### Purpose
To provide step-by-step instructions for patient care providers participating in patient logrolling.

### Goal
To maintain spinal alignment, patient safety, and comfort during logrolling procedures and to ensure consistent logrolling technique among all care providers.

### Applicability
This policy and the corresponding procedures apply to all Covenant Health facilities and the staff and physicians who assess or care for patients with a suspected or confirmed spinal injury.

*Please see attached algorithm addendums for procedure modifications for Sites/Units which may not have adequate resources to perform this procedure as outlined.*

### Education/Training Requirements
Refer to Covenant Health P/P #VII-B-150, *Spinal, or Suspected Spinal, Injury.*

Spine Management education program.

### Procedure
**NOTE:** Logrolling technique should not be provided when there are not enough personnel to safely perform the technique or when other conditions are priority; eg. need to obtain and secure an airway for the patient, etc.

1. Review “C-Spine Management – Patient Care Orders” for spinal motion restriction.
2. Determine need for analgesic / antiemetic prior to turn.
3. Assess the patient’s ability to understand and cooperate with the procedure.
4. Assess patient’s motor and sensory status prior to and after each turn. This assessment must be documented on the Spinal Assessment Record.

5. Determine the number of staff required to safely turn the patient:
   a) A minimum of four staff are required using the lifting sheet method
   b) Additional staff are required as determined by size of the patient and/or presence of additional injuries
   c) The head of the bed must always be flat, patient supine and in good alignment.

The Leader (hereon identified as Person A) is in charge of the turn. This person is responsible for:
- Communicating with the patient.
- Instructing staff throughout the turn.
- Clarifying the direction and distance of the turn.
- Assessment and documentation of the patient’s motor and sensory status prior to and after each turn. Refer to Spinal Signs Measurement Procedure for motor and sensory check.

6. Gather equipment:
   - Pillows 3 – 5 depending on the patient’s size
   - Full length flannel lifting sheet if not already under the patient
   - Appropriate personal protective equipment (PPE).

7. Ensure all staff who is participating in the logrolling is clear on their duties and responsibilities.

8. Apply PPE.

9. Prepare patient for the logroll
   a) Explain the procedure
   b) Have the patient cross and relax his or her arms on his or her chest
   c) Communicate with the patient the importance of not assisting but allow the staff to have complete control of the procedure
   d) Ensure the patient is in good alignment prior to the turn:
      a. nose should be in line with the umbilicus
      - upper limbs should be in close to body
      - lower limbs should be parallel to midline

10. Prepare bed area for the turn:
    a) Ensure brakes are locked
    b) Ensure the bed is flat and raised to a level which is comfortable for all participating staff.

11. Person A will be designated in charge of the turn.
12. **Person A** does a brief verbal motor/sensory assessment to determine if patient can wiggle their fingers and toes and to determine baseline motor/sensory status.

**LIFTING - Move the patient to the edge of the bed using the following method:**

13. **4 Person Lift Using a Lifting Sheet**
   a) Position two staff on each side of the bed: one at the patient’s shoulder and one at the hip level.
   b) Ensure the full length flannel lifting sheet extends from the patient’s shoulders to calves.
   c) Place pillows between the patient’s legs to keep proper spinal alignment and provide patient comfort.
   d) Roll the edges of the lifting sheet inward close to the patient’s body.
   e) The staff member at patient’s shoulder level grasps the sheet at shoulder and patient’s hip.
   f) The staff member at patient’s hip level grasps the sheet at hip and lower calf.
   g) All staff members should concentrate on using good body mechanics for the lift.
   h) Have the patient relax his or her arms and place them on his or her chest.
   i) Person A gives instructions on the move including:
      - Side of the bed to lift the patient to
      - Move on the 3 count – “1 – 2 – 3”.
   j) Lift the patient with minimal clearance of the mattress, always maintaining alignment of the spine.

**TURNING THE PATIENT**

14. **Minimum of two people is required for the turn. Additional staffs are required as determined by size of the patient and/or presence of additional injuries.**
   a) Assess need for analgesic / antiemetic prior to turn.
   b) Person A is positioned at patient’s shoulder and a second assistant positions self at patient’s hip.
c) Communicate with the patient that he or she must allow the staff to perform the turn without assistance, relax his or her arms on abdomen, and exhale on count of three during the turn.

d) Person A places a hand at patient’s shoulder and lower hand at the hip.

e) Second assistant overlaps his or her upper arm with Person A to place hand at patient’s hip and above knee.

f) All staff is to use good body mechanics to align squarely with the patient.

g) Person A provides instructions to staff and the patient to turn on the 3-count - “1 - 2 - 3”.

h) Apply adequate pressure in unison to roll the patient smoothly onto his/her side facing the staff, maintaining alignment of the spine throughout the roll.

i) The second staff member moves to the opposite side of bed to position pillows for back support while Person A maintains the patient in position. Place one pillow lengthways from the shoulders downward and place the second pillow at the buttocks.

j) Adjust pillows between patient’s legs to maintain alignment and comfort.

k) Adjust patient’s head, arms and legs into a comfortable position.

l) Settle patient back into the pillows.

m) Seek feedback from patient regarding comfort.

n) Check position of any tubes, lines, or leads.

15. Person A will repeat and document a full motor/sensory assessment to determine if any changes have occurred. If any change detected patient is to be returned to original position and the physician or nurse practitioner is to be notified. See Spinal Measurement procedure.

16. Cover the patient, raise side rails and ensure the call bell is within reach.

17. Remove PPE and perform hand hygiene.

18. Document
   • Document performance of spine immobilization, spinal motion restriction and logrolling as applicable.
   • Document and report any changes in motor/sensory status.

19. To return the patient to the supine position reverses the above steps.
Spinal or Suspected Spinal, Injury: Logrolling Technique without C-Spine Precautions

Date Effective Nov. 6, 2015
Policy No. VII-B-160 Page 5 of 5

Definitions

**Spinal Motion Restriction** – maintaining the patient in a neutral, in-line position while trying to protect the spine from further damage

Related Documents

Procedures related to this Policy:

- Spinal, or Suspected Spinal, Injury, #VII-B-150
- Spinal, or Suspected Spinal, Injury – Logrolling Technique – **With C Spine Precautions**, #VII-B-155
- Spinal, or Suspected Spinal, Injury – Application and Maintenance of Extrication Collar, #VII-B-165
- Spinal, or Suspected Spinal, Injury – Collar Care – Philadelphia® Collar, #VII-B-170
- Spinal, or Suspected Spinal, Injury – Surface to Surface Transfer, #VII-B-175
- Spinal, or Suspected Spinal, Injury – General Care of the Patient, #VII-B-180
- Spinal, or Suspected Spinal, Injury – Spinal Signs Measurement, #VII-B-185

References

Alberta Health Services – University of Alberta Hospital, Stollery Children’s Hospital, Mazankowski Alberta Heart Institute Patient Care Procedure (2009): Lifting, moving, or logrolling a patient in bed not including c-spine, Number 8.6.2

Revisions

June 6, 2014