

Accreditation Statement:

The American College of Foot and Ankle Surgeons is approved by the Council on Podiatric Medical Education as a provider of continuing education in podiatric medicine.

Designation Statement:

The American College of Foot and Ankle Surgeons designates these educational activities for CPME Continuing Education Contact Hours. Physicians should only claim credit commensurate with the extent of their participation in the activity.

Learning Objectives:

At the conclusion of this activity, the participant will be able to:

1. Understand the Epidemiology of Osteomyelitis.
 2. Review diagnostic indicators with clinical findings.
 3. Compare and contrast various imaging methods advantages vs. disadvantages
 4. Identify important pearls and pitfalls gleaned from case based discussions.
 5. Evaluate treatment approaches and their application to your patient for current osteomyelitis.
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Instructions

1. Watch the online video presentations.
2. Fill in your contact information on the CE Test.
3. Complete the CE Test.
4. Complete the Evaluation form.
5. E-Mail your CE Test and Evaluation form to: eLearning@acfas.org

OR

Mail your CE Test and Evaluation form to
[American College of Foot & Ankle Surgeons](#)
[Education Curriculum & Alliances Department](#)
[8725 W. Higgins Road, Suite 555](#)
[Chicago, IL 60631-2724](#)

6. Please allow 6 - 8 weeks to receive your CE confirmation.

* Please note: the minimum passing score is 70%.

Questions

- 1. Which of the following bone scans has the least specificity for osteomyelitis?**
 - a. ^{99m}Tc -MDP
 - b. Gallium-67
 - c. WBC-Indium-111
 - d. WBC- ^{99m}Tc -MDP

- 2. When dealing with an infected stainless steel plate, which of the following studies is most sensitive in detecting acute osteomyelitis?**
 - a. Magnetic resonance imaging (MRI)
 - b. Positron emission tomography-computed tomography (PET-CT)
 - c. Bone scan
 - d. Computed tomography (CT)

- 3. Based on available literature, how long after surgery can an iatrogenic bone marrow edema be seen on an MRI?**
 - a. 2 weeks
 - b. 13 weeks
 - c. 2 months
 - d. 13 months

- 4. Which of the following is a true statement?**
 - a. Osteomyelitis is a diagnosis of exclusion
 - b. A multi-diagnostic approach is necessary to rule out osteomyelitis
 - c. Osteomyelitis always develops in a chronic wound
 - d. Osteomyelitis is best described as a mono-microbial infectious process
 - e. Osteomyelitis is never an indolent process

- 5. Osteomyelitis can develop under which of the following conditions?**
 - a. An area of compromised blood flow
 - b. Status after elective surgery
 - c. After long-term parenteral antibiotic therapy
 - d. Answers a and b
 - e. Answers a, b, and c



Questions (Cont'd.)

6. Which of the following scenarios is the most optimal environment for the development of osteomyelitis?
 - a. Healthy 45-year-old female following bunionectomy
 - b. Patient with end-stage renal disease with peripheral vascular disease with no ulcerations
 - c. 14-year-old male with closed fracture of the navicular bone
 - d. Diabetic patient with stage 3 Charcot neuropathy without ulceration
 - e. Diabetic patient with a chronic (>6 months) distal hallux ulcer

7. When selecting an implant, which of the following is true?
 - a. Titanium is less susceptible to bacterial colonization than stainless steel
 - b. Solid core screws are less susceptible to bacterial colonization than cannulated screws
 - c. Smooth surfaces are less susceptible to bacterial colonization than stainless steel
 - d. All of the above are true
 - e. None of the above are true

8. Which of the following surgical scenarios could benefit from antibiotic prophylaxis?
 - a. Prolonged surgical time (>2 hours)
 - b. Excessive blood loss during surgery (>1200 mL)
 - c. Surgical intervention for treatment of acute trauma
 - d. Surgical implantation of internal fixation
 - e. All of the above

9. It may be acceptable to retain an implant in the setting of an acute infection in which of the following clinical scenarios?
 - a. Intra-articular fracture
 - b. Implant is stable but fracture/osteotomy is not
 - c. Implant is stable and stabilizing the fracture/osteotomy
 - d. Answers a and b
 - e. Answers a and c

Questions (Cont'd.)

