Module 2

THROMBOLYTIC THERAPY IN ACUTE ISCHEMIC STROKE

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Reviewed by Teresa A. Allison, Pharm.D., BCPS; and Chigozie Mason, Pharm.D., BCPS

LEARNING OBJECTIVES

1. Analyze the evidence involving the use of fibrinolytics in acute ischemic stroke (AIS).
2. Evaluate a patient's eligibility for receiving thrombolytic therapy in AIS.
3. Design an individualized treatment plan for the use of intravenous and intra-arterial thrombolytic therapy in a patient with AIS.
4. On the basis of the best-quality evidence, identify the eligible population and recommend a thrombolytic dose for a patient who may receive intra-arterial thrombolysis.
5. Develop a plan for monitoring and post-thrombolysis care, including blood pressure control, thromboembolic prophylaxis, and antiplatelet therapy, for a patient receiving thrombolytic therapy.
6. Justify the importance of obtaining certification as a complete stroke center.

THROMBOTIC AND BLEEDING DIATHESES IN CRITICALLY ILL PATIENTS

BY WESLEY D. MCMILLIAN, PHARM.D., BCPS; AND JOSEPH ALOI, PHARM.D., BCPS

Reviewed by Joseph E. Mazur, Pharm.D., BCPS; and Katy H. Wright, Pharm.D., BCPS

LEARNING OBJECTIVES

1. Evaluate novel pharmacologic agents for the treatment of venous thromboembolism (VTE).
2. Design a patient-specific plan for the treatment of a submassive or massive pulmonary embolism in patients with moderate bleed risk.
3. Apply recent guideline recommendations to develop an appropriate anticoagulant regimen for patients requiring acute treatment of VTE.
4. Demonstrate an understanding of the pharmacology and laboratory monitoring for the novel oral antithrombotic therapies.

5. Devise a strategy for the periprocedural management of patients taking one of the novel oral anticoagulants.
6. Develop a treatment plan for the reversal of novel oral systemic anticoagulants in patients requiring an emergency surgical procedure.

INFECTION IN CRITICALLY ILL PATIENTS

BY LISA HALL ZIMMERMAN, PHARM.D., BCPS, BCNSP, FCCM; AND JANIE FARIS, PHARM.D., BCPS

Reviewed by Dustin D. Spencer, Pharm.D., BCPS: and Edward Edmond Grace, Pharm.D., BCPS (AQ-ID), AAHIVP

LEARNING OBJECTIVES

1. Evaluate the critically ill patient with fever for the presence of specific infections.
2. Identify pathogens associated with ICU infections to design a therapeutic plan to optimize treatment.
3. Evaluate rapid diagnostic testing strategies in the management of critically ill patients with infections.
4. Develop strategies to prevent infections in the ICU.

PAIN, AGITATION, AND DELIRIUM IN THE ICU

BY KARA L. BIRRER, PHARM.D., BCPS

Reviewed by Jeffrey J. Fong, Pharm.D., BCPS; and Eimer Maldonado, Pharm.D., BCPS

LEARNING OBJECTIVES

1. Apply knowledge of the clinical presentation and associated risk factors to identify the development of pain, agitation, and delirium in a patient in the intensive care unit (ICU).
2. Evaluate a patient's depth of sedation, analgesia, and delirium using the appropriate bedside assessment scales.
3. Design a treatment plan to manage pain or agitation during invasive or potentially painful ICU procedures using the 2013 Clinical Practice Guidelines for the Management of Pain, Agitation, and Delirium.
4. Formulate and implement a sedation/analgesia protocol or guideline to a target a light depth of sedation in an ICU patient.
5. Justify the use of delirium screening tools to facilitate early identification of delirium in the ICU.