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Was the content of the article relevant to current AT practice? Yes No

Was reading the article and completing the quiz a good way for you to learn? Yes No

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30.1D Quiz: Reduction in Ulnar Pressure Distribution When Walking with Forearm Crutches With a Novel Cuff Design: Cross-sectional Intervention Study on the Biomechanical Efficacy of an Ulnar Recess

1. How many volunteers participated in this study?

- a. 15 – 7 males and 8 females
- b. 15 – 8 males and 7 females
- c. 12 – 6 males and 6 females
- d. 18 – 9 males and 9 females
- e. 14 – 8 males and 6 females

ANSWER: _____

2. How many participants had previously used crutches due to an injury?

- a. 3
- b. 6
- c. 9
- d. 5
- e. 4

ANSWER: _____

3. How many walking trials did participants perform with right forearm loadings with each cuff design?

- a. 3
- b. 4
- c. 5
- d. 6
- e. 7

ANSWER: _____

4. Which of the following statements correctly describes the crutch gait trial procedures?

- a. Subjects were notified of condition and order of conditions was predetermined
- b. Subjects were blinded to the condition and order of conditions was predetermined
- c. Order of conditions was randomized and subjects were blinded to the condition
- d. Order of conditions was randomized and subjects were notified of condition

ANSWER: _____

5. Significant differences between conditions were detected using which test?

- a. Bonaparte's multiple comparison test
- b. Bonferroni's multiple comparison test
- c. Ferro-Rocher's multiple comparison test
- d. Borodin's multiple comparison test

ANSWER: _____

6. What was the statistical significance level for all statistical tests set *a priori*?

- a. 0.006
- b. 0.009
- c. 0.060
- d. 0.090
- e. 0.016

ANSWER: _____

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7. What was the largest medial shift observed with the novel cuff?

- a. 19 mm
- b. 22 mm
- c. 17 mm
- d. 15 mm
- e. 23 mm

ANSWER: _____

8. What changed when walking with crutches with the novel design?

- a. The size of the area where the center of pressure points were found
- b. The location of the center of the pressure points
- c. Both the size of the area and the location of the center of the pressure points
- d. Neither the size of the area nor the location of the center of the pressure points

ANSWER: _____

9. Which of the following statements represents findings from the study?

- a. Participants required more time than expected for adjusting their gait to the novel cuff design
- b. Participants appeared to alter their general gait pattern
- c. Kinetics were measured in the study
- d. Kinematics were not measured in the study
- e. Both kinetics and kinematics were measured in the study

ANSWER: _____

10. Which description accurately represents characteristics of this particular study?

- a. Changes in handle design as well as crutch cuff were made and observed
- b. A large group of healthy participants was tested
- c. A small group of healthy participants was tested
- d. Long-term users of crutches were also tested for comparison purposes

ANSWER: _____

11. Walking with forearm crutches can trigger which condition in the biceps tendon?

- a. Tendrilsynovitis
- b. Tenosynovitis
- c. Ulnar recessivitis
- d. Ulnar neuropraxitis

ANSWER: _____

12. What was the overall purpose of the study?

- a. To test the hypothesis that a crutch cuff design with an ulnar recess actually increases ulnar pressure during walking with forearm crutches
- b. To test the hypothesis that axillary crutches are indeed superior to forearm crutches
- c. To test the hypothesis that a crutch cuff design with an ulnar c-curve support reduces ulnar pressure during walking with forearm crutches
- d. To test the hypothesis that a crutch cuff design with an ulnar recess actually reduces ulnar pressure during walking with forearm crutches
- e. To test the hypothesis that a crutch cuff design with an ulnar recess reduces ulnar pressure during walking with axillary crutches

ANSWER: _____