

TABLE OF CONTENTS

Critical and Urgent Care I	1
Critical and Urgent Care I Panel	3
Acute Ischemic Stroke	
<i>By Steven H. Nakajima, Pharm.D., BCCCP; and Kathleen Wyatt Chester, Pharm.D., BCCCP, BCGP</i>	
Introduction	7
Therapeutic Goals	9
Intravenous Fibrinolytics	10
Guidelines for the Early Management of Patients With Acute Ischemic Stroke: AHA/ASA	15
Thrombectomy	23
Pharmacists' Role in Acute Stroke Care	25
References	27
Self-Assessment Questions	30
Trauma and Neurocritical Care	
<i>By Audis Bethea, Pharm.D., BCPS, BCCCP; and Jennifer M. Jarvis, Pharm.D., BCPS</i>	
Introduction	35
Shock/Resuscitation	35
CNS Pathologies	49
Antimicrobial Prophylaxis	56
References	60
Self-Assessment Questions	63
Critical and Urgent Care II	69
Critical and Urgent Care II Panel	71
Pulmonary Embolus and DVT	
<i>By John M. Hammer, Pharm.D., MBA, BCPS, DPLA; and Carleton B. Maxwell, Pharm.D., BCPS, FNPhA</i>	
Introduction	75
Submassive and Massive PEs	78
Conclusion	87
References	87
Self-Assessment Questions	89
Heparin Dosing, Monitoring, and Reversal	
<i>By Allison E. Burnett, Pharm.D., Ph.C., CACP; and Preeyaporn Sarangarm, Pharm.D., BCPS, BCCCP</i>	
Introduction	93
Heparin Use in General Indications	97
Laboratory Monitoring of Heparin	104
Practical Management Aspects of UFH	107
Conclusion	110
References	110
Self-Assessment Questions	114
Critical and Urgent Care III	119
Critical and Urgent Care III Panel	121
Pain, Agitation, and Delirium	
<i>By Mary M. Looby, Pharm.D., BCPS, BCCCP</i>	
Introduction	125
Methodology	125
Pain	126
Agitation/Sedation	131
Delirium	134
Immobility	136
Sleep Disruption	136
Conclusion	138
References	139
Self-Assessment Questions	141
Smoke Inhalation and Toxic Exposure	
<i>By Kate Oltrogge Pape, Pharm.D., BCPS, BCCCP; and Ryan Feldman, Pharm.D., BCPS, DABAT</i>	
Smoke Inhalation Introduction	145
Chemical Inhalation Introduction	150
Chemical Cutaneous Injuries	157
References	161
Self-Assessment Questions	165
Endocrine Emergencies	
<i>By Jaime Robenolt Gray, Pharm.D., BCCCP; and Heather Rouse Teufel, Pharm.D., BCCCP</i>	
Critical Illness–Related Adrenal Insufficiency	171
Diabetic Ketoacidosis and Hyperglycemic Hyperosmolar State	184
Complications of DKA/HHS	188
Hypoglycemia	188
Prevention of Diabetic Crises	189
Conclusion	189
References	190
Self-Assessment Questions	193
Critical and Urgent Care IV	197
Critical and Urgent Care IV Panel	199
Interactive Case: Anticoagulation for Unique Situations	
<i>By Scott D. Nei, Pharm.D. BCPS, BCCCP; and Hannah E. Pope, Pharm.D., MHA, BCPS</i>	
Interactive Case: Anticoagulation for Unique Situations	203
Hyperlink to Activity	203
Self-Assessment Questions	207
Anesthesia and Ventilator Management in Critical Care Patients	
<i>By Mona K. Patel, Pharm.D., BCCCP; and Justin Muir, Pharm.D., BCCCP</i>	
Interactive Case: Anesthesia and Ventilator Management in Critical Care Patients	211
Hyperlink to Activity	211
Self-Assessment Questions	216
Statistics in Practice: Comparing Three or More Groups	
<i>By Daniel R. Touchette, Pharm.D., MA, FCCP; and Ryan Rodriguez, Pharm.D., BCPS</i>	
Statistics in Practice: Comparing Three or More Groups	221
Hyperlink to Activity	221
Self-Assessment Questions	223