

CONTENTS

1. Normal Gross and Histologic Features of the Gastrointestinal Tract	1
The Normal Esophagus	1
Anatomy	1
Histology	2
The Normal Stomach	2
Anatomy	2
Histology	4
The Normal Small Bowel	6
Anatomy	6
Histology	8
The Normal Colorectum	10
Anatomy	10
Histology	11
The Normal Appendix	12
Anatomy	12
Histology	12
The Normal Anus	14
Anatomy	14
Histology	15
2. Diseases of the Esophagus	19
Congenital and Acquired Structural Abnormalities	19
Esophageal Atresia and Tracheoesophageal Fistula	19
Esophageal Stenosis	20
Esophageal Rings and Webs	20
Esophageal Cysts	21
Diverticula	22
Intramural Pseudodiverticulosis	24
Heterotopias	24
Motility Disorders and Infiltrative Diseases	26
Primary Achalasia	26
Secondary Achalasia	28
Chagas Disease	30
Progressive Systemic Sclerosis	31
Other Disorders with Abnormal Manometric Findings	32
Causes of Esophageal Hemorrhage	32
Varices	32
Mucosal Tears and Esophageal Rupture	34

Inflammatory Conditions of the Esophagus	34
Corrosive Esophagitis	34
Gastroesophageal Reflux Disease	36
Eosinophilic Esophagitis	40
Lymphocytic Esophagitis	46
Drug-Induced Injury	48
Infectious Esophagitis	53
<i>Candida</i> Esophagitis	53
Herpesvirus Esophagitis	54
Cytomegalovirus Esophagitis	56
Idiopathic HIV-Associated Ulcers	59
Desquamating Disorders	61
Esophagitis Dissecans Superficialis	61
Acute Esophageal Necrosis	62
Other Pauci-Inflammatory Conditions that Cause Esophageal Desquamation. . .	65
Mucocutaneous Bullous Diseases Involving the Esophagus.	66
Barrett Esophagus.	69
Polyps of the Esophagus	78
Glycogenic Acanthosis	78
Hyperplastic Polyp	79
Squamous Papilloma.	80
Polypoid Fibroadipose Tumors of the Esophagus.	81
3. Diseases of the Stomach	95
Congenital and Acquired Structural Abnormalities	95
Gastric Atresia	95
Pyloric Stenosis	95
Duplication Cysts	96
Diverticula.	97
Pancreatic Heterotopia and Metaplasia	99
Motility Disorders	99
Gastroparesis	99
Bezoar	101
Pauci-Inflammatory Gastropathies	103
Portal Hypertensive Gastropathy	103
Gastric Antral Vascular Ectasia	105
Acute Hemorrhagic Gastropathy	106
Chemical Gastropathy	108
Bile Reflux Gastropathy	110
Drug-Induced Gastric Injury	113
Mucosal Calcinosis	113

Iron Pill Gastropathy	114
Doxycycline-Related Injury	118
Therapy-Related Gastropathies	118
Graft-versus-Host Disease	118
Radiation- and Chemotherapy-Related Gastropathy	121
Selective Internal Radiation Therapy-Related Gastropathy	125
Inflammatory Diseases of the Stomach	126
<i>Helicobacter</i> -Associated Chronic Gastritis	126
Autoimmune Gastritis	133
Collagenous Gastritis	136
Lymphocytic Gastritis	140
Granulomatous Gastritis	142
Phlegmonous Gastritis	144
<i>Sarcina Ventriculi</i> and Related Organisms	146
Hypertrophic Gastropathies	146
Menetrier Disease	146
Zollinger-Ellison Syndrome	147
Gastric Polyps	150
Xanthoma	150
Fundic Gland Polyp	152
Hyperplastic Polyp	155
Non-Neoplastic Mimics of Diffuse-Type Gastric Carcinoma	157
Signet Ring Cell Change (Pseudosignet Ring Cells)	157
Macrophages	161
4. Diseases of the Small Intestine and Colorectum	173
Congenital Abnormalities	173
Atresias and Stenoses	173
Duplication Cysts	173
Congenital Diverticula and Remnants of the Vitelline Duct	174
Heterotopias	177
Disorders of Infancy and Early Childhood	179
Microvillus Inclusion Disease	179
Congenital Tufting Enteropathy	183
Abetalipoproteinemia	186
Enteroendocrine Cell Dysgenesis	187
Intestinal Aganglionosis	189
Cystic Fibrosis	190
Necrotizing Enterocolitis	191
Inborn Errors of Metabolism	192
Primary Intestinal Lymphangiectasia	194

