FOOTHILL COLLEGE EMS PROGRAMS
SPINAL IMMOBILIZATION ADULT (Supine Patient)
SKILLS LAB

PERFORMANCE OBJECTIVE

Rescuer must correctly demonstrate the use of a long spine board on an adult patient by performing all of the listed steps. Taking More than 15 minutes is a "FAIL" for this skill.

CONDITIONS

The patient is lying supine on the floor complaining of back pain. A helper is immobilizing the C-spine. Note: The body shape of the patient may not conveniently align with the position of the holes on the available longboard. Minor adjustments in the selected strapping holes may be necessary to assure the patient is secure. Strapping should be initially placed properly, NOT with the intention to move it into place after it is on the patient.

EQUIPMENT

Long spine board 2-4 student helpers (as available)
C-Spine bag containing:

- 5 straps (each containing male and female end) with buckles/looped ends Sta-Blok Pad
  - Note: Do Not unbuckle straps until you are ready to use that strap. (Not all buckles will connect with each other)
- Adult C-collar
- Minimum of 2" cloth tape

PRACTICE SKILL SHEET
Rescuer States: "I would perform PENMAN"
Rescuer States: "Hello, my name is _____, I'm an EMT. I am going to help you."
Rescuer Will Instruct Assistant: "Please maintain C-spine immobilization until I request release, and also ensure that the patient's head is maintained in a neutral position"
Rescuer Will Perform Checks S/M on Hands: **Movement** - Instructs the patient, "Please move the fingers of each hand." (Holds wrist joints) **Sensation** – Ask the patient, "which finger am I touching?"
Rescuer Will Perform Checks S/M on Feet: **Movement** – Instructs the patient "Please move the toes of each foot." (Holds ankle joints) **Sensation** – Asks the patient "Which toe am I touching?"
Rescuer Performs: Sizes cervical collar: Using fingers, visually measures height from the top of the patient's shoulder at the base of the neck to patient's chin, and adjusts collar to correct size. (From the sizing post to the bottom edge of the collar, not to the edge of the foam!)
Rescuer Will Perform: Places collar: 1. Slides properly adjusted collar up the chest wall. 2. Assures the chin is well supported by the collar chin piece. 3. Maneuvers the Velcro attachment behind the patient's neck (*Gently*). Attaches Velcro securely. 4. Assures the patient's nose and sternum *always* remain in alignment. Assures patient's neck is not flexed or extended 5. Ear rings, removes, or moves them out of the way.
Rescuer Will Perform: Positions the longboard: Positions the long spine board next to and parallel with the patient. *The top of the board hole for the shoulder strap must be aligned with the top of the patient's shoulder*.
Rescuer Will Perform: Instructs three (if available) untrained rescuers where to kneel at the side of the patient and how to grasp the patient, leaving room to roll the patient toward them. Student explains positioning for two or three total rescuers.
Rescuer Performs log roll: Directs the rescuer at the patient's head to take control of the log roll procedure. Head Rescuer States, "On my count of 3 role the patient towards you, 1, 2, 3", all the rescuers roll the patient toward them at the same time**.**

Rescuer Performs Back Assessment: Observes and palpates the patient's back while the patient is held on his/her side, noting that clothing would have been removed. **States:** "I am assessing for bleeding or deformities."

Rescuer Performs Log Roll onto Board:

1. Pushes the spine board into position against the patient so the patient does not roll onto the edge of the board.
2. Directs the rescuer at the patient's head to take control of the log roll procedure. On that rescuer's count all the rescuers roll the patient back down onto the board.

Positioning note –

1. The patient must be centered on the backboard and the top of the patient's shoulders must be aligned with the TOP of the uppermost slot on the board that leaves adequate room for the patient's head on the board.
2. If it is necessary to adjust their position on the board, the student directs movement of the patient ensuring diagonal motion only – no sideways motion!

Strap note –

1. Each strap consists of a pair of half straps each with a male and female buckle end and a looped end. This loop will be used to secure the strap to the board by running the buckle end through it around the slot on the board.
2. ALL strap loops should enter their respective slots in a downward fashion before being brought around and having the buckle end of the straps passed through them to AVOID having a strap wrap around the outside of the handles of the board.

