

1 THE HEART, 1

CONGENITAL HEART DISEASE, 2

- Cardiovascular shunts and septal defects, 2
- Conotruncal anomalies, 4
- Cardiovascular obstructions, 6

VALVULAR LESIONS, 9

- Rheumatic heart disease, 9
- Infective endocarditis, 11
- Other valvular lesions, 13

MYOCARDIAL DISEASES, 14

- Myocarditis, 14
- Cardiomyopathy, 17

CORONARY ARTERY DISEASES, 20

- Coronary atherosclerosis, 20
- Myocardial infarction, 22
- Complications of myocardial infarction, 22

PERICARDIAL DISEASES, 25

CARDIAC TUMORS, 27

2 BLOOD VESSELS, 30

ARTERIOSCLEROSIS, 32

ANEURYSMS, 35

VASCULITIS, 36

- Immune-mediated vasculitis, 38

3 UPPER RESPIRATORY TRACT, 40

INFLAMMATORY LESIONS, 42

BENIGN TUMORS AND RELATED CONDITIONS, 44

MALIGNANT TUMORS, 45

4 LUNGS, 48

DEVELOPMENTAL ANOMALIES, 50

PERINATAL LUNG DISEASES, 52

PULMONARY INFECTIONS, 54

PULMONARY CIRCULATORY DISORDERS, 57

- Pulmonary emboli, 57
- Pulmonary hypertension, 58

IMMUNE-MEDIATED LUNG DISEASES, 58

CHRONIC INFECTIONS AND CHRONIC

OBSTRUCTIVE PULMONARY DISEASE (COPD), 60

- Bronchiectasis, 60

Chronic obstructive pulmonary disease, 60
PNEUMOCONIOSES, 62
IDIOPATHIC INTERSTITIAL LUNG DISEASES, 66
PULMONARY NEOPLASMS, 68

5 THE HEMATOPOIETIC AND LYMPHOID SYSTEM, 72

ANEMIAS, 74
 Bone marrow changes, 74
 Peripheral blood smears, 74
 Tissue changes in anemia, 77
LEUKEMIAS, 78
 Acute leukemias, 78
 Chronic leukemias, 80
PLASMA CELL DYSCRASIAS, 82
REACTIVE LYMPHADENOPATHIES, 84
HODGKIN DISEASE, 87
 Histopathologic subtypes of Hodgkin disease, 87
NON-HODGKIN LYMPHOMA, 89
OTHER HEMATOPOIETIC PROLIFERATIONS IN LYMPH
 NODES, 95
NEOPLASMS INVOLVING THE SPLEEN, 96
DISEASES OF THE THYMUS, 98

6 UPPER DIGESTIVE TRACT, 100

DEVELOPMENTAL ANOMALIES, 102
INFLAMMATORY LESIONS, 103
ORGAN-SPECIFIC LESIONS, 105
 Dental cysts, 105
 Oral and salivary gland lesions, 108
 Esophageal lesions, 110
TUMORS, 112
 Oral tumors, 112
 Salivary gland tumors, 112
 Esophageal tumors, 118

7 GASTROINTESTINAL TRACT, 120

DEVELOPMENTAL DISORDERS, 122
CIRCULATORY DISTURBANCES, 124
OBSTRUCTIONS AND DILATATIONS OF INTESTINAL
 LUMEN, 125

ORGAN-SPECIFIC DISEASES, 126

Gastritis and peptic ulcer, 126

Small intestinal diseases that cause malabsorption, 129

Inflammation of the appendix and the large intestine, 130

Inflammatory bowel disease (IBD), 132

TUMORS, 134

Gastric tumors, 134

Tumors of the small intestine, 136

Tumors of the appendix, 136

Intestinal polyps, 136

Carcinoma of the large intestine, 139

Anal tumors and related lesions, 140

8 HEPATOBILIARY TRACT, 142**HEREDITARY METABOLIC DISEASES, 144****CIRCULATORY DISORDERS, 146****INFECTIOUS HEPATITIS, 147**

Viral hepatitis, 147

Hepatitis caused by pathogens other than hepatitis viruses, 149

Biliary infections, 150

DRUG-INDUCED LIVER DISEASES, 152**ALCOHOLIC LIVER DISEASES, 153****AUTOIMMUNE LIVER DISEASES, 155****BILIARY OBSTRUCTION, 156****CIRRHOSIS, 158****TUMOR-LIKE CONDITIONS AND TUMORS, 159**

