## **Contents**

1 Ear	1	Clinical Aspects of Diseases of the External Ear	
Applied Anatomy and Physiology	1	Congenital Anomalies	49
Embryology	1	Reconstructive Operations on the Auricle	49
Basic Anatomy	1	Inflammations of the External Ear	50
External Ear	2	Nonspecific Inflammation.	50
Middle Ear and Pneumatic System	3	Specific Forms of Inflammation of the	
Inner Ear, Peripheral Hearing, and Balance	_	External Ear	51
Organs	8	Chronic Inflammation	
Central Connections of the Organ of Corti	11	Otomycosis and Eczema	
Central Connections of the Organ of the	• •	Trauma	54
Balance Mechanism	11	Wax and Foreign Bodies	55
	13	Tumors	56
Facial Nerve	13	Benign Tumors	56
Physiology and Pathophysiology of Hearing	1.4	Precancerous and Malignant Tumors	56
and Balance	14	Clinical Aspects of Diseases of the Middle	
Physiology of Hearing: Middle and Internal Ear.	14	and Internal Ear	58
Physiology of Hearing: Retrocochlear		Disorders of Ventilation and Drainage of the	
Analysis of Acoustic Information	17	Middle Ear Spaces	58
Pathophysiologic Basis of Hearing Disorders	17	Nonspecific Inflammation of the Middle Ear	
Physiology of the Balance System	18	and Mastoid	61
Pathophysiologic Basis of Functional Vestibular		Specific Types of Inflammation of the Middle Ear	
Disorders	20	and Mastoid	64
Methods of Investigation	21	Otogenic Infective Complications	76
Inspection, Palpation, Otoscopy, Microscopy	21	Specific Diseases of the Middle Ear and	
Inspection of the External Ear	21	Mastoid Process	Q-
Diagnostic Imaging	24	Noninflammatory Diseases of the	٥
Conventional Radiography	24	Labyrinthine Capsule	Q.
Computed Tomography	24	Trauma of the Middle and Inner Ear	
Angiography	24	Tumors of the Middle and Internal Ear,	0.
Magnetic Resonance Imaging	26	-	0.
Functional Assessment of the Eustachian Tube	26	Vestibulocochlear Nerve, and Facial Nerve	89
Qualitative Assessment of Tubal Function	26	Congenital Anomalies of the Middle and	_
Hearing Investigations	27	Internal Ear	94
Testing Hearing without an Audiometer	27	Clinical Aspects of Cochleovestibular Disorders	9:
Audiometry: Fundamental Physical and		Toxic Damage to the Hearing and	
Acoustic Concepts	27	Balance Apparatus	
Pure-tone Audiometry	27	Ototoxic Drugs	
Speech Audiometry	32	Ototoxic Occupational Toxins	96
Objective Hearing Tests	35	Inflammatory Lesions of the Hearing and	
Hearing Tests in Infants and Young Children	40	Balance Apparatus	
Vestibular Function Tests		Immunologic Diseases of the Inner Ear	97
	41	Trauma	97
Case History	41	Vestibular Disorders	97
Vestibulospinal Reflexes	42	Hearing Disorders	10
Spontaneous and Provoked Nystagmus	42	-	
Experimental Tests of the Vestibular System	45		
Investigation of the Facial Nerve	47		

