

SPECIFIC OBJECTIVES

Enhancing Clinical Excellence

CME Sponsors: American Medical Seminars, Inc.

Activity Title: Pediatric Emergency Medicine: Emergent and Urgent Challenges

Activity Dates: August 13-17, 2018

Presenting Faculty: Mark D. Joffe, M.D. and Jeffrey A. Seiden, M.D., F.A.A.P.

NARRATIVE DESCRIPTION

Following this course, the participant should be able to formulate an appropriate differential diagnosis of the various presenting disorders; apply proper life-stabilizing measures as well as identify the life-threatening emergencies as requiring urgent treatment and/or hospital admission; organize an approach to diagnosis and test ordering and develop a treatment plan based on current evidence as well as providing cost-effective outcomes. This activity is expected to result in improved competence in making an appropriate diagnosis and providing effective treatment and referral or follow-up care with the overall goal of improving patient outcomes.

The emphasis will be on aligning physician behavior with current guidelines and evidence-based medicine, as indicated within each topic's specific objectives, with a focus on diagnosis, treatment and when to refer. There is a need to improve the competence and practice strategies in the field of Pediatric Emergency Medicine since it affects not only those in EM but even those practicing in clinical settings such as FP, GP and Pediatricians; therefore, this course was designed as an update for all practitioners at the level of a practicing physician.

SPECIFIC OBJECTIVES

Day 1

Life-Threatening Pediatric Infections.

Upon completion of this session, using national Evidence Based Medicine sources including Cochrane Collaboration and published guidelines from sources including the American Academy of Pediatrics, the participant should be able to:

- Conclude that as newer immunizations eradicate many serious infections, we are still faced with certain pathogens that can cause severe morbidity and mortality.
- Recognize, diagnose and manage the following diseases:
 - a. Toxic Shock Syndrome;
 - b. Meningococcemia;
 - c. Rocky Mountain Spotted Fever;
 - d. Kawasaki Syndrome.
- Develop an approach to the patient who presents with fever and a rash.

Approach to Febrile Infants and Toddler.

Upon completion of this session, using published guidelines and evidence-based medicine, the participant should be able to: $^{\rm EBM,\,GL,\,COMP}$

 Assess the risks of various management strategies of febrile infants less than 2 months of age.

- 2. Appraise recent data concerning the clinical approach to febrile young infants.
- 3. Appraise data concerning the diagnostic evaluation of febrile children 3-24 months of age.
- Recognize the changing epidemiology of invasive bacterial infections secondary to widespread vaccination practices.

Upper Airway Emergencies in the Pediatric Patient.

Upon completion of this session, using national Evidence Based Medicine sources including Cochrane Collaboration and published guidelines from sources including the American Academy of Pediatrics, the participant should be able to: $^{\rm EBM,\ GL,\ COMP}$

- Recommend medication therapy for selected upper airway emergencies.
- Interpret the most recent evidence-based literature in the approach to the child with croup.
- 3. Distinguish and discriminate among the varied presentations of pediatric stridor.

Acute Management of Childhood Asthma.

Upon completion of this session, using published practice guidelines and Cochrane EBM sources, the participant should be able to: $^{\rm EBM,\,GL,\,COMP}$

- Determine the appropriate use of albuterol by metered-dose inhaler, intermittent nebulizer, and continuous nebulizer for children with moderate and severe asthma exacerbations.
- Appropriately apply the evidence regarding levalbuterol as compared with albuterol in the treatment of childhood asthma.
- Employ recent data and recommendations for the use of steroids, magnesium sulfate, terbutaline, and ipratropium bromide in the treatment of acute asthma exacerbations.
- Recognize indications for inpatient hospitalization in children with acute asthma exacerbations.

Day 2

Non-Traumatic Surgical Abdominal Emergencies.

Upon completion of this session, using national Evidence Based Medicine sources including Cochrane Collaboration and published guidelines from sources including the American Academy of Pediatrics, the participant should be able to:

- 1. Recognize pediatric abdominal processes that require surgical intervention.
- Formulate and prepare initial emergency room management of specific abdominal surgical emergencies.



SPECIFIC OBJECTIVES

Enhancing Clinical Excellence

CME Sponsors: American Medical Seminars, Inc.

Activity Title: Pediatric Emergency Medicine: Emergent and Urgent Challenges

Activity Dates: August 13-17, 2018

Presenting Faculty: Mark D. Joffe, M.D. and Jeffrey A. Seiden, M.D., F.A.A.P.

Head Injuries in the Pediatric Patient.

Upon completion of this session, using evidence-based medicine and guidelines from the 4th International Symposium on Concussion in Sport, the participants should be able to: EBM, GL, COMP

- Describe the pathophysiology and, using evidence-based medicine, develop clinical strategies for the emergency treatment of severe head injury in childhood.
- Apply an evidence-based medicine approach to decisions regarding obtaining a CT scan in children after minor head trauma.
- Recognize the signs and symptoms of concussions in pediatric patients.
- Demonstrate use of currently recommended management approaches in children with concussion.

Diagnosis and Misdiagnosis of Appendicitis in Childhood.

Upon completion of this session, using evidence-based medicine, the participant should be able to: $^{\rm EBM}$ $_{\rm COMP}$

- 1. Review the pathophysiology of appendicitis.
- 2. Associate the pathophysiology of appendicitis with the signs and symptoms.
- 3. Analyze various diagnostic approaches to appendicitis in childhood.
- Criticize the care provided in several cases of appendicitis missed at the time of initial ED evaluation.

Blunt Abdominal Trauma in Children.

