal Cartilage Reconstruction *73*
- Alloplast Ear Reconstruction *76*
- Recent Advances in Alloplast Reconstruction *79*
- Future Directions *81*

5. Internal Nasal Valve Surgery **85**
Claus Walter, Marcus M Maassen
- Surgical Methods in the Management of the Inner Nasal Valve *85*
- Surgical Method of Our Combined Approach *88*

6. Contemporary Management of Bell's Palsy **98**
Maurizio Barbara, Edoardo Covelli, Carlo Iacolucci, Luigi Volpini, Simonetta Monini
- Clinical Presentation *99*
- Diagnosis *99*
- Management *102*
- Medical Treatment *103*
- Surgical Treatment *103*
- Physical Therapy *104*
- Proposal of a Combined Protocol (Flowchart) *106*

7. Advances Facial Nerve Testing In and Out of the Operating Room **110**
Gregory R Mannarelli, Paul R Kileny
- Anatomy *111*
- ENoG *119*
- EMG *124*
- Protocols *130*
- Future Directions *135*
- Future Research *135*

8. Surgical Rehabilitation of the Paralyzed Face **152**
Joseph C Clarke, Scott R Owen, Douglas K Henstrom
- Acute Nerve Injury *152*
- Chronic Paralysis *157*
- Upper Face *157*

- Midface *161*
- Lower Face *167*

9. Evidence in Favor of Cochlear Implantation for the Treatment of Single-Sided Deafness **173**
Jaclyn B Spitzer, George Korres, Anil K Lalwani
- Single-Sided Deafness *173*
- Advantage of Binaural Hearing *174*
- Cochlear Implantation in SSD *176*

10. Ossiculoplasty in Case of Missing Malleus: The Malleus Replacement Prosthesis **185**
Robert Vincent

11. Contemporary Management of Differentiated Thyroid Cancer **195**
Laura Y Wang, Ashok R Shaha
- Epidemiology *195*
- Evaluation *195*
- Thyroid Management *197*
- Nodal Management *199*
- Risk Stratification *200*
- Adjuvant Radioactive Iodine Therapy *201*
- Postoperative TSH Suppression *203*
- Targeted Therapies *204*

12. Robotic Surgery in Head and Neck Cancer **210**
Hamad Chaudhary, Tamer A Ghanem
- Principles *211*
- Indications and Treatment Goals *213*
- Rationale and Results *218*
- Robotic Approach to Skull Base and Nasopharynx *223*
- Robot-Assisted Thyroid Surgery (RATS) *224*
- Robot-Assisted Neck Dissection (RAND) *228*
- Limitations and Complication *229*

13. Objective Diagnostic Tools in Rhinology **234**
Gunter Mlynski, Giorgi Gogniashvili, Achim Georg Beule
- Objective Functional Diagnostic Methods *236*

- Diagnostic Procedure in Patients with Nasal Obstruction *247*
- Applications *248*

14. Allergic and Nonallergic Rhinitis—A Collaborative Approach **260**
Oliver Hausmann, Markus HF Pfister
- Nonallergic Rhinitis *261*
- Allergic Rhinitis *263*

15. Role of Topical Sinonasal Irrigation in Sinus Disease **269**
Jivianne T Lee, Alexander G Chiu
- Topical Saline Irrigations *269*
- Topical Steroid Irrigations *271*
- Topical Antibiotic Irrigations *271*
- Topical Antifungal Irrigations *278*
- Topical Additive Irrigations *283*

16. Treatment of Sinonasal Inverted Papilloma **296**
Fabio Pagella, Alessandro Pusateri, Elina Matti
- Tumor Staging *299*
- Imaging *301*
- Surgical Treatment of Sinonasal Inverted Papilloma *303*

17. Chronic Cough: What's New? **322**
Chandra M Ivey
- Anatomy and Neurophysiology *323*
- Common Identifiable Causes for Chronic Cough *327*
- Treatment of Identifiable Causes of Cough *329*
- Concept of Neuropathic Cough *331*
- Treatment of Neuropathic Cough *332*
- Proposed Mechanisms for Future Treatment *334*

18. Advances in Sepsis **339**
James A Russell, Adam Linder, David Sweet, John Boyd, Keith R Walley
- Pathophysiology and Molecular Biology of Sepsis *339*
- Other Sepsis Permeability Candidates *345*
- Identification of the Septic Patient *345*
- Overview of Management: ABCDEF *348*
- Airway and Breathing *349*
- Circulation: Fluids *350*

- Vasopressors and Inotropic Agents *355*
- Drugs: Vasopressin *357*
- Drugs: Early Antimicrobials *361*
- Drugs: Activated Protein C *362*
- Drugs: Corticosteroids *363*
- Other Therapies *364*
- Evaluate and Fix the Source of Sepsis *364*
- Prognosis *365*
- Future Directions *366*

Index *383*