## VIII Contents

Clinical Aspects of Central Hearing Disorders . 104	Facial Neuralgias	
Rehabilitation of Hearing Disorders with	Principles of Surgery of the Paranasal Sinuses .	
<b>Hearing Aids</b>	Rhinosinusitis in Children	
Pediatric Hearing Disorders	Fungal Diseases of the Paranasal Sinuses	182
(Pediatric Audiology)	Pathophysiologic Relationship between the	
Clinical Aspects of Disorders of the	Sinuses and the Rest of the Body	
Facial Nerve	Mucoceles and Cysts	
Synopsis of Ear Symptoms	Complications of Sinus Infections	
	Epistaxis	
2 Nose, Nasal Sinuses, and Face	Diseases of the Septum	197
Applied Anatomy and Physiology 116	Facial Skeleton	201
Basic Anatomy	Trauma of the Middle Third of the Face	
External Nose	and the Sinuses	203
Nasal Cavity	Congenital Anomalies and Deformities	
Paranasal Sinuses	of the Nose	
Basic Physiology and Pathophysiology 124	Congenital Anomalies of the Nose	
The Nose as an Olfactory Organ 124	Disorders of Shape of the External Nose	212
The Nose as a Respiratory Organ 126	Basic Plastic Reconstruction Procedures	
The Nasal Mucosa as a Protective Organ 127	in the Head and Neck	
The Nose as a Reflex Organ 127	Tumors of the Nose and Sinuses	
Influence of the Nose on Speech 128	Benign Tumors	
Function of the Nasal Sinuses	Malignant Tumors of the External Nose	222
Methods of Examining the Nose,	Malignant Tumors of the Nasal Cavity and	
Paranasal Sinuses, and Face	Nasal Sinuses	225
External Inspection and Palpation	Principles of Management of Malignant	
Anterior Rhinoscopy	Tumors of the Nose and Paranasal Sinuses	226
Posterior Rhinoscopy		
Nasal Endoscopy	3 Mouth and Pharynx	228
Assessment of Nasal Patency	at_la a bot ti	
Olfactometry	Applied Anatomy and Physiology	
Diagnostic Imaging of the Nose and Sinuses 136	Basic Anatomy	
Lavage of the Sinuses	Oral Cavity	
Specific Diagnostic Methods	Nasopharynx, Oropharynx, and Hypopharynx	
Dermatologic Principles for the	Lymphoepithelial System of the Pharynx	
Otolaryngologist	Physiologic and Pathophysiologic Principles	
Skin Type 140   Types of Lesion 141	Eating, Preparation of Food, and Swallowing Taste	
Basics of Topical Dermatologic Therapy 141	Function of the Tonsils	
Clinical Aspects of Diseases of the Nose,	Formation of Sound and Speech	
Sinuses, and Face	Methods of Investigation	
Inflammatory Diseases of the Nose and	Inspection, Palpation, and Examination with	233
Paranasal Sinuses	the Mirror	230
Inflammations Confined Mainly to the	Endoscopy	
External Nose	Imaging Studies	
Acute and Chronic Inflammations Localized	Examination of the Saliva	
Mainly in the Nasal Cavity	Gustometry.	
Local Conservative Treatment in the Upper	Specific Diagnostic Procedures	
Respiratory and Digestive Tracts	Clinical Aspects of Diseases of the Mouth	_ T_
Acute and Chronic Rhinosinusitis 159	and Pharynx	24:
Rhinogenous Headache	Hyperplasia of the Lymphoepithelial Organs	

IX

Hypopharyngeal Carcinoma......328

## X Contents

8 Neck (Including the Thyroid Gland) 375	Anatomy and Physiology of the Major	
Applied Anatomy and Physiology 375	and Minor Salivary Glands	
Basic Anatomy and Physiology	Parotid Gland	
Regions	Submandibular Gland	
Fascia	Sublingual Gland	
Spaces	Minor Salivary Glands	
Blood Vessels	Formation and Function of Saliva	
Cervical Lymphatic System	Methods of Investigation	
Nerves	Diagnostic Imaging	. 417
	Sonography	
Basic Physiology	Computed Tomography, Spiral CT	. 417
Methods of Investigation	Magnetic Resonance Imaging	. 417
Specific History	Sialography	. 417
Inspection of the Neck Region	Positron-Emission Tomography	. 418
Palpation	Plain Radiographs	. 418
Diagnostic Imaging	Function Studies	
Main Techniques	Methods	. 418
Special Techniques	Biopsy	. 419
Biopsy	Clinical Aspects	
Clinical Aspects	Inflammatory Diseases	
Inflammation of the Cervical Soft Tissues 387	Acute Bacterial Infections	
Inflammatory Cervical Lymphadenopathy 388	Viral Infections	
Cervical Spine Syndrome	Chronic Inflammation	
Trauma 392	Sialolithiasis	
Congenital Anomalies	Cysts	
Thyroglossal Duct Cysts and Fistulas 393	Sialadenosis	
Branchial Cysts and Fistulas	Trauma	
Musculoskeletal Defects	Injury to the Nerves or Ducts and	. 42/
Vascular Malformations	Salivary Fistulas	427
Tumors	Salivary Tumors	
Benign Tumors	•	
Malignant Tumors of the Cervical	Benign Tumors	
Lymph Nodes	Malignant Tumors.	. 432
CUP Syndrome	Basic Principles in the Treatment of	435
Principles of Surgery	Salivary Tumors	. 435
Prescalene Node Biopsy		
Mediastinoscopy	Appendix	. 438
Neck Dissection		
Thyroid Gland and Otorhinolaryngology 407	Emergencies in ENT and First Aid Procedures.	
Topographic Anatomy	Essential Information for Infection Control	
Diagnostic Procedures in Thyroid Disorders 408	Introduction	
Specific Conditions	Infection Control Response in the UK	
Specific Conditions	C. difficile Infection	
	MRSA Infection	
<b>9 Salivary Glands</b>	References and Further Reading	
Embryology, Structure, and Congenital	Subject Index	. 445