Pennsylvania Statewide

Basic Life Support Protocols

Pennsylvania Department of Health
Bureau of Emergency Medical Services

Effective July 1, 2015

SPINAL CARE
STATEWIDE BLS PROTOCOL

Criteria:

A. Excessive motion of the spine may worsen spine fractures or spinal cord injuries (especially in patients with altered consciousness who can't restrict their own spinal motion), but immobilization on a long spine board may also cause pain, agitation, respiratory compromise, and pressure ulcers. Patients with the following symptoms or mechanisms of injury **should be assessed to determine whether restriction of spinal motion is required**:

1. Symptoms of:
   a. Neck or back pain
   b. Extremity (upper or lower) weakness or numbness, even if symptoms have resolved.

OR

2. Mechanism of injury consistent with possible spinal injury, including:
   a. Any fall from standing or sitting with evidence of striking head.
   b. Any fall from a height (above ground level).
   c. Any MVC
   d. Any trauma where victim was thrown (e.g. pedestrian accident or explosion).
   e. Any lightning or high voltage electrical injury.
   f. Any injury sustained while swimming/ diving or near drowning where diving may have been involved.

OR

3. Any unknown or possible mechanism of injury when the history from patient or bystanders does not exclude the possibility of a spine injury. [1]

B. This protocol also applies to assessment of patients before inter-facility transfer for injuries from a traumatic mechanism unless a medical command physician agrees that the patient may be transported without restriction of spinal motion.

Exclusion Criteria:

A. No history or no mechanism of injury that would be consistent with spinal injury.

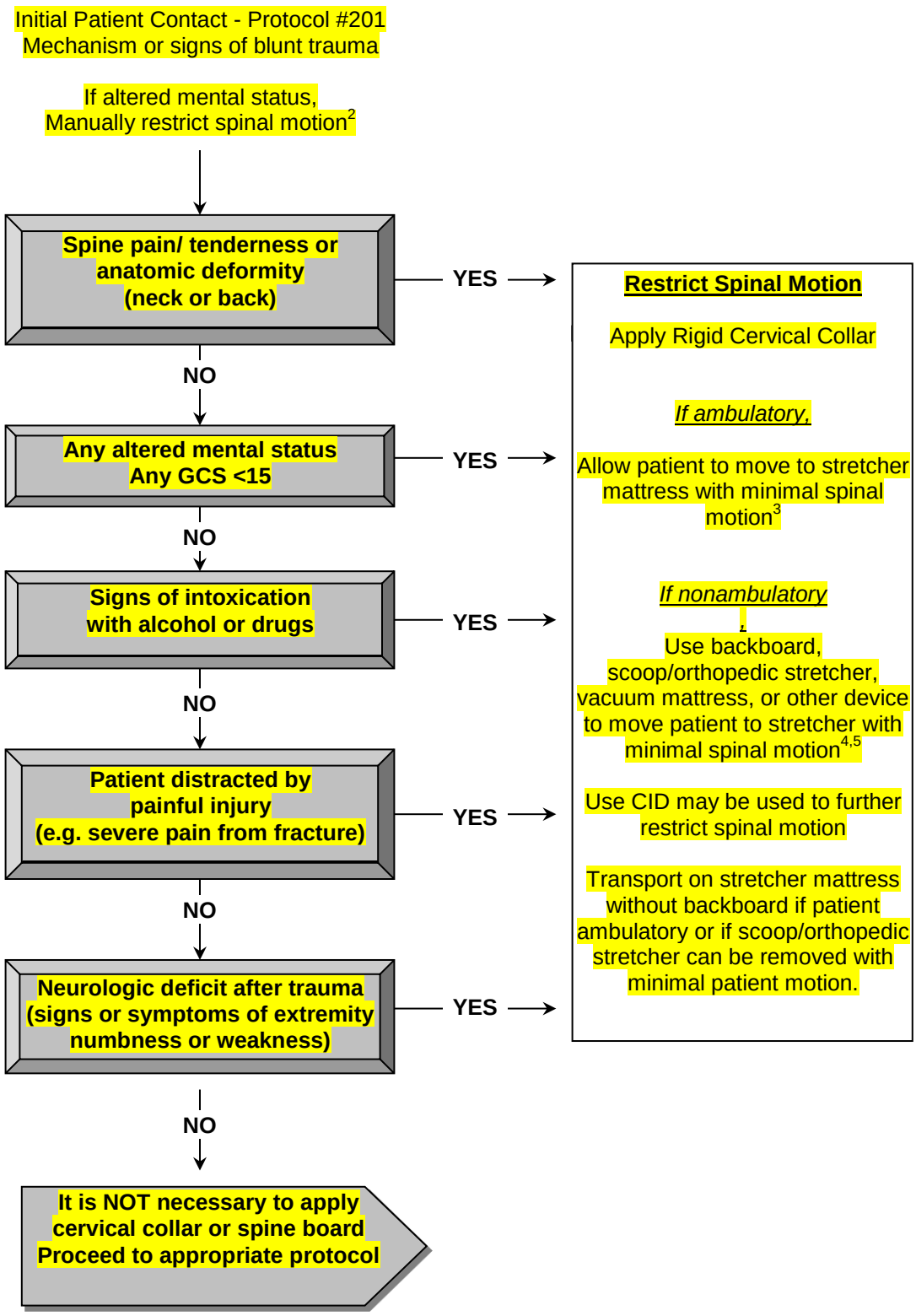
B. **Patients with penetrating trauma to the chest, abdomen, head, neck, or back.** These patients may be harmed by immobilization on a spine board.

C. Patients with gun shot wounds to the head do not require immobilization on a spine board.

D. Patients with non-traumatic back or neck pain related to movement, position or heavy lifting.[1]

Procedure:

A. All patients:



WARNING: These criteria cannot be assessed on any patient with a language or communication barrier (including infant/toddler/preschool patients) that prevents understanding and appropriately responding to the assessment questions. If there is any doubt about whether the patient meets any of the clinical criteria listed above, restrict spinal motion.

Notes:

1. Beware - minimal trauma may lead to spinal fractures in patients with advanced age and ground level fall and also in patients with history of Rheumatoid Arthritis, severe osteoarthritis, Down's Syndrome, cancer, or ankylosing spondylitis. If these patients meet the spinal precautions criteria in this protocol then restrict spinal motion even if their mechanism was relatively minor (e.g. minor fall).
2. Maintain patent airway during manual C-spine stabilization. Use jaw-trust if needed. Consider nasopharyngeal or oropharyngeal airway if decreased LOC and no gag reflex.
3. There is no evidence for the "standing backboard" technique of strapping an ambulatory patient to a backboard while standing. Ambulatory patients should be eased to a seated position on the stretcher mattress without backboard, then laid back gently while restricting excessive spinal motion.
4. Use care with patients that have severe kyphosis or other spine abnormalities. Use appropriate padding or alternatives to spine board to avoid uncomfortable position for the patient.
5. If the patient is in a seated position, a short spine board or similar device may be used to immobilize the spine during transfer to the stretcher.

Performance Parameters:

A. Review all cases of trauma patients that did not receive spinal motion restriction precautions for documentation of appropriate assessment of all five clinical criteria listed in the protocol.