CCSAP 2017 Book 1 (Cardiology Critical Care)
Total Available Hours: 15.5
BCCCP test deadline: 11:59 p.m. (Central) on May 15, 2017.
ACPE test deadline: 11:59 p.m. (Central) on January 14, 2020.

Cardiology Critical Care I (Module 1) – Credit Hours: 4.0

Chapter: Antithrombotic Therapies in Acute Coronary Syndrome
Learning Objectives
1. Distinguish the types of myocardial infarction that can occur in critically ill patients.
2. Evaluate the acute use of antiplatelet and anticoagulant therapies for patients with ischemic heart disease.
3. Develop appropriate management of chronic antithrombotic pharmacotherapies for ischemic heart disease in critically ill patients.
4. Demonstrate appropriate management of antithrombotic toxicities and adverse effects in patients with ischemic heart disease.

Chapter: Direct Oral Anticoagulants in Special Populations
Learning Objectives
1. Assess the risks and benefits of direct oral anticoagulants (DOACs) compared with traditional anticoagulants.
2. Design an appropriate DOAC regimen for patients with alterations in organ function.
3. Develop an evidence-based strategy for the management of DOACs in patients with selected comorbid conditions.
4. Design a treatment approach to manage bleeding complications associated with DOACs.

Cardiology Critical Care II (Module 2) – Credit Hours: 6.0

Chapter: Volume Management in Acute Decompensated Heart Failure
Learning Objectives
1. Distinguish between hypervolemia, hypovolemia, and euvolemia in acute decompensated heart failure (ADHF) on the basis of hemodynamic parameters.
2. Evaluate the results of invasive monitoring to create a pharmacologic treatment plan to improve the hemodynamic status of a patient with ADHF.
3. Assess the role of intravenous vasodilators as add-on therapy for the management of hypervolemia in ADHF.
4. Evaluate the usefulness of vasopressin receptor antagonists in hypervolemic hyponatremia.
5. Devise a volume management strategy using ultrafiltration in ADHF.
6. Develop a patient-specific treatment plan for the management of hypervolemia in ADHF.

Chapter: Advanced Heart Failure
Learning Objectives
1. Design optimal pharmacotherapy for patients awaiting left ventricular assist device (LVAD) or implantation or orthotopic heart transplantation (OHT).
2. Construct safe and effective drug therapy regimens for patients receiving extracorporeal membrane oxygenation support.
3. Devise effective thromboprophylactic strategies for patients receiving percutaneous LVAD support.
4. Design effective treatment plans for patients with complications of durable LVAD therapy.
5. Devise safe and effective pharmacotherapy regimens in patients recovering from OHT.

Chapter: Management of Circulatory Shock
Learning Objectives
1. Distinguish between the various shock syndromes according to a patient's clinical and hemodynamic parameters.
2. Construct an initial resuscitation pathway that includes quantitative resuscitation for patients with shock.
3. Devise a treatment strategy for a patient with hypovolemic shock.
4. Design an appropriate resuscitation and treatment strategy for a patient with cardiogenic shock.
5. Delineate the role and place in therapy of thrombolytics for pulmonary embolism.
6. Develop a treatment pathway for the care of patients with severe sepsis or septic shock that incorporates the Surviving Sepsis Campaign guideline recommendations and management bundle.

Cardiology Critical Care III (Module 3) – Credit Hours: 5.5

Chapter: ACLS and Post-Cardiac Arrest Management
Learning Objectives
1. Justify the pharmacist's role in advanced cardiac life support (ACLS).
2. Demonstrate an understanding of an automated external defibrillator and how it is used in the setting of cardiac arrest.
3. Distinguish between intravenous, intraosseous, and endotracheal access and drug administration by each route in the ACLS setting.
4. Design pharmacotherapy for the arrhythmias commonly encountered in cardiovascular emergencies including pulseless ventricular tachycardia (VT)/ventricular fibrillation, pulseless electrical activity, asystole, bradycardia, atrioventricular block (first, second, and third degree), paroxysmal supraventricular tachycardia, stable VT (with a pulse), and torsades de pointes.
5. Evaluate pharmacologic agents used in ACLS with respect to mechanism of action, appropriate dosing regimen, and treatment role.
6. Justify targeted temperature management in patients with cardiac arrest.

7. Evaluate the need for antiarrhythmic and/or vasopressor therapy in post-cardiac arrest patients including dosing, administration, and monitoring plans.

Chapter: Beyond Randomized Placebo Controlled Trials in Cardiology
Learning Objectives
1. Judge the utility of evidence from non-randomized placebo controlled trial clinical study designs to answer clinical questions.
2. Evaluate the validity and applicability of active control superiority trial data to patient care.
3. Evaluate the validity and applicability of noninferiority trial data to patient care.
4. Distinguish between types of traditional observational study designs.
5. Evaluate the validity and applicability of evidence from traditional observational study designs to patient care.
6. Distinguish between types of novel observational study designs.
7. Evaluate the validity and applicability of evidence from novel observational study designs to patient care.