CONTENTS

VOLUME 1

1. Blood Vessels and Lymphatics 1 Vascular Structure and Function, Vascular Anomalies, Vascular Wall Response to Injury, and Hypertensive Vascular Disease 1 1.2 Arteriosclerosis and Atherosclerosis 23 1.3 Aneurysms, Dissection, Vasculitis, Veins, and Lymphatics 44 1.4 Vascular Malformations, Reactive Vascular Proliferations, and Vascular Tumors 69 1.5 Lymphatic Tumors, Perivascular Tumors, and Pathology of Vascular Intervention 89 2. The Heart 96 2.1 Cardiac Structure 96 2.2 Heart Failure 106 2.3 Embryologic Development of Heart and Congenital Heart Disease 116 2.4 Ischemic Heart Disease, Hypertensive Heart Disease, Arrhythmias, and Sudden Cardiac Death 138 2.5 Valvular Heart Disease 170 Cardiomyopathy, Myocarditis, and Other Myocardial Diseases 193 2.6 2.7 Pericardial Disease, Tumors of the Heart, Cardiac Transplantation, Cardiac Devices, and Myocardial Biopsy 211 3. Lung, Pleura, and Mediastinum 225 Normal Respiratory System, Congenital Anomalies, Cystic Diseases, Atelectasis, Pulmonary Edema, Acute Lung Injury, and Acute Respiratory Distress Syndrome 225 3.2 Obstructive Lung Diseases 242 Chronic Diffuse Interstitial (Restrictive) Diseases 265 3.3 3.4 Diseases of Vascular Origin 292 3.5 Pulmonary Infections and Lung Transplantation 300 Tumors of Lung 329 3.6 3.7 Pleura 355

Prelims_VOL-1.indd 15 23-09-2023 14:02:10

Mediastinum 362

3.8

4.	Hea	Head and Neck		
	4.1	Oral Cavity and Oropharynx 373		
	4.2	Nose, Paranasal Sinuses, and Nasopharynx 394		
	4.3	Larynx 407		
	4.4	Ears 415		
	4.5	Neck 421		
	4.6	Salivary Glands 424		
5.	Gast	trointestinal Tract	447	
	5.1	Normal Anatomy and Diseases of Esophagus 447		
	5.2	Stomach 462		
	5.3	Small Intestine and Large Intestine 497		
	5.4	Appendix 558		
	5.5	Anus and Miscellaneous 562		
	5.6	Neuroendocrine Neoplasms in Non-endocrine Organs 577		
	5.7	Peritoneal Cavity 592		
6.	5. Liver		597	
	6.1	Normal Anatomy, General Features of Liver Disease, Liver Failure and Portal Hypertension 597		
	6.2	Infectious Disorders 615		
	6.3	Autoimmune Hepatitis and Drug- and Toxin-induced Liver Injury 635		
	6.4	Fatty Liver Disease 642		
	6.5	Cirrhosis 657		
	6.6	Inherited Disease of Liver 659		
	6.7	Cholestatic Disease 671		
	6.8	Miscellaneous Non-neoplastic Liver Disease 687		
	6.9	Tumors and Tumor-like Conditions 695		
	6.10	Gallbladder 713		
7.	'. Pancreas		729	
	7.1	Normal Anatomy, Congenital Anomalies, and Pancreatitis 729		
	7.2	Non-neoplastic Cysts and Exocrine Neoplasms of Pancreas 746		
	7.3	Neuroendocrine Neoplasms of Pancreas 766		
8.	Kidr	neys	775	
	8.1	Anatomy and Clinical Manifestations of Renal Disease 775		
	8.2	Introduction to Glomerular Diseases and Renal Biopsy 784		
	8.3	Nephritic Syndrome 799		
	84	Nephrotic Syndrome 806		

