SELECTIVE SPINAL IMMOBILIZATION

Backboards are not the standard of care in most cases of potential spinal injury and have not been shown to provide any benefit for spinal injuries. Backboards may be appropriately utilized as an extrication device and/or tool to carry non-ambulatory patients. Neurological exam is mandatory in patients with potential spinal trauma.

A. Perform **Initial Treatment / Universal Patient Care Protocol** and follow the proper protocol for medical management based on clinical presentation.

B. Identify risk of spinal column and spinal cord injury/injuries.

C. Prevent and/or reduce further spinal column or spinal cord injury through application of appropriate evidenced-based immobilization.

D. Use Long Spine Board (or any of the multiple equipment devices) to TRANSFER patient to stretcher with minimal spinal movement, remove the device, and then secure patient to stretcher. Backboards used only to transport the patient to the ambulance gurney should be gently removed except in the following instances:

1. The backboard is being utilized as an element of the splinting strategy such as multiple long bone fractures.

2. The patient is at risk of vomiting but unable to protect their own airway and may need to be turned to provide airway protection.

3. Cases in which the patient is agitated or unresponsive.

4. Removal of the backboard would otherwise delay transport in a critical patient.

E. Extrication of a patient to a stretcher:

1. If patient does not meet criteria for c-spine immobilization and has no other injury, including thoracic or lumbar injury that would preclude standing or ambulating, patient may self-extricate with assistance to a waiting stretcher.

2. Patients who are on the ground with c-collar applied who have altered mental status with GCS < 15, neurological signs of injury, and are unable to stand from a sitting position should be positioned and immobilized to a long spine board or scoop stretcher for extrication to the stretcher.

SELECTIVE SPINAL IMMOBILIZATION

F. Treatment and Interventions:

1. Apply cervical restriction if a patient is assessed and there is suspicion of cervical injury. If it does not cause increased agitation or pain, apply a properly fitted cervical collar. Suspicion of cervical injury includes:

   a. Patient complains of neck pain
   b. Tenderness upon palpation of the neck
   c. Abnormal mental status including agitation or neurological deficit
   d. Evidence of drug or alcohol ingestion

2. Apply full immobilization if the patient is assessed and exhibits with any of the following:

   a. Abnormal sensory/motor exam – abnormal findings such as paresthesia, loss of sensation in extremities, weakness or paralysis in extremities, or loss of urethral or sphincter control.
   b. Distracting injuries that produce pain that may distract the patient from the pain of a spine injury.
   c. Complaints of pain or tenderness on examination of the spine including palpation of the entire spine and range of motion (if appropriate).
   d. Patient reliability is questioned such as the following examples: intoxicated, elderly, young, altered mental status, chemically altered, or those patients that you cannot adequately perceive or communicate with.

G. Exclusion Criteria

1. No history of injury consistent with spinal injury

2. Patients with penetrating trauma to the chest, abdomen, head, neck, or back. These patients may be harmed by immobilization on a spine board.

3. Patients with non-traumatic back or neck pain related to movement, position, or heavy lifting.

H. Precautions and Considerations:

1. Caution should be exercised in high risk patients >65 years of age and patients <3 years of age as spinal assessments may be less sensitive in these age groups. This criteria in and of itself is not a factor in the providers decision making process to immobilize or not.

2. Consider airway adjuncts if needed to maintain an adequate airway.

3. There is no evidence that the “standing backboard” technique is beneficial or appropriate. Ambulatory patients should simply be eased to a sitting position on the stretcher without the use of a backboard.

4. Use care with patients that have spinal abnormalities such as kyphosis. Padding or other alternatives may be required for patient comfort.