Tumor-like conditions, 159

Epithelial tumors, 161

Mesenchymal tumors, 163

Metastatic tumors, 163

DISEASES OF THE GALLBLADDER, 164**9 PANCREAS, 166****DEVELOPMENTAL AND GENETIC DISORDERS, 168****PANCREATITIS, 169****TUMORS OF THE EXOCRINE PANCREAS, 172**

Benign tumors and tumors of borderline malignancy, 172

Carcinoma of the pancreas, 174

TUMORS OF THE ENDOCRINE PANCREAS, 176**DIABETES MELLITUS, 177****10 ENDOCRINE GLANDS, 180****DISEASES OF THE PITUITARY GLAND, 182**

Hypopituitarism, 182

Reactive changes, 183

Tumors, 183

DISEASES OF THE THYROID GLAND, 185

- Thyroid hyperplasia, 185
- Thyroiditis, 186
- Benign thyroid tumors, 188
- Malignant thyroid tumors, 190

DISEASES OF THE PARATHYROID GLANDS, 195

DISEASES OF THE ADRENAL CORTEX, 198

- Adrenocortical insufficiency, 198
- Adrenocortical hyperplasia and hyperfunction, 199
- Adrenocortical tumors, 201

DISEASES OF THE ADRENAL MEDULLA, 203

11 KIDNEY AND URINARY TRACT, 208

DEVELOPMENTAL AND GENETIC DISORDERS, 210

- Agenesis, malposition, exstrophy, and related defects, 210
- Polycystic kidney disease, 212
- Hereditary glomerular and tubular diseases, 213

VASCULAR DISORDERS, 216

IMMUNE-MEDIATED GLOMERULAR DISEASES, 217

- Membranoproliferative glomerulonephritis, 219
- Membranous glomerulonephritis, 220
- IgA nephropathy and Henoch-Schönlein purpura, 222
- Postinfectious glomerulonephritis, 223
- Crescentic glomerulonephritis, 224
- Systemic lupus erythematosus (SLE), 225

TUBULOINTERSTITIAL DISEASES, 227

LOWER URINARY TRACT INFECTIONS, 232

TUMORS, 234

- Tumors of the kidney and renal pelvis, 234
- Tumors of the urinary bladder, 235

12 MALE REPRODUCTIVE SYSTEM, 238

GENETIC AND DEVELOPMENTAL DISORDERS, 240

INFECTIONS, 241

TUMORS OF THE TESTIS, 242

- Germ cell tumors, 242
- Sex cord stromal tumors, 246
- Mixed germ cell stromal tumors, 247
- Tumors of rete testis, epididymis, and tunica vaginalis testis, 248

TUMORS AND TUMOR-LIKE LESIONS OF THE PROSTATE, 248

- Benign prostatic hyperplasia, 248
- Carcinoma of the prostate, 250

13 FEMALE REPRODUCTIVE SYSTEM, 256

DEVELOPMENTAL DISORDERS, 258

INFECTIONS, 260

HORMONALLY INDUCED CHANGES, 261

TUMORS OF THE VULVA, 263

TUMORS OF THE VAGINA, 265

TUMORS OF THE CERVIX, 266

TUMORS OF THE UTERUS, 268

Endometrial adenocarcinoma, 268

Endometrial stromal tumors, 270

Tumors of the myometrium, 271

TUMORS OF THE OVARY, 273

Serous tumors, 273

Mucinous tumors, 275

Endometrioid carcinoma, 277

Clear cell carcinoma, 278

Transitional cell tumors, 278

Sex cord stromal tumors, 278

Germ cell tumors, 282

Unclassified and metastatic tumors of the ovary, 284

DISORDERS OF THE PLACENTA, 287

Abnormal implantation and separation of the placenta
and rupture of membranes, 289