Prelims_VOL-1.indd 16 23-09-2023 14:02:10

	8.5	Tubular and Interstitial Diseases 833		
	8.6	Vascular Diseases of Kidney and Chronic Kidney Injury 858		
	8.7	Congenital Anomalies and Cystic Diseases of Kidney 873		
	8.8	Urinary Tract Obstruction (Obstructive Uropathy) and Renal Transplant Pathology 882		
	8.9	Tumors and Tumor-like Conditions of Kidney 899		
9.	Lower Urinary Tract			
	9.1	Normal Anatomy, Ureters, and Non-neoplastic Lesions of Urinary Bladder 927		
	9.2	Urinary Bladder Tumors and Lesions of Urethra 940		
10.	. Male Genital System		960	
	10.1	Penis and Scrotum 960		
	10.2	Non-neoplastic Diseases of the Testis 974		
	10.3	Testicular Tumors 989		
	10.4	Lesions of Testicular Adnexa 1015		
	10.5	Prostate 1021		
		VOLUME 2		
		VOLUME 2		
11.	Fem	VOLUME 2 vale Genital Tract	1052	
11.	Fem 11.1		1052	
11.		ale Genital Tract	1052	
11.	11.1	Tale Genital Tract Embryology, Infections, Vulva, and Vagina 1052	1052	
11.	11.1 11.2	Tale Genital Tract Embryology, Infections, Vulva, and Vagina 1052 Cervix 1068	1052	
11.	11.1 11.2 11.3	Tale Genital Tract Embryology, Infections, Vulva, and Vagina 1052 Cervix 1068 Body of Uterus and Endometrium 1094	1052	
11.	11.1 11.2 11.3 11.4	Embryology, Infections, Vulva, and Vagina 1052 Cervix 1068 Body of Uterus and Endometrium 1094 Mesenchymal Tumors of the Uterus and Lower Genital Tract 1128	1052	
11.	11.1 11.2 11.3 11.4 11.5	Embryology, Infections, Vulva, and Vagina 1052 Cervix 1068 Body of Uterus and Endometrium 1094 Mesenchymal Tumors of the Uterus and Lower Genital Tract 1128 Fallopian Tubes 1138 Ovaries, Cysts, Classification of Tumors and Epithelial Tumors 1147 Sex Cord-Stromal Tumors 1176	1052	
11.	11.1 11.2 11.3 11.4 11.5 11.6 11.7 11.8	Embryology, Infections, Vulva, and Vagina 1052 Cervix 1068 Body of Uterus and Endometrium 1094 Mesenchymal Tumors of the Uterus and Lower Genital Tract 1128 Fallopian Tubes 1138 Ovaries, Cysts, Classification of Tumors and Epithelial Tumors 1147 Sex Cord-Stromal Tumors 1176 Germ Cell Tumors 1187	1052	
11.	11.1 11.2 11.3 11.4 11.5 11.6 11.7 11.8	Embryology, Infections, Vulva, and Vagina 1052 Cervix 1068 Body of Uterus and Endometrium 1094 Mesenchymal Tumors of the Uterus and Lower Genital Tract 1128 Fallopian Tubes 1138 Ovaries, Cysts, Classification of Tumors and Epithelial Tumors 1147 Sex Cord-Stromal Tumors 1176	1052	
	11.1 11.2 11.3 11.4 11.5 11.6 11.7 11.8	Embryology, Infections, Vulva, and Vagina 1052 Cervix 1068 Body of Uterus and Endometrium 1094 Mesenchymal Tumors of the Uterus and Lower Genital Tract 1128 Fallopian Tubes 1138 Ovaries, Cysts, Classification of Tumors and Epithelial Tumors 1147 Sex Cord-Stromal Tumors 1176 Germ Cell Tumors 1187 Diseases of Placenta 1203	1052	
	11.1 11.2 11.3 11.4 11.5 11.6 11.7 11.8 11.9	Embryology, Infections, Vulva, and Vagina 1052 Cervix 1068 Body of Uterus and Endometrium 1094 Mesenchymal Tumors of the Uterus and Lower Genital Tract 1128 Fallopian Tubes 1138 Ovaries, Cysts, Classification of Tumors and Epithelial Tumors 1147 Sex Cord-Stromal Tumors 1176 Germ Cell Tumors 1187 Diseases of Placenta 1203		
	11.1 11.2 11.3 11.4 11.5 11.6 11.7 11.8 11.9	Embryology, Infections, Vulva, and Vagina 1052 Cervix 1068 Body of Uterus and Endometrium 1094 Mesenchymal Tumors of the Uterus and Lower Genital Tract 1128 Fallopian Tubes 1138 Ovaries, Cysts, Classification of Tumors and Epithelial Tumors 1147 Sex Cord-Stromal Tumors 1176 Germ Cell Tumors 1187 Diseases of Placenta 1203		
	11.1 11.2 11.3 11.4 11.5 11.6 11.7 11.8 11.9 Brea	Embryology, Infections, Vulva, and Vagina 1052 Cervix 1068 Body of Uterus and Endometrium 1094 Mesenchymal Tumors of the Uterus and Lower Genital Tract 1128 Fallopian Tubes 1138 Ovaries, Cysts, Classification of Tumors and Epithelial Tumors 1147 Sex Cord-Stromal Tumors 1176 Germ Cell Tumors 1187 Diseases of Placenta 1203 ast Normal Anatomy and Benign Epithelial Lesions of Breast 1228		

