

Flex Therapist CEUs

Lower Extremity Amputation and Leg Blood Flow

1. The data in this case study showed that there was a 25% reduction in maximum thigh circumference in the amputated lower leg compared to the non-amputated lower leg

- A. True
 - B. False
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2. During exercise, the peak muscle contraction strength at each kick linearly declined from onset to the end of exercise in the amputated lower leg for all band intensities, except for the:

- A. Thin, 1.3 kg, yellow band
 - B. Medium, 1.7 kg, red band
 - C. Heavy, 2.1 kg, green band
 - D. Super heavy, 4.6 kg, silver band
-

3. There was a significant positive linear relationship between peak muscle contraction strength and LBF at steady-state in:

- A. The amputated lower leg
 - B. The non-amputated lower leg
 - C. Both the non-amputated lower leg and the amputated lower leg
 - D. Neither the non-amputated lower leg nor the amputated lower leg
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4. There was a positive linear relationship between peak muscle contraction strength and exercising leg vascular conductance in:

- A. The amputated lower leg
 - B. The non-amputated lower leg
 - C. Both the non-amputated lower leg and the amputated lower leg
 - D. Neither the non-amputated lower leg nor the amputated lower leg
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5. The relative muscle strength (%MVC) during 30-s steady state was higher in the amputated lower leg than the non-amputated lower leg except at the higher exercise intensities (black and silver bands).

- A. True
 - B. False
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6. Which of the following is an accurate finding during the recovery phase?

- A. The rate of decline of blood velocity return to the pre-exercise level was faster in the amputated lower leg compared to the non-amputated lower leg.
 - B. The blood velocity was lower in the amputated lower leg than the non-amputated lower leg at 90 - 120 s after the end of exercise.
 - C. The rate of decline in LBF during recovery was similar between the non-amputated lower leg and the amputated lower leg.
 - D. All of the above findings are accurate during the recovery phase.
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7. In the present case, the femoral artery diameter was approximately _____ smaller in the amputated lower leg than the non-amputated lower leg.

- A. 0.5 mm
 - B. 1 mm
 - C. 1.5 mm
 - D. 2 mm
-

8. Considering that LBF was reduced by 38% in the amputated lower leg compared with the non-amputated lower leg, it is suggested that there is a greater influence on blood velocity in the smaller amputated lower leg vessel.

- A. True
 - B. False
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9. It is suggested that exercising LBF in the amputated lower leg may be more influenced by the thigh-stump muscle contraction intensity than the peak muscle contraction strength at the steady-state.

- A. True
 - B. False
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10. The fluctuations in blood pressure during exercise were more significant in:

- A. The amputated lower leg
 - B. The non-amputated lower leg
 - C. There was no significant difference between the non-amputated lower leg and the amputated lower leg
 - D. The blood pressure did not fluctuate in the legs during exercise
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11. The peak muscle strength consistently declined toward the end of exercise in:

- A. The amputated lower leg
- B. The non-amputated lower leg

- C. Both the non-amputated lower leg and the amputated lower leg
 - D. Neither the non-amputated lower leg nor the amputated lower leg
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