Infections, 289

Gestational trophoblastic disease, 290

14 BREAST, 294

FIBROCYSTIC CHANGE, 296

TUMORS, 298

Fibroadenoma, 298

Adenoma, 298

Phyllodes tumor, 299

Intraductal papilloma, 300

Atypical hyperplasia, 301

Noninvasive carcinoma, 302

Invasive breast carcinoma, 303

Variants of invasive carcinoma 306

Immunohistochemistry of breast carcinoma, 308

15 SKIN, 310

HEREDITARY SKIN DISEASES, 312

INFECTIONS, 312

Bacterial infections, 313

Fungal infections, 314

Viral infections, 314

INFLAMMATORY DERMATOSES, 316

Immune-mediated dermatoses, 316

Granulomatous diseases, 319

Idiopathic skin disease, 321

NEOPLASMS AND RELATED DISORDERS, 323

Pigmentary lesions, 323

Epidermal tumors, 328

Adnexal tumors, 331

Mesenchymal tumors, 333

16 SOFT TISSUE, 334

FIBROBLASTIC LESIONS, 336

- Benign fibroblastic tumors and tumor-like lesions, 336
- Fibromatoses, 337

FIBROHISTIOCYTIC TUMORS, 338

LIPOMATOUS TUMORS, 339

VASCULAR TUMORS, 341

PERIVASCULAR TUMORS, 343

SMOOTH MUSCLE CELL TUMORS, 344

TUMORS OF STRIATED MUSCLE, 345

NEURAL TUMORS, 347

- Benign neural tumors, 347
- Malignant neural tumors, 348

CARTILAGE AND BONE-FORMING TUMORS, 349

MISCELLANEOUS SOFT-TISSUE TUMORS, 350

17 BONES AND JOINTS, 354

DEVELOPMENTAL AND GENETIC DISORDERS, 356

METABOLIC AND DEGENERATIVE DISEASES, 357

- Metabolic bone diseases, 357
- Hyperparathyroidism, 359
- Paget disease of bone, 359
- Crystal-induced arthritis, 360
- Osteonecrosis, 361
- Degenerative joint disease, 361

INFLAMMATORY DISEASES, 363

- Infections of bones and joints, 363
- Noninfectious arthropathies, 364

NEOPLASMS, 367

- Benign bone-forming tumors, 367
- Malignant bone-forming tumors, 369
- Fibrous lesions of bone, 377
- Giant cell tumor of bone, 378
- Marrow tumors, 379
- Vascular tumors, 380
- Miscellaneous tumors and tumor-like conditions, 380
- Tumors and tumor-like lesions of joints, 383

18 SKELETAL MUSCLES, 384

CONGENITAL MYOPATHIES, 386

MUSCULAR DYSTROPHIES, 386

INFLAMMATORY MYOPATHIES, 389

GENETIC-METABOLIC MYOPATHIES, 392

- Carbohydrate storage diseases, 392
- Lipid storage myopathies, 393
- Mitochondrial myopathies, 394

DENERVATION-RELATED MUSCLE DISEASES, 395

19 NERVOUS SYSTEM, 398

DEVELOPMENTAL AND GENETIC DISORDERS, 400

PERINATAL BRAIN LESIONS, 401

TRAUMA OF THE BRAIN AND THE SPINAL CORD, 403

CIRCULATORY DISTURBANCES, 405

Intracranial hemorrhages, 405

Cerebral ischemia, 408

INFECTIONS, 409

METABOLIC AND TOXIC DISEASES, 413

Inborn errors of metabolism, 414

DEMYELINATING DISEASES, 416

**DEGENERATIVE DISEASES OF THE CENTRAL
NERVOUS SYSTEM, 417**

NEOPLASMS, 420

Astrocytic tumors, 422

Oligodendroglioma, 422

Ependymoma, 422

Neuronal, mixed neuronal-glial, and neuroendocrine
neoplasms, 424

Pineal tumors, 424

Meningioma, 425

Vascular neoplasms, 425

Malformative and nonneoplastic mass lesions, 426

DISEASES OF PERIPHERAL NERVES, 426

Peripheral neuropathies, 426

Hereditary neuropathies, 428

Ischemic neuropathies, 430

Inflammatory neuropathies, 430

Neoplasms of peripheral nerves, 432

20 THE EYE AND OCULAR ADNEXA, 434

INFLAMMATION OF THE EYE AND OCULAR
ADNEXA, 436

EYE CHANGES IN SYSTEMIC DISEASES, 437

SPECIFIC OCULAR DISORDERS, 438

Glaucoma, 438

Diseases of the cornea, 440

Retinal degenerative diseases, 441

Cataracts, 442

TUMORS, 443

Melanoma, 443

Retinoblastoma, 445

Medulloepithelioma, 446

21 EAR, 448

INFLAMMATORY LESIONS OF THE EXTERNAL AND
MIDDLE EAR, 450

PATHOLOGIC CHANGES OF THE INNER EAR, 453

NEOPLASMS, 455

Tumors of the outer ear, 455

Tumors of the middle ear, 455

Tumors of the inner ear, 455