Certified Professionals may earn .2 CEUs by completing quizzes based on selected articles in each issue of the *Assistive Technology* journal.

Each quiz is 12 questions in multiple-choice or true-false format. You must answer nine questions correctly (75%) to earn the .2 CEU credit. Results of the quiz will be emailed (or mailed by request) upon completion.

Complete the quiz by circling the correct answers. Mail or fax the completed quiz with payment to RESNA Quizzes, 1560 Wilson Blvd, Suite 850, Arlington, VA 22209. FAX: (703) 524-6630.

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**QUIZ 27.1b PAYMENT INFO:**

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Other quizzes from Assistive Technology Journal articles may be found on the RESNA website (www.RESNA.org). The primary program learning objective is to keep abreast of current findings and practices in assistive technology, research and rehabilitation engineering.

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
27.1b Quiz – The Effects of a Liner on the Dispersion of Sacral Interface Pressures During Spinal Immobilization

1. What is one associated complication of immobilization on a hard spine board?
   A. stiffness of the affected area
   B. skin breakdown
   C. dermatitis
   D. skin allergies

2. What is the most common location for pressure ulcers?
   A. coccyx
   B. ilium
   C. sacrum
   D. sacroiliac

3. How many volunteers between the ages of 18 and 60 were recruited for this study?
   A. 60
   B. 28
   C. 37
   D. 43
   E. 56

4. After data was analyzed in relation with the height of the participant, what did BMI and wrigg show?
   A. no significant statistical differences in overall mean peak sacral pressure
   B. slight statistical differences in average sensing areas for the spine board
   C. significant statistical decreases in pressure areas for the spine board + gel PDL
   D. significant statistical increases in sensing areas for the spine board + gel PDL

5. What did the results reveal about standard immobilization on a spine board in healthy volunteers?
   A. moderate mean peak sacral interface pressures and a low mean sensing area
   B. extremely low overall mean peak iliac interface pressures and high mean sensing area
   C. high overall mean peak sacral interface pressures and a high mean sensing area
   D. extremely high overall mean peak sacral interface pressures and a low mean sensing area

6. What did the study show about mean peak pressures on the spine board versus the spine board + gel PDL?
   A. overall mean peak pressures on the spine board increased by twice as much as those on the spine board + gel PDL
   B. overall mean peak pressures on the spine board + gel PDL increased by twice as much as on the spine board
   C. overall mean peak pressures on the spine board itself increased about the same amount as those on the spine board + gel PDL
   D. overall mean peak pressures on the spine board increased at a much higher rate than those on the spine board + gel PDL
7. Which type of individuals in the subject pool tended to benefit less from the addition of the gel PDL to the spine board?
   A. tall
   B. short
   C. heavy
   D. slender

8. Which of the following hypotheses did the authors reach?
   A. limited immobilization on the spine board is associated with early pressure ulcer formation
   B. prolonged immobilization on the spine board is associated with longer lasting pressure ulcers
   C. prolonged immobilization on the spine board is associated with early pressure ulcer formation
   D. duration of immobilization period on the spine board is not related to pressure ulcer formation

9. At what level did the pressures register?
   A. 24
   B. at 32 or above
   C. 28
   D. above 36

10. Preventative measures included which of the following recommendations?
    A. redesigning the spine board to include a gel PDL and lengthening the time spent on the spine board
    B. shortening the time spent on the spine board and excluding a gel PDL option
    C. lengthening the spine board itself but shortening the time spent on the spine board
    D. redesigning the spine board to include a gel PDL and shortening the time spent on the spine board

11. What is the name of the system comprising a pressure-sensing mat that contains 256 sensors connected to the FSA computer software via an interface module?
    A. PSA Pressure-decoding system
    B. FSP Mapping-Interface system
    C. FSA Pressure–mapping system
    D. ASF Mapping-sensor system

12. What is of great concern during the initial management of patients with potential SCI?
    A. neurologic function may be impaired due to movement of the unstable or injured vertebrae
    B. complications associated with skin breakdown may lead to neurologic function impairment
    C. lateral support devices could become unstable, resulting in further patient trauma
    D. improper rigid cervical collar setting, exacerbating victim’s condition further