
Contents

Part I

Anatomy, Pathophysiology, Diagnosis, Staying and Medical Management

Chapter 1

Development and Use of Microscopic and Endoscopic Surgery of the Nose and Sinuses	1
JOACHIM HEERMANN and RALF HEERMANN	

Chapter 2

Surgical Anatomy of the Nose, Paranasal Sinuses and Pterygopalatine Fossa	17
JOÃO A. CALDAS NAVARRO	

Chapter 3

Endoscopic Diagnosis: Nasosinus Disorders	35
EULALIA SAKANO	

Chapter 4

Rhinomanometry	43
JUAN EUGENIO SALAS GALICIA	

Chapter 5

Imaging of the Nose and Paranasal Sinuses	53
RAINER G. HAETINGER	

Chapter 6

Immunology and Allergy of the Nose and Sinuses	83
MONICA AIDAR MENON MIYAKE and PEDRO CAVALCANTI FILHO	

Chapter 7

Bacterial, Viral and Fungal Infections of the Nose and Paranasal Sinuses	97
PAUL VAN CAUWENBERGE and DE-YUN WANG	

Chapter 8

Nasal Polyps	103
MIRKO TOS, PER L. LARSEN, KNUD LARSEN, and PER CAYÉ-THOMASEN	

Chapter 9

Sinusitis: Medical Management	127
LUC L.M. WECKX and PAULO A.L. PONTES	

Chapter 10	
Biomechanical Effects of the Ethmoidal Isthmi on the Pathogenesis of Chronic Paranasal Sinusitis	135
MALTE ERIK WIGAND	
Chapter 11	
Pre-operative Staging, Grading and Post-Operative Follow-Up of Chronic Inflammatory Sinus Disease	141
VALERIE J. LUND	
Chapter 12	
Surgical "Grading" System for Inverting Papilloma	147
ALDO CASSOL STAMM	
Chapter 13	
Teaching and Learning in Endonasal Sinus Surgery	153
RAINER KEERL, RAINER WEBER, and WOLFGANG DRAF	
Part II	
Surgica Treatment of the Nose and Paranasal Sinus Diseases	
Chapter 14	
Micro-endoscopic Surgery of the Turbinates and Nasal Septum	161
ALDO CASSOL STAMM, ELISABETH ARAUJO, ANTONIO DOUGLAS MENON, and KAREN BORNE TEUFERT	
Chapter 15	
Surgical Approaches to Sinusitis: Overview of Techniques	179
RENATO ROITHMANN, IAN WITTERICK, MICHAEL HAWKE, and ALDO CASSOL STAMM	
Chapter 16	
High-Risk Areas in Endoscopic Sinus Surgery	195
TOSHIO OHNISHI	
Chapter 17	
Micro-endoscopic Surgery of the Paranasal Sinuses	201
ALDO CASSOL STAMM	
Chapter 18	
Combined Microscopic and Endoscopic Surgery of the Ethmoid Sinus	237
HEINRICH H. RUDERT and CHRISTOPH G. MAHNKE	
Chapter 19	
Micro-endoscopic Surgery of the Maxillary Sinus	249
RODOLFO ARIAS, HECTOR ARIZA, IVAN CORREA, and ALDO CASSOL STAMM	
Chapter 20	
Endonasal and External Micro-endoscopic Surgery of the Frontal Sinus	257
WOLFGANG DRAF, RAINER WEBER, RAINER KEERL, JANNIS CONSTANTINIDIS, BERNHARD SCHICK, and ANJALI SAHA	

