

## **EMCP 503: OB/GYN, Infectious Disease, and Pediatric Emergencies**

### **OB/GYN Objectives**

At the end of the course the learner will integrate material covered in online lectures, reading assignments, and vignettes and apply this knowledge to clinical problem solving. Specifically, the learner should be able to:

1. Describe the normal physiologic changes that occur with pregnancy.
2. Describe the various types of miscarriages and the appropriate ED treatment and disposition.
3. Explain the symptoms of ectopic pregnancy and how the quantitative HCG levels and ultrasound aid in its diagnostic evaluation.
4. Describe the clinical presentation, diagnostic evaluation, and ED treatment of pre-eclampsia, eclampsia, and HELLP syndrome.
5. Describe the causes of vaginal bleeding in each trimester.
6. List the risk factors, clinical presentation, diagnostic evaluation, and treatment for placental abruption.
7. Describe the clinical presentation and diagnostic evaluation of placenta previa.
8. Explain the conditions in which a pregnant patient should receive RhoGAM in the ED.
9. Define asymptomatic bacteriuria. Describe how this finding is addressed in the pregnant patient.
10. Explain what classes of drugs are safe in pregnancy and what drugs are contraindicated.
11. Describe how radiographic imaging is approached in the pregnant patient.
12. List which fetal positions are not safe for vaginal delivery.
13. Describe the major maneuvers used to deliver a baby.
14. Describe the management of a shoulder dystocia and nuchal cord.
15. Explain the indications and steps in performing an episiotomy.
16. Explain the steps to quickly assess the newborn (i.e., APGAR score).
17. Define premature labor and describe how it is handled if encountered in the ED.
18. Describe the signs of fetal distress on a fetal heart tracing.
19. Explain how to decide when to keep a laboring patient in the ED versus transferring her to the Labor and Delivery suite.
20. Describe the basic approach to a breech delivery.
21. Explain the management of immediate and delayed postpartum bleeding.
22. Define premature rupture of membranes. Explain how this condition is diagnosed and treated.
23. Define endometritis and explain its diagnosis and treatment.
24. List the common causes of vaginal discharge and discuss how the wet prep aids in the diagnostic evaluation.
25. Describe how to diagnose and treat yeast vaginitis, trichomonas, and bacterial vaginosis.
26. Describe how to diagnose and treat genital warts and genital herpes.
27. Describe the clinical presentation and treatment of a Bartholin's gland abscess.
28. Define pelvic inflammatory disease and discuss its diagnosis, treatment, and complications.

29. List the signs and symptoms of ovarian cysts. Explain the ED treatment and disposition of this condition.
30. Discuss how ovarian torsion presents and the work up and treatment of this condition.
31. Define dysfunctional uterine bleeding and the ED work up and disposition of this condition.

### **Infectious Disease Emergencies Objectives**

At the end of the course the learner will integrate material covered in online lectures, reading assignments, and vignettes and apply this knowledge to clinical problem solving. Specifically, the learner should be able to:

1. Utilize the appropriate empiric antibiotic therapy in the treatment of commonly encountered bacterial infections including:
  - Community acquired pneumonia
  - Cellulitis
  - Urinary tract infections
  - Bacterial pharyngitis
  - Sinusitis
  - Acute otitis media
  - Acute bacterial exacerbation of chronic bronchitis
  - Bacterial meningitis
  - Acute gastroenteritis
  - Sexually transmitted disease (Chlamydia, Gonococcal infections)
  - Bacterial endocarditis
  - Toxic Shock Syndrome
2. Evaluate the pathophysiology and rationale for aggressive early goal directed therapy in the ED treatment of sepsis and septic shock.
3. Describe the natural history of HIV infection from the time of initial infection to the development of frank AIDS.
4. Evaluate the current classes of antiretroviral medications and their major side-effects.
5. Describe the management of occupational exposure of a health care worker to potentially infectious bodily fluids, including the indications for the initiation of HIV prophylaxis.
6. List the common opportunistic infections that occur in patients with AIDS, and how such infections are treated: cryptococcal meningitis, Toxoplasmosis, Pneumocystis pneumonia, cytomegalovirus retinitis, esophageal candidiasis, and tuberculosis.
7. Describe the clinical presentation, diagnostic evaluation, and treatment of commonly encountered viral infections in the ED, including:
  - Rhinovirus infection
  - Influenza
  - Infectious mononucleosis
  - Herpes simplex virus
  - Herpes zoster/varicella

- Rabies
  - Roseola
  - Rubella
8. Describe the clinical presentation, diagnostic evaluation, and ED treatment of common tick-borne infections, including:
    - Lyme disease
    - Rocky Mountain Spotted Fever
    - Ehrlichiosis
  9. Describe the clinical presentation, diagnostic evaluation, and ED treatment of common protozoan infections, including:
    - Malaria
    - Toxoplasmosis
  10. Compare and contrast the clinical presentation and treatment of patients that present to the ED following exposure to biologic weapons including: anthrax, bubonic plague, tularemia, small pox, and ricin.

### **Pediatric Emergencies Objectives**

At the end of the course the learner will integrate material covered in online lectures, reading assignments, and vignettes and apply this knowledge to clinical problem solving. Specifically, the learner should be able to state the presentation, diagnosis, and treatment of the following pediatric conditions:

- Croup
- Epiglottitis
- Intussusception
- Bronchiolitis
- Retropharyngeal abscess
- Pyloric stenosis
- ALTE
- Febrile seizures
- Fevers
- Otitis media
- Newborn jaundice
- UTIs
- Periorbital/orbital cellulites
- Henoch-Schonlein purpura,
- Hemolytic uremic syndrome,
- Fluid therapy in children,
- Kawasaki's disease,
- Nursemaid's elbow,
- Acute rheumatic fever
- Diabetic Ketoacidosis
- Non-accidental trauma

- The learner should also be able to explain how intravenous fluids are given in the pediatric patient, and how the management of the pediatric airway differs from that of an adult.