



## 12SS42: When Amputation is Not a Failure

### Accreditation Statement:

The American College of Foot and Ankle Surgeons is approved by the Council on Podiatric Medical Education as a sponsor 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. Compare and contrast various surgical treatment protocols for patients at risk for amputation.
2. Determine how to increase the likelihood of successful healing of ulcers.
3. Identify important pearls and pitfalls gleaned from case based discussions.
4. Evaluate treatment approaches and their application to your practice for patient(s) with vascular insufficiency.

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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 (must have Microsoft Outlook) 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  
Maggie Hjelm, Manager, Education Curriculum & Alliances  
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%.



## 12SS42: When Amputation is Not a Failure

### Questions

1. **Balancing procedures for transmetatarsal amputations include all of the following except:**

- a. Tendo-Achilles lengthening (TAL)
- b. Peroneus brevis to peroneus longus transfer
- c. Split tibialis anterior tendon transfer
- d. Transfer of the flexor hallucis longus tendon to the first metatarsal and extensor digitorum longus tendon to the lesser metatarsals
- e. Transfer of the posterior tibial tendon through the interosseous membrane to the dorsal midfoot

2. **All of the following techniques are effective at balancing a Chopart amputation except:**

- a. Tendo-Achilles lengthening
- b. Posterior tibial tendon recession
- c. Transfer of the anterior tibial tendon to the talar neck and peroneal tendon to the calcaneus
- d. Retrograde locked intramedullary nail fixation
- e. All of the above

3. **Which of the following would be appropriate when an equinovarus deformity and plantar ulceration develop after a Chopart amputation?**

- a. Revision surgery with an exostectomy, tendon transfer or osseous stabilization, and lifelong bracing
- b. Syme amputation
- c. Constriction at the porta pedis
- d. Below-knee amputation
- e. All of the above

4. **Which of the following vascular tests can assist in improving the outcome of partial foot amputations?**

- a. Pulse volume recording
- b. Transcutaneous oxygen pressure (TcPO<sub>2</sub>)
- c. Photoplethysmography
- d. Angiogram
- e. All of the above

5. **Which of the following adjunct therapies positively impact(s) the outcome of partial foot amputations?**

- a. Aggressive debridement with hydrosurgery, ultrasonic debridement, etc.
- b. Tendon balancing, TAL, gastroc recession, extensor to flexor tendon reconstruction
- c. Broad-spectrum antibiotics including coverage for resistant bacterial pathogens
- d. Negative pressure wound therapy
- e. All of the above



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### Questions (Cont'd.)

6. Which of the following can be utilized as a closure technique for an open partial foot amputation?

- a. Split-thickness skin graft
- b. Local flap
- c. Bioengineered alternative tissue
- d. Free tissue transfer
- e. All of the above

7. Syme ankle amputations involve removal of which of the following structures?

- a. Lateral malleolus
- b. Medial malleolus
- c. Talus
- d. Tibial plafond
- e. All of the above

8. Which of the following statements is true regarding a Syme amputation?

- a. It requires less energy expenditure than a below-knee amputation
- b. It is indicated in patients with plantar heel ulcers
- c. An ankle-brachial index (ABI) of less than 0.5 favors performance of a Syme amputation
- d. Osteomyelitis of the tibia is an indication for a Syme amputation
- e. None of the above

9. All of the following are true regarding a Syme amputation *except*:

- a. Patients may ambulate on the amputation stump without their prosthesis for brief periods of time
- b. Nutritional status is an important indicator for a Syme amputation
- c. Mobility of the plantar fat pad is a reason for failure in performance of the Syme amputation
- d. Patients with a Syme amputation have greater oxygen consumption than patients with a below-knee amputation
- e. All of the above

10. What is the most cost-effective way to address diabetic wounds?

- a. Amputation
- b. Application of dermal substitutes
- c. Prevention
- d. Surgical excision
- e. Wet-to-dry dressing



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### **Questions (Cont'd.)**

**11. In general, which of the following patients has the best quality of life?**

- a. A patient who is being treated for ulceration
- b. A patient with no current ulcer but with a history of toe amputation
- c. A patient who had a below-the-knee amputation without phantom pain
- d. A patient with ulceration who has no history of amputation
- e. A patient with stump ulceration after a Syme amputation

**12. Which one of the following statements is true?**

- a. Limb salvage is always more cost-effective than amputation
- b. Mental health is diminished in patients with Charcot arthropathy
- c. Regardless of a number of applications, bioengineered dermal substitutes are always more cost-effective than other standard wound care regimen
- d. Neurogenic ulceration causes more deaths than prostate cancer
- e. Failed salvage is more expensive than primary amputation

**13. Some patients with problem wounds and peripheral artery disease can have a longer life expectancy with an amputation.**

- a. True
- b. False

**14. What percentage of lower extremity amputations in diabetes are preceded by ulceration?**

- a. 12%
- b. 53%
- c. 84%
- d. 100%

**15. Amputation of one lower extremity can precipitate an amputation of the contra-lateral extremity.**

- a. True
- b. False



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### Questions (Cont'd.)

16. Which of the following may not be an indication for an amputation?

- a. Severe infection
- b. Ischemic lesion
- c. Patient preference
- d. Hammertoe
- e. Severe osteomyelitis

17. Which one of the following is true regarding an amputation?

- a. Full-thickness incisions should be used
- b. Tourniquets should always be used, especially after a revascularization procedure
- c. All amputations should be closed primarily
- d. Layered technique should be used in dissection and closure
- e. Negative pressure wound therapy is never used in amputation surgery

18. Which of the following is not true regarding the panmetatarsal head resection?

- a. It is a good alternative to transmetatarsal amputation
- b. Indications for this procedure include painful bunion
- c. Consider this procedure if there is a high likelihood of forefoot breakdown
- d. It maintains surface area for weight/pressure distribution
- e. It is psychologically more acceptable to the patient



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Please type your answers.

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|-----------------------|--|------------------|--|
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## CE TEST

### Answers

| Question | Answers                    |                            |                            |                            |                            |
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| 1        | <input type="checkbox"/> a | <input type="checkbox"/> b | <input type="checkbox"/> c | <input type="checkbox"/> d | <input type="checkbox"/> e |
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| 18 | <input type="checkbox"/> a | <input type="checkbox"/> b | <input type="checkbox"/> c | <input type="checkbox"/> d | <input type="checkbox"/> e |
|----|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|

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### Evaluation

1. The course achieved its learning objectives.

strongly disagree     disagree     neutral     agree     strongly agree

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

strongly disagree     disagree     neutral     agree     strongly agree

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

strongly disagree     disagree     neutral     agree     strongly agree

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

strongly disagree     disagree     neutral     agree     strongly agree

5. The course validated my current practice.

strongly disagree     disagree     neutral     agree     strongly agree

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

strongly disagree     disagree     neutral     agree     strongly agree

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

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