Complex Case: Neonatal Sepsis
ACPE Number: 0204-0000-15-965-L01-P
Application-based: 1.5 credit hours

Objectives:
At the end of the presentation, the pharmacist should be able to:
1. Correctly answer case-based questions about appropriate treatment and monitoring of a complex neonatal patient with multiple conditions, including patent ductus arteriosus, apnea of prematurity, early and late onset sepsis, and necrotizing enterocolitis.
2. Evaluate the clinical and therapeutic implications of placental transfer of medications
3. Identify age-specific pharmacokinetic difference among neonates, infants, children, and adolescents.

Complex Case: Acute Lymphoblastic Leukemia and Supportive Care
ACPE Number: 0204-0000-15-966-L01-P
Application-based: 1.5 credit hours

Objectives:
At the end of the presentation, the pharmacist should be able to:
1. Correctly answer case-based questions about appropriate treatment and monitoring of a complex pediatric patient with multiple conditions, including acute lymphoblastic leukemia (ALL), tumor lysis syndrome, febrile neutropenia, invasive aspergillosis infection, and Clostridium difficile infection.
2. Select appropriate medication dose modifications related to hepatic impairment.

Regulatory and IRB Considerations
ACPE Number: 0204-0000-15-970-L03-P
Knowledge-based: 0.5 credit hours

Objectives:
At the end of the presentation, the pharmacist should be able to:
1. Identify appropriate off-label use of medications in the pediatric population.
2. List characteristics of patients who require informed assent/consent.
3. Recognize federal legislation relevant to the use of medications in pediatric patients.
Complex Case: Diabetic Ketoacidosis
ACPE Number: 0204-0000-15-964-L01-P
Application-based: 1.5 credit hours

Objectives:
At the end of the presentation, the pharmacist should be able to:
1. Correctly answer case-based questions about appropriate treatment and monitoring of a complex pediatric patient with multiple conditions, including diabetic ketoacidosis, type 1 diabetes mellitus, and urinary tract infection.
2. Calculate maintenance and replacement fluid requirements and urine output.
3. Identify factors affecting medication adherence.
4. Determine appropriate dosing of insulin based on patient age and weight.
5. Select an effective method of delivery for insulin.

Complex Case: Medication Error and Practice Management
ACPE Number: 0204-0000-15-967-L05-P
Application-based: 1.5 credit hours

Objectives:
At the end of the presentation, the pharmacist should be able to:
1. Incorporate position statements, white papers, and national guidelines from recognized regulatory organizations into institutional policies and procedures related to:
   a. Medication reconciliation
   b. Appropriate drug preparation and delivery (e.g., extemporaneous compounding and standardized concentrations)
   c. Selecting equipment/technology and decision support
   d. Adverse drug event monitoring and reporting
   e. Metrics for evaluating quality of pediatric pharmacy services.

Complex Case: Acute Asthma
ACPE Number: 0204-0000-15-961-L01-P
Application-based: 1.5 credit hours

Objectives:
At the end of the presentation, the pharmacist should be able to:
1. Correctly answer case-based questions about appropriate treatment and monitoring of a complex pediatric patient with multiple conditions, including acute and chronic asthma, ADHD, acne and GERD.
2. Evaluate essential components of social history, including smoke exposure and home environment.
3. Formulate a plan to address barriers to patient education and adherence, including age, language, cultural considerations, and inhaler technique.
4. Describe the impact of age on classification and management of asthma.
5. Assess available resources to improve access to medications, including patient assistance programs.
Research Design, Evidence-Based Medicine and Statistical Analysis
ACPE Number: 0204-0000-15-968-L04-P
Application-based: 2.0 credit hours

Objectives:
At the end of the presentation, the pharmacist should be able to:
1. Interpret biomedical literature with regard to study design, methodology, statistical analysis, and significance and applicability of reported data and conclusions.
2. Summarize key points from the most current pharmacy practice literature.
3. Explain the use of evidence-based treatment guidelines and protocols.

Complex Case: Status Epilepticus and Cardiopulmonary Resuscitation
ACPE Number: 0204-0000-15-962-L01-P
Application-based: 1.5 credit hours

Objectives:
At the end of the presentation, the pharmacist should be able to:
1. Correctly answer case-based questions about appropriate treatment and monitoring of a complex pediatric patient with multiple conditions and needs, including status epilepticus, cardiopulmonary resuscitation, and sedation/analgesia.
2. Differentiate treatment options in cardiopulmonary arrest based on patient presentation.
3. Select the appropriate dose and route of administration for medications.
4. Assess the need and processes for reporting adverse drug events.
5. Identify cultural considerations related to treatment and counseling of the pediatric population.

Complex Case: Deep Vein Thrombosis and Metabolic Syndrome
ACPE Number: 0204-0000-15-963-L01-P
Application-based: 1.5 credit hours

Objectives:
At the conclusion of the session the participant should be able:
1. Correctly answer case-based questions about appropriate treatment and monitoring of a complex pediatric patient with multiple conditions, including deep vein thrombosis, type 2 diabetes mellitus, dyslipidemia, and hypertension.
2. Identify resources and treatment options for sexually transmitted infections.
3. Select appropriate monitoring considerations of anticoagulation medications.
4. Recognize the impact of pharmacogenomic differences on warfarin therapy.
Complex Case: Sickle Cell Disease with Vaso-Occlusive Crisis
ACPE Number: 0204-0000-15-969-L01-P
Application-based: 1.5 credit hours

Objectives:
At the end of the presentation, the pharmacist should be able to:
1. Correctly answer case-based questions about appropriate treatment and monitoring of a complex pediatric patient with multiple conditions, including a vaso-occlusive crisis, cellulitis, constipation, and need for immunizations.
2. Select the most appropriate patient-controlled analgesia regimen based on vaso-occlusive crisis severity.
3. Apply pharmacodynamic principles when selecting appropriate antibiotic regimens.
4. Identify required immunizations for adolescents, including patients with risk factors for vaccine-preventable diseases.

Complex Case: Pneumonia and Septic Shock
ACPE Number: 0204-0000-15-960-L01-P
Application-based: 1.5 credit hours

Objectives:
At the conclusion of the session the participant should be able to:
1. Correctly answer case-based questions about appropriate treatment and monitoring of a complex pediatric patient with multiple conditions, including pneumonia, septic shock, acute kidney injury, and need for parenteral nutrition.
2. Calculate creatinine clearance, fluid requirements, and urine output in pediatric patients.
3. Incorporate FDA Alerts for adverse drug events and drug-drug interactions into clinical practice.
4. Select appropriate dosing for medications based on renal dysfunction and/or replacement modalities.
5. Differentiate vital signs between stable and critically ill pediatric patients.