Protein Allergy	195
Vascular Abnormalities and Ischemic Enterocolitis	196
Caliber-Persistent Artery	196
Telangiectasia	197
Angiodysplasia	199
Arteriovenous Malformation	200
Hereditary Hemorrhagic Telangiectasia	202
Blue Rubber Bleb Nevus Syndrome.	203
Portal Hypertensive Enterocolopathy	204
Ischemic Enterocolitis	205
Polyarteritis Nodosa	210
Antineutrophil Cytoplasmic Antibody-Associated Vasculitis	211
IgA-Associated Vasculitis.	214
Behçet Disease.	216
Enterocolic Lymphocytic Phlebitis.	217
Idiopathic Myointimal Hyperplasia of Mesenteric Veins.	218
Other Types of Vasculitis and Vasculopathy	221
Medication-Related Enterocolopathies and Enterocolitides	223
Antibiotic Agents	223
Bisphosphonates	224
Iron Deposition and Related Injury	224
Melanosis Coli.	226
Preparatory Effects	226
Nonsteroidal Anti-Inflammatory Drugs	226
Ion Exchange Resins and Sequestrants	231
Olmesartan and Related Compounds.	233
Medications that Affect the Cell Cycle	234
Mycophenolate-Induced Gastrointestinal Injury.	236
Immune Checkpoint Inhibitors	238
Idelalisib	241
Other Chemotherapeutic Agents	242
Medications that Cause Ischemic Injury	243
Other Therapy-Related Enterocolopathies and Enterocolitides	244
Graft-versus-Host Disease	244
Cord Colitis Syndrome	247
Neutropenic Enterocolitis	247
Radiation Enterocolitis	249
Infections of the Small Bowel and Colon	253
Acute Infectious Enterocolitis, Inflammatory Pattern	253
Acute Infectious Colitis, Ischemic/Hemorrhagic Pattern.	253

	Pseudomembranous Colitis	256
	Other Bacterial Enterocolitis	258
	Viral Enterocolitis	266
	Fungal Enterocolitis	269
	Protozoal Infections	272
	Helminthic Infections	283
	Proctitis Due to Sexually Transmitted Infections	289
	Other Inflammatory Conditions and Structural Abnormalities	291
	Peptic Duodenitis and Duodenal Ulcers	291
	Tropical Sprue	293
	Small Intestinal Bacterial Overgrowth	296
	Secondary Intestinal Lymphangiectasia	296
	Small Intestinal Diverticulosis	297
	Colonic Diverticulosis and Related Inflammatory Conditions	299
	Diversion Colitis and Diversion-Related Changes	304
	Stercoral Ulcer	305
	Pneumatosis Intestinalis	307
	Mucosal Prolapse and Solitary Rectal Ulcer Syndrome	308
	Inflammatory Cap Polyposis	310
	Stent-Related Pseudopolyposis	314
5.	Immune-Mediated Diseases with Systemic Manifestations	333
	Celiac Disease and Related Disorders	333
	Celiac Disease	333
	Refractory Sprue	339
	Ulcerative Jejunoileitis	339
	Collagenous Sprue	341
	Idiopathic Inflammatory Bowel Disease	341
	Ulcerative Colitis	341
	Crohn Disease	349
	Pouch Inflammation Following Ileal Pouch-Anal Anastomosis	354
	Collagenous Colitis	360
	Lymphocytic Colitis	364
	Eosinophilic Gastroenteritis	366
	Autoimmune Enteropathy	368
6.	Systemic Disorders with Gastrointestinal Manifestations	379
	Primary Immunodeficiencies	379
	Common Variable Immunodeficiency	379
	Selective IgA Deficiency	382
	Chronic Granulomatous Disease	382
	Connective Tissue Disorders	383

Ehlers-Danlos Syndrome Type IV	383
Collagen Vascular Diseases	385
Deposition Diseases	387
Cryoglobulinemia	387
Amyloidosis	388
Lymphoplasmacytic Lymphoma	390
Light Chain Deposition Disease	392
Non-Neoplastic Polyposis Syndromes	392
Sporadic Hamartomatous Polyps	393
Juvenile Polyposis Syndrome	393
Peutz-Jeghers Syndrome	395
<i>PTEN</i> Hamartoma-Tumor Syndrome	397
Cronkhite-Canada Syndrome	398
Ganglioneuromas and Ganglioneuromatosis	399
Miscellaneous Disorders	399
Malakoplakia	399
Endometriosis	402
7. Diseases of the Veriform Appendix	409
Congenital and Acquired Structural Anomalies	409
Appendiceal Agenesis	409
Appendiceal Duplication	409
Appendiceal Diverticula and Diverticulitis	409
Mechanical Abnormalities of the Appendix	411
Intussusception	411
Inflammatory Conditions of the Appendix	412
Acute Appendicitis	412
Stump Appendicitis	418
Eosinophilic Appendicitis	418
Interval Appendicitis	419
Chronic Appendicitis	419
Chronic Idiopathic Inflammatory Bowel Disease	422
Specific Bacterial Causes of Appendicitis	424
Viral Appendicitis	426
Fungal Infection	428
Parasitic Infection	428
Miscellaneous Conditions	430
Mucocele	430
Myxoglobulosis	432
Fibrous Obliteration	432
Periappendicitis	432

Endometriosis	435
Endosalpingiosis	435
Deciduosis of the Appendix	436
Non-Neoplastic Appendiceal Polyps.	436
8. Diseases of the Anus	443
Congenital and Acquired Structural Anomalies	443
Anorectal Malformations	443
Tailgut Cyst	444
Ectopic Tissues.	445
Hemorrhoids	447
Fissures	449
Fistulae	450
Polyps of the Anus	452
Fibroepithelial Polyp.	452
Inflammatory Cloacogenic Polyp	452
Condyloma Acuminatum	454
Inflammatory Diseases of the Anus	457
Herpes Simplex Virus	457
Syphilis	459
Lymphogranuloma Venereum	462
Granuloma Inguinale	463
Crohn Disease	464
Index.	469