
The National Medical Series for Independent Study

2nd edition
medicine

Allen R. Myers, M.D.

*Dean and Professor of Medicine
Temple University
School of Medicine
Associate Vice President
Temple University
Health Sciences Center
Philadelphia, Pennsylvania*



Harwal Publishing

Philadelphia • Baltimore • Hong Kong • London • Munich • Sydney • Tokyo

A Waverly Company

Contents

Contributors	xi
Preface	xiii
Acknowledgments	xv
To the Reader	xvii

1 Cardiovascular Diseases

I. Congestive heart failure	1
II. Cardiac arrhythmias	6
III. Ischemic heart disease	11
IV. Valvular heart disease	23
V. Cardiomyopathies	31
VI. Pericardial disease	36
VII. Congenital heart disease in the adult	39
VIII. Venous thrombosis	43
IX. Systemic hypertension	44
X. Cardiovascular syncope	49

1

2 Pulmonary Diseases

I. Pulmonary function studies	61
II. Chronic obstructive pulmonary disease (COPD)	65
III. Asthma	69
IV. Bronchiectasis, cystic fibrosis, and lung abscess	72
V. Acute respiratory failure	74
VI. Adult respiratory distress syndrome (ARDS)	75
VII. Cor pulmonale	76
VIII. Pulmonary embolism	77
IX. Diseases of the pleura	80
X. Chest wall disorders	83
XI. Mediastinal diseases	85
XII. Diffuse interstitial lung disease	86
XIII. Occupational lung diseases	88
XIV. Pulmonary diseases of unknown etiology	90
XV. Sleep apnea syndrome	94

61

3 Hematologic Diseases

I. Red blood cell disorders	103
II. Hematocrit disorders	108

103

- III. White blood cell disorders 110
- IV. Acute leukemias 113
- V. Disorders of coagulation and hemostasis 116
- VI. Abnormalities related to hypercoagulability and increased tendency to thrombosis 124

4 Oncologic Diseases

133

- I. Tumor growth 133
- II. Cancer staging 133
- III. Treatment modalities 134
- IV. Breast cancer 143
- V. Other gynecologic malignancies 147
- VI. Sarcomas 152
- VII. Melanoma 153
- VIII. Carcinoma of the lung 155
- IX. Cancer of unknown primary site (CUPS) 158
- X. Cancers of the kidney, bladder, and prostate 159
- XI. Testicular cancer 163
- XII. Head and neck carcinomas 165
- XIII. Multiple myeloma 166
- XIV. Hodgkin's disease 168
- XV. Non-Hodgkin's lymphoma 170
- XVI. Paraneoplastic syndromes 172

5 Gastrointestinal Diseases*

181

- I. Diseases of the esophagus 181
- II. Diseases of the stomach 186
- III. Peptic ulcer disease 190
- IV. Diseases of the small intestine 195
- V. Diseases of the colon 208
- VI. Diseases of the rectum and anus 213
- VII. Diseases of the pancreas 214
- VIII. Diseases of the biliary tract 218
- IX. Diseases of the liver 222
- X. Diseases of the peritoneum, mesentery, and abdominal vasculature 236

6 Renal Diseases and Fluid and Electrolyte Disorders

249

Part I: Renal Diseases

- I. Clinical assessment of renal function 249
- II. Acute renal failure 250
- III. Chronic renal failure 254
- IV. Medical complications of renal replacement therapy 255
- V. Proteinuria 257
- VI. Hematuria 258
- VII. Nephrolithiasis 259
- VIII. Urinary tract obstruction 261
- IX. Urinary tract infection 262

- X. Glomerular disease 265
- XI. Renal cystic disease 275
- XII. Tubulointerstitial disease 276
- XIII. Renal transport defects 279
- XIV. Renal vascular disease 280
- XV. Tumors of the urinary tract 284
- XVI. Kidney involvement in lymphoma and leukemia 284
- XVII. The kidney in pregnancy 285

Part II: Fluid and Electrolyte Disorders

- I. Water metabolism 287
- II. Sodium metabolism 291
- III. Potassium metabolism 292
- IV. Acid-base metabolism 298
- V. Calcium metabolism 304
- VI. Phosphate metabolism 304
- VII. Magnesium metabolism 307

7 Allergic and Immunologic Disorders 323

- I. Overview of the immune system 323
- II. Pathogenesis of the IgE-mediated allergic reaction 325
- III. Allergic rhinitis 326
- IV. Urticaria and angioedema 330
- V. Generalized anaphylaxis 333
- VI. Insect sting sensitivity 335
- VII. Drug reactions 336
- VIII. Immunodeficiency disorders 341

8 Infectious Diseases 353

- I. General principles of human-microbe interaction 353
- II. Use of anti-infective therapy 356
- III. Effective use of the microbiology laboratory 359
- IV. Risk factors for infection 360
- V. Specific infections according to body site 364
- VI. Sexually transmitted diseases 378
- VII. Other infectious diseases and syndromes 381
- VIII. Retrovirus infection of humans 385

9 Endocrine and Metabolic Diseases 401

- I. Disorders of the pituitary gland 401
- II. Disorders of the thyroid gland 408
- III. Disorders of the parathyroid gland 418
- IV. Disorders of glucose homeostasis 423
- V. Disorders of the adrenal gland 437
- VI. Female reproductive disorders 446
- VII. Male reproductive disorders and gynecomastia 451
- VIII. Metabolic bone disease 453

10	Rheumatic Diseases	465
	I. Osteoarthritis 465	
	II. Crystal-related joint diseases 469	
	III. Rheumatoid arthritis 475	
	IV. Spondylarthropathies 482	
	V. Juvenile rheumatoid arthritis 490	
	VI. Bacterial arthritis 493	
	VII. Systemic lupus erythematosus 497	
	VIII. Scleroderma 504	
	IX. Inflammatory myopathies (polymyositis and dermatomyositis) 508	
	X. Sjögren's syndrome 511	
	XI. Vasculitis 513	
11	Neurologic Disorders	529
	I. Approach to the patient with a neurologic complaint 529	
	II. Loss of consciousness 534	
	III. Alteration in behavior 539	
	IV. Headache 542	
	V. Weakness 545	
	VI. Disequilibrium and dizziness 546	
	VII. Pain syndromes 548	
	VIII. Stroke 549	
	IX. Seizures 555	
	X. Movement disorders 557	
	XI. Demyelinating diseases 561	
	XII. Myelopathy and other spinal cord disorders 562	
	XIII. Neuropathy 563	
	XIV. Disorders of the neuromuscular junction 568	
	XV. Disorders of muscle 569	
	XVI. Infection 571	
	XVII. Primary CNS tumors 572	
	XVIII. Hereditary disorders 573	
	XIX. Toxic and metabolic disorders 575	
	XX. Sleep disorders 577	
	XXI. Trauma 577	
	Case Studies in Clinical Decision Making	CS-1
	Comprehensive Exam	CE-1
	Index	I-1