Chapter 21	
Mini-anterior and Combined Frontal Sinusotomy and Drilling of Nasofrontal Beak	279
KANIT MUNTARBHORN and SANGUANSAK THANAVIRATANANICH	
Chapter 22	
Recurrence of Polyposis: Risk Factors, Prevention, Treatment and Follow-Up	287
PIERRE ROUVIER and ROGER PEYNEGRE	
Chapter 23	
What Is the Place of Endonasal Surgery in Fungal Sinusitis?	309
VALERIE J. LUND	
Chapter 24	
Combined Fiberoptic Headlight and Endoscopic Sinus Surgery with Adjunct Use of Middle-Meatal Stenting	315
PAUL H. TOFFEL	
Chapter 25	
Sinus Mucosal Wound Healing Following Endoscopic Sinus Surgery: Mucosal Preservation	323
HIROSHI MORIYAMA	
Chapter 26	
Wound Healing after Endonasal-Sinus Surgery in Time-Lapse Video: a New Way of Continuous In Vivo Observation and Documentation in Rhinology	329
RAINER WEBER, RAINER KEERL, ANDREAS HUPPMANN, WOLFGANG DRAß, and ANJALI SAHA	
Chapter 27	
Pediatric Endoscopic Endonasal Sinus Surgery	347
GERALD WOLF	
Chapter 28	
Micro-endoscopic Sinus Surgery in Children	357
SHIRLEY SHIZUE NAGATA PIGNATARI and ALDO CASSOL STAMM	
Chapter 29	
Revision Endoscopic Sinus Surgery	371
JEAN-MICHEL KLOSSEK	
Chapter 30	
Power Instrumentation in Rhinologic and Endoscopic Sinus Surgery	377
DANIEL G. BECKER and DAVID W. KENNEDY	
Chapter 31	
Image-Guided Surgical Navigation in Functional Endoscopic Sinus Surgery	387
WINSTON C. VAUGHAN and FREDERICK A. KUHN	

Part III

Transnasal Micro-Endoscopic Advanced Surgery

Chapter 32

Severe Epistaxis: Micro-endoscopic Surgical Techniques 393

ALDO CASSOL STAMM, GLAURA FERREIRA,

JOÃO A. CALDAS NAVARRO and LUIZ A. SILVA FREIRE

Chapter 33

Choanal Atresia: Transnasal Micro-endoscopic Surgery 405

ALDO CASSOL STAMM, LEVON MEKHITARIAN,

and SHIRLEY SHIZUE NAGATA PIGNATARI

Chapter 34

Endoscopic Transnasal Dacryocystorhinostomy 415

GUSTAVO A. RIVEROS-CASTILLO and ALFREDO CAMPOS

Chapter 35

Endonasal Surgery of the Lacrimal System 425

JOACHIM HEERMANN and RALF HEERMANN

Chapter 36

Endoscopic Transnasal Orbital Decompression 433

PETER H. HWANG and DAVID W. KENNEDY

Chapter 37

Endoscopic Optic-Nerve Decompression in Traumatic Optic Neuropathy 441

LUIS ALFONSO PARRA DUQUE

Chapter 38

Cerebrospinal Fluid Rhinorrhea – Transnasal Micro-endoscopic Surgery 451

ALDO CASSOL STAMM and LUIZ A. SILVA FREIRE

Chapter 39

Endoscopic Repair of Cerebrospinal-Fluid Rhinorrhea 465

ALFREDO HERRERA, EMIRO CAICEDO

Chapter 40

Endonasal Micro-endoscopic Surgery of Nasal and Paranasal-Sinuses Tumors 481

WOLFGANG DRAF, BERNHARD SCHICK, RAINER WEBER,

RAINER KEERL, and ANJALI SAHA

Chapter 41

Micro-endoscopic Surgery of Benign Sino-Nasal Tumors 489

ALDO CASSOL STAMM, CLEONICE HIRATA WATASHI,

PAULO FERNANDO MALHEIROS, and LEE ALAN HARKER

Chapter 42

Juvenile Nasopharyngeal Angiofibroma – Transantral Microsurgical Approach 515

ALEJANDRO E. TERZIAN

Chapter 43

Endoscopic Approach to Lesions of the Anterior Skull Base and Orbit 529

DHARAMBIR S. SETHI

Chapter 44

Endonasal, Microscopic, Trans-Septal, Sphenoidal Approach to the Sella and Parasellar Lesions	543
RICARDO SERGIO COHEN, ALDO CASSOL STAMM, and ANDRÉ BORDASCH	

Chapter 45

Transnasal Endoscopic Surgery of Sellar and Parasellar Regions	555
ALDO CASSOL STAMM, ANDRÉ BORDASCH, EDUARDO VELLUTINI, and FELIX PAHL	

Chapter 46

Midfacial Degloving – Microsurgical Approach	569
ALDO CASSOL STAMM, MOACIR POZZOBON, and OSWALDO L. MENDONÇA CRUZ	

Chapter 47

Complications of Micro-endoscopic Sinus Surgery	581
ALDO CASSOL STAMM	

Subject Index	595
----------------------------	-----