Rescuer Performs - Places TORSO "X": To minimize patient movement on board straps should wrap over the patient's shoulder.

1. Places the first strap at the top of the slot above one shoulder. Loops one half of the strap through hole to secure it, runs it across the torso in a diagonal direction towards a slot near the upper hip. Secures second half of strap through slot and connects with strap from shoulder.
2. Repeats this process starting with the slot above the second shoulder. Tightens the "X" across the torso. *Purpose: If tilted head down, the straps must prevent the patient from sliding up.*
3. **States:** "I would place pads as necessary to ensure no voids between the torso and straps"

Rescuer Performs - Places MID-BODY "X":

1. Similarly to Torso "X", places straps to secure hips and mid-thigh.
2. The strap line for both straps targeting the lower thigh should travel slightly below the crotch region being inserted into a board slot of the lower thigh.
3. *If necessary, the lower holes that were used for Torso "X" may be used for the upper straps of the mid-body "X" provided the straps DO NOT twist or pull on each other when securing the patient to board.*

Rescuer Performs - Secures the Lower Extremities:

1. Secures both sides of the 5th strap to the bottom end of a slot just below the knee area on each side. *There should be no strap pressure on the knees.*
2. Runs one strap in a diagonal direction across the lower legs/ankles and around the bottom of feet/shoes. Bring the strap back to connect with the other buckle.
3. *Purpose: If tilted, the patient should be able to "stand" on these straps without sliding.*

Rescuer Performs - Secures the Head:

1. Places the Sta-Blok Pad centered on board, under the patient's head, (occipital region) with minimal movement of head. Aligns pad just high enough to leave room to place support blocks above ears.
2. Places the support blocks just above the patient's ears and presses them into place on the pad. Place the soft white Velcro strap across the forehead and onto the blocks.
3. **Rescuer States:** "After assuring the pad is properly aligned I would pull the liner to expose the adhesive backing and press the pad firmly to the board."

Note on taping the head -

1. *In the field the tape goes across the patient's forehead, and potentially, the eyebrows.* 2. *The tape adhesion to the skin is important to prevent the patient's head from moving.* 3. *The following procedure is an accommodation to the volunteer patient. (Review Spinal Strapping in your textbook)*
Tapes head: 1. Applies 2" cloth tape to one side of the board, directly across the patient's forehead (*over the Velcro strap, but not over the patient's skin or eye brows*) and down to the opposite side of the board. (*Tape should wrap 2" under the board edge on each side*.) 2. Applies a second piece of cloth tape from the board, near the patient's shoulder, at an angle up to the first piece of tape, across the patient's forehead, *not over the patient's skin or eye brows*, and down to the same location on the opposite side of the board. (*Tape should wrap 2" under the board edge on each side*.) 3. **States:** "I would now instruct my assistant to discontinue manual C-spine immobilization"
Rescuer Performs - Secures Hands: Restrains hands securely on midline for transport.
Rescuer Performs - Reassesses S/M on all extremities: **Hands:** While holding wrists instructs the patient "Please move the fingers of each hand." Ask the patient: "Which finger am I touching?" **Feet:** While holding ankle joints instructs the patient "Please move the toes of each foot." Ask the patient "Which toe am I touching?"
Transports: States: "I would then transport to a trauma center code ??? depending on how stable patient is" Student will state what code they will transport simulated patient to proctor.

Critical Criteria

___ Did not immediately direct or take manual stabilization of the head
___ Did not properly apply appropriately sized cervical collar before ordering release of manual stabilization
___ Released or ordered release of manual stabilization before it was maintained mechanically
___ Manipulated or moved the patient excessively causing potential for spinal compromise
___ Head immobilized to the device **before** patient's torso sufficiently secured to the device
___ Patient moves excessively up, down, left or right on the backboard
___ Upon completion of immobilization, head is not in a neutral, in-line position
___ Did not reassess motor, sensory and circulatory functions in each extremity after securing the patient to the device
___ Failure to manage patient as a competent EMT
___ Fails to apply immobilization device in 15 minutes