Upon completion of this session, using evidence-based medicine and published guidelines, the participant should be able to: $^{\rm EBM,~GL,~COMP}$

- Recognize injury mechanisms and clinical findings that are characteristic of solid organ injury and hollow viscus injury in children.
- 2. Integrate the role of various laboratory and radiologic tests in the diagnosis of solid organ injury and hollow viscus injury in children.
- Develop and employ appropriate management strategies for children with significant intraabdominal injuries.
- Appraise recent data regarding the utility of focused abdominal sonography in trauma (FAST) in pediatric trauma.

Day 3

Judicious Use of Antibiotics in Outpatient Setting.

Upon completion of this session, using national Evidence Based Medicine sources including Cochrane Collaboration and published guidelines from sources including the American Academy of

Pediatrics, the participant should be able to: EBM, GL,

- Identify antibiotic prescribing patterns, outcomes, and expenditures for common pediatric conditions.
- Differentiate between common pediatric infections and those that require antibiotic treatment.
- Develop a clinical approach to the diagnosis and therapy of sinusitis.

The Child with a Limp.

Upon completion of this session, using national Evidence Based Medicine sources including Cochrane Collaboration and published guidelines from sources including the American Academy of Pediatrics, the participant should be able to:

- Discuss the importance of age to specific hip pathology.
- Differentiate etiologies of limp in the pediatric patient.
- Review management of specific orthopedic conditions.

Fluid and Electrolyte Emergencies.

Upon completion of this session, using AAP guidelines and evidence-based medicine, the participant should be able to: $\frac{\text{EBM, GL, COMP}}{\text{EBM, GL, COMP}}$

- Assess the degree of dehydration in children based on factors evaluated in recent published research.
- Utilize oral rehydration and subcutaneous rehydration in appropriately selected pediatric patients.
- Discuss the presentations and treatment of children with abnormalities in serum sodium and potassium concentrations.

Visual Diagnosis: You Make the Call.

Upon completion of this session, using national Evidence Based Medicine sources including Cochrane Collaboration and published guidelines from sources including the American Academy of Pediatrics, the participant should be able to:

- "Make the correct call" on slides representing interesting physical examination findings of pediatric patients.
- Evaluate the visual presentation of over 25 different conditions to determine the DDx, lab, imaging and/or their respective treatments or referral as indicated. Some conditions to be covered include:
 - a. Testicular Torsion
 - b. Herpes Zoster



SPECIFIC OBJECTIVES

Enhancing Clinical Excellence

CME Sponsors: American Medical Seminars, Inc.

Activity Title: Pediatric Emergency Medicine: Emergent and Urgent Challenges

Activity Dates: August 13-17, 2018

Presenting Faculty: Mark D. Joffe, M.D. and Jeffrey A. Seiden, M.D., F.A.A.P.

c. Periorbital Cellulitis

d. Mastoiditis

e. Erythema Multiforme (Minor)

f. Pre-Auricular Adenitisg. Lap-Belt Complex

h. Hematuria

Day 4

The Septic Appearing Infant.

Upon completion of this session, using national Evidence Based Medicine sources including Cochrane Collaboration and published guidelines from sources including the American Academy of Pediatrics, the participant should be able to: EBM, GL, COMP

- Conclude that an infectious etiology is not the only cause of a "toxic" appearing child.
- Differentiate neurologic, hematologic, toxin, and cardiac causes of the ill child.

Pediatric Poisonings.

Upon completion of this session, using AAP guidelines and evidence-based medicine, the participant should be able to: EBM, GL, COMP

- Review data on pediatric poisonings including recent trends.
- Employ appropriate gastrointestinal decontamination in a variety of pediatric ingestions.
- 3. Discuss management of several specific poisonings.

Orthopedic Conditions Above the Hip.

Upon completion of this session, using national Evidence Based Medicine sources including Cochrane Collaboration and published guidelines from sources including the American Academy of Pediatrics, the participant should be able to:

- 1. Interpret radiographs that demonstrate Salter-Harris fractures in the pediatric patient.
- Initially manage fractures of the upper extremity and recognize when to refer to an Orthopedic Surgeon.
- 3. Develop management plans for fractures; assess the need for urgent orthopedic consultation.

Pediatric Emergency Radiology.

Upon completion of this session, the participant should be able to: $^{\text{COMP}}$

- Assess the radiographic findings after case description.
- Diagnose various pediatric conditions after case description and radiographic assessment.

Day 5

Pediatric Seizures I. Status Epilepticus, II. Febrile Seizures.

Upon completion of this session, using national Evidence Based Medicine sources including Cochrane Collaboration and published guidelines from sources including the American Academy of Pediatrics, the participant should be able to:

- Demonstrate appropriate medications to treat pediatric status epilepticus.
- 2. Utilize the literature concerning epidemiology of febrile seizures in educating patients' families.

Medical Errors in Pediatrics.

Upon completion of this session, the participant should be able to: $^{\rm EBM,\;COMP}$

- Demonstrate root cause analysis and perform it on cases of medical errors that involve children.
- Assess specific, evidence-based risks for medication errors and strategies to reduce their occurrence.
- Review issues in sleep physiology that relate to medical error risks, and make evidence-based recommendations for sleep management.

Articles That Change the Way We Practice Pediatric Emergency Medicine.

Upon completion of this session, using national Evidence Based Medicine sources including Cochrane Collaboration and published guidelines from sources including the American Academy of Pediatrics, the participant should be able to:

1. Analyze the latest Emergency Medicine literature to bring improved care to the bedside.

Dilemma of the Foreign Body - Aspirated or Ingested.

Upon completion of this session, using evidence-based medicine, the participant should be able to: $^{\rm EBM,}$ $_{\rm COMP}$

- Distinguish the epidemiology and clinical presentation of aspirated versus ingested foreign bodies
- Analyze the rationale for radiographic evaluation of children with a history of foreign body ingestion.
- Review the diagnostic approach and radiographic interpretation of children with aspirated foreign bodies.