10. Which of the following is true regarding the "probe to bone" (PTB) test?

- a. If the PTB test is positive but the bone culture is negative, it is still safe to assume that active osteomyelitis is present
- b. The baseline prevalence (or pre-test probability) of osteomyelitis in the population you are treating influences the interpretation of the PTB test
- c. The PTB test has a high positive predictive value in both the outpatient and inpatient settings
- d. The PTB is an expensive and useless test when evaluating for osteomyelitis in the clinical setting
- e. If the PTB test is positive but all other tests are negative, you can safely assume that active osteomyelitis is present

11. Which serologic marker can independently diagnose osteomyelitis from a contiguous wound in the foot and/or ankle?

- a. White blood cell count (WBC)
- b. Erythrocyte sedimentation rate (ESR)
- c. C-reactive protein (CRP)
- d. Procalcitonin
- e. None of the above

12. Which factor(s) can also elevate acute phase reactants (nonspecific inflammatory markers such as ESR, CRP)?

- a. Advanced age
- b. Obesity
- c. Recent surgery
- d. Malignancy
- e. All of the above

13. Appropriate work-up for a patient with suspected joint sepsis would include:

- a. CRP / ESR / complete blood count (CBC) with differential
- b. Blood culture
- c. Uric acid
- d. Answers a and b
- e. Answers a, b, and c

Questions (Cont'd.)

14. What tests should be ordered if joint aspiration only produces 1 mL of fluid?

- a. Synovial cell count
- b. Crystal analysis
- c. Body fluid culture
- d. Answers a and b
- e. Answers a, b, and c

15. Appropriate treatments for acute septic ankle joint include:

- a. Serial arthroscopic washout
- b. Open arthrotomy
- c. Serial aspiration
- d. Answers a and b
- e. Answers a, b, and c

16. Which of the following statements are true regarding osteomyelitis?

- a. Long-term antibiotic therapy does not increase the rate of resistance
- b. All antibiotics penetrate bone equally
- c. There are no significant adverse events with long-term IV antibiotics
- d. The duration of treatment of osteomyelitis depends on many variables
- e. Resistant bacterial pathogens do not affect the treatment of osteomyelitis

17. Which are the following statements regarding antibiotic therapy for osteomyelitis is/are true?

- a. The risk of methicillin-resistant Staphylococcus aurea (MRSA) presence increases as the rate of amputation and failure to heal increase
- b. Antibiotic therapy for osteomyelitis should be based on culture-specific pathogens
- c. Blood flow/perfusion plays an important role in delivering antibiotic therapy to the site of osteomyelitis
- d. Conservative therapy with antibiotics for long-term treatment of osteomyelitis does play a role in the treatment for limb salvage
- e. All of the above statements are true

Questions (Cont'd.)

18. Which of the following statements is true regarding osteomyelitis?

- a. Patients with a Charcot osteoarthropathy and underlying osteomyelitis cannot be treated with IV antibiotics and bone reconstruction with a predictable result
- b. Suppressive therapy with antibiotics for the treatment of osteomyelitis is never an option for limb preservation
- c. All infected bone must be removed prior to considering any antibiotic therapy
- d. The combination of surgical eradication and antibiotic therapy is probably more suitable for bone infections when applicable
- e. None of the above statements are true

CE Test

Please type your information.

ACFAS ID #			
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Question	Answers				
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Evaluation

1. The course achieved its learning objectives.

strongly agree agree neutral disagree strongly disagree

2. The course was relevant to my clinical learning needs.

strongly agree agree neutral disagree strongly disagree

3. The course was relevant to my personal learning needs.

strongly agree agree neutral disagree strongly disagree

4. The electronic method of instruction was conducive to learning.

strongly agree agree neutral disagree strongly disagree

5. The course validated my current practice.

strongly agree agree neutral disagree strongly disagree

6. I plan to change my practice based on what I learned in the course.

strongly agree agree neutral disagree strongly disagree

7. Any suggestions for the ACFAS e-Learning program?

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