

Table of Contents:

PART 1: CRITICAL CARE PROCEDURES, MONITORING, AND PHARMACOLOGY

- 1 Cardiac Arrest and Cardiopulmonary Resuscitation
- 2 Airway Management in the Critically Ill Adult
- 3 Assessment of Cardiac Filling and Blood Flow
- 4 Arterial, Central Venous, and Pulmonary Artery Catheters
- 5 Cardiac Pacing
- 6 Pericardial Tamponade: Clinical Presentation, Diagnosis, and Catheter-Based Therapies
- 7 Intra-aortic Balloon Counterpulsation
- 8 Echocardiography
- 9 General Principles of Mechanical Ventilation
- 10 Ventilatory Management of Obstructive Airway Disease
- 11 Mechanical Ventilation in Acute Respiratory Distress Syndrome
- 12 Bronchoscopy and Lung Biopsy in Critically Ill Patients
- 13 Noninvasive Respiratory Monitoring
- 14 Tracheostomy
- 15 Chest Tube Thoracostomy
- 16 Intracranial Monitoring
- 17 Gastrointestinal Endoscopy
- 18 Continuous Renal Replacement Therapy
- 19 Use of Sedatives, Analgesics, and Neuromuscular Blockers
- 20 Principles of Drug Dosing in Critically Ill Patients

PART 2: CRITICAL CARE CARDIOVASCULAR DISEASE

- 21 Circulatory Shock
- 22 Cardiogenic Shock
- 23 Septic Shock

- 24 Cardiac Tamponade
- 25 Severe Sepsis and Multiple Organ Dysfunction
- 26 Hypovolemic Shock
- 27 Traumatic Shock and Tissue Hypoperfusion: Nonsurgical Management
- 28 Anaphylaxis and Anaphylactic Shock
- 29 Severe Heart Failure
- 30 Acute Coronary Syndromes and Acute Myocardial Infarction
- 31 Cardiac Arrhythmias
- 32 Valvular Heart Disease in Critical Care
- 33 Acute Aortic Dissection
- 34 Hypertensive Crises
- 35 General Principles of Postoperative Intensive Care Unit Care
- 36 Postoperative Management of the Cardiac Surgery Patient

PART 3: CRITICAL CARE PULMONARY DISEASE

- 37 Acute Respiratory Failure
- 38 Life-Threatening Asthma
- 39 Chronic Obstructive Pulmonary Disease
- 40 Hypoventilation and Respiratory Muscle Dysfunction
- 41 Nonpulmonary Causes of Respiratory Failure
- 42 Pneumonia: Considerations for the Critically Ill Patient
- 43 Weaning from Mechanical Ventilation
- 44 Acute Pulmonary Embolism
- 45 Pulmonary Hypertension
- 46 Massive Hemoptysis
- 47 Pneumothorax and Barotrauma
- 48 Toxic Gas, Fume, and Smoke Inhalation

49 Immunologic Lung Disease in the Critically Ill

PART 4: CRITICAL CARE INFECTIOUS DISEASE

50 Nosocomial Infection in the Intensive Care Unit

51 Principles Governing Antimicrobial Therapy in the Intensive Care Unit

52 Antifungal and Antiviral Therapy

53 Critically Ill Immunosuppressed Host

54 Specific Infections with Critical Care Implications

PART 5: RENAL DISEASE AND METABOLIC DISORDERS IN THE CRITICALLY ILL

55 Acute Kidney Injury

56 Chronic Kidney Disease

57 Acid-Base, Electrolyte, and Metabolic Abnormalities

58 Acute Diabetic Emergencies, Glycemic Control, and Hypoglycemia

59 Adrenal Insufficiency in the Critically Ill Patient

60 Thyroid Disorders

PART 6: NEUROLOGIC DISEASE IN THE CRITICALLY ILL

61 Coma

62 Neurologic Criteria for Death in Adults

63 Stroke

64 Muscular Paralysis: Myasthenia Gravis and Guillaine-Barre Syndrome

65 Seizures in the Critically Ill

66 Head Injury

PART 7: PHYSICAL AND TOXIC INJURY IN THE CRITICALLY ILL

67 Critical Care Management of the Severely Burned Patient

68 Poisonings

69 Hypothermia, Hyperthermia, and Rhabdomyolysis

PART 8: ADMINISTRATIVE, ETHICAL, AND PSYCHOLOGICAL ISSUES IN THE

CARE OF THE CRITICALLY ILL

70 Intensive Care Unit Administration and Performance Improvement

71 Ethical Considerations in Managing Critically Ill Patients

72 Delirium, Sleep, and Mental Health Disturbances in Critical Illness

73 Severity of Illness Scoring Systems

74 Education and Training in Intensive Care Medicine

PART 9: OTHER CRITICAL CARE DISORDERS AND ISSUES IN THE CRITICALLY ILL

75 Diagnosis and Management of Liver Failure in the Adult

76 Gastrointestinal Bleeding

77 Acute Pancreatitis

78 Hemorrhagic and Thrombotic Disorders

79 Use of Blood Components in the Intensive Care Unit

80 Intensive Care of the Cancer Patient

81 Critical Care Medicine in Pregnancy

82 Nutrition Support

83 Bedside Ultrasonography in the Critical Care Patient