Prelims_VOL-1.indd 17 23-09-2023 14:02:10

12.5 The Male Breast 1292

13.	The	Endocrine System	1295
	13.1	Pituitary Gland 1295	
	13.2	Non-neoplastic Lesions of Thyroid Gland 1314	
	13.3	Tumors of the Thyroid 1335	
	13.4	Parathyroid Glands 1365	
	13.5	The Endocrine Pancreas 1378	
	13.6	Adrenal Glands: Adrenal Cortex 1402	
	13.7	Adrenal Medulla and Paraganglia 1425	
	13.8	Genetic Tumor Syndromes Associated with Endocrine Lesions and Tumors Paraneoplastic Syndromes 1433	
14.	The	Skin	1440
	14.1	Normal Anatomy 1440	
	14.2	Disorders of Pigmentation and Melanocytes 1457	
	14.3	Blistering (Bullous) Diseases 1481	
	14.4	Benign Tumors Cysts of Epidermis, and Congenital Diseases 1495	
	14.5	Adnexal (Appendage) Tumors 1504	
	14.6	Premalignant and Malignant Epidermal Tumors 1521	
	14.7	Granulomatous Inflammation 1533	
	14.8	Soft Tissue Tumors and Tumors of Hematopoietic and Lymphoid Origin 1541	
	14.9	Inflammatory Dermatoses 1551	
	14.10	Disorders of Epidermal Appendages, Panniculitis, and Infection 1562	
15.	Bon	e and Joints	1573
	15.1	Bone <i>1573</i>	
	15.2	Developmental Disorders of Bone and Cartilage and Metabolic Diseases of Bone 1584	
	15.3	Fractures, Avascular Necrosis, and Osteomyelitis 1600	
	15.4	Bone Tumors 1609	
	15.5	Joints 1642	
16.	Soft Tissue		1669
	16.1	Normal Anatomy and Introduction to Soft Tissue Tumors 1669	
	16.2	Tumors of Adipose Tissue 1688	
	16.3	Fibroblastic and Myofibroblastic Tumors 1700	
	16.4	Tumors of Smooth Muscle and Skeletal 1716	
	16.5	Peripheral Nerve Sheath Tumors 1729	
	16.6	Tumors of Uncertain Differentiation 1741	
	16.7	Undifferentiated Small Round Cell Sarcomas of Bone and Soft Tissue 1749	

Prelims_VOL-1.indd 18 23-09-2023 14:02:10

-	4	Η	-

(
C	2
Ξ	3
5	7
ŗ	₽
Ξ	?
5	Ţ

17.	Peri	pheral Nerves and Skeletal Muscles	1754
	17.1	Peripheral Nervous System 1754	
	17.2	Diseases of the Neuromuscular Junction 1771	
	17.3	Skeletal Muscle 1775	
	17.4	Diseases of Skeletal Muscles 1791	
18.	Cent	tral Nervous System	1820
	18.1	Normal Anatomy and Cellular Pathology of the Central Nervous System 1820	
	18.2	Raised Intracranial Pressure, Malformations, Developmental Disorders, and Perinatal Brain Injury 1832	
	18.3	Trauma and Cerebrovascular Disease 1842	
	18.4	Central Nervous System Infections 1864	
	18.5	Demyelinating Diseases 1891	
	18.6	Neurodegenerative Diseases 1896	
	18.7	Metabolic, Nutritional, and Toxic Diseases 1921	
	18.8	Tumors of the Central Nervous System 1932	
19.	The	Еуе	1991

Scan the QR code to access the INDEX

20. Genetic Tumor Syndromes



2026

Prelims_VOL-1.indd 19