What's New in Pennsylvania EMS Spinal Care

Fast Facts for Emergency Department Personnel

June 2015

Prehospital spinal immobilization has long been held as the standard of care for victims of blunt or penetrating trauma who have experienced a mechanism of injury (MOI) forceful enough to possibly damage the spinal column/cord. The majority of textbooks stress that any significant MOI, regardless of signs and symptoms of spine injury, requires full-body immobilization, which is typically defined as a cervical collar being applied and the patient being secured to a backboard with head stabilizers in place. This approach to patient immobilization has been accepted and implemented as the standard of care for decades with little scientific evidence justifying the practice.

In 2012 the National Association of EMS Physicians and American College of Surgeons Committee on Trauma published a joint position statement that, ***"…the benefit of long backboards is largely unproven; …utilization of backboards should be judicious so that the potential benefits outweigh the risks."*** In response to this evidence-based recommendation, Statewide Basic Life Support Protocol #261 on spinal care has been revised. Pennsylvania certified EMS providers may begin to use this protocol following an educational update that must be completed on or before July 1, 2015.

Q: How has the spinal care protocol changed in 2015?

A: Prehospital spinal care will continue to be assessment-based and will focus, when indicated, on "restricting spinal motion" instead of the prior philosophy of "spinal immobilization."

Q: How will spinal motion be restricted?

A: A rigid cervical collar will be applied and patient will be instructed to maintain their neck in a neutral position during transport. A cervical immobilization device (CID) may also be used to restrict lateral neck rotation.

Q: What role of the long backboard under the new protocol?

A: In certain situations the long backboard will still be used as an extrication device, but plays no significant role in restricting spinal motion. If a backboard is utilized during extrication, the EMS crew may, at its discretion, remove the board prior to initiating transport.

Q: Why has the role of the long backboard diminished?

A: Research suggests that unnecessary, prolonged immobilization on a long backboard may cause pain, agitation, respiratory compromise and place some patients at increased risk for pressure-related skin breakdown. Use of a long backboard is contraindicated for penetrating trauma to the head, neck, chest, abdomen or back, as well as any patient suffering from non-traumatic back pain.

Q: What might I expect to find during patient transfer of care?

A: Most patients complaining of neck pain will arrive at the ED with a cervical collar in place, but resting in a position of comfort on the ambulance stretcher. For patients with a language or communications barrier (including some pediatric patients), spinal restriction may be performed based on mechanism of injury. Those patients who are combative and/or uncooperative may arrive without spinal restriction regardless of exam or mechanism of injury.

Q: How does this protocol affect interfacility transfers?

A: This protocol also applies to assessment of patients before interfacility transfer for injuries from a traumatic mechanism unless a physician orders transport on a backboard even when not required by the protocol.

Q: What does this mean for the emergency department?

A:
- ✓ Increased patient comfort and satisfaction
- ✓ Improved accuracy of initial nursing and physician assessment by eliminating backboard induced pain
- ✓ Less backboards in hallways and/or temporary storage areas

Q: Where can I receive additional information regarding the new spinal care protocol?

A: A summary of the revised spinal care protocol has been included in this publication. The statewide basic life support treatment protocols are available through the Pennsylvania Department of Health website at www.health.pa.gov, the Pennsylvania Emergency Health Services Council website at www.pehsc.org or your regional EMS council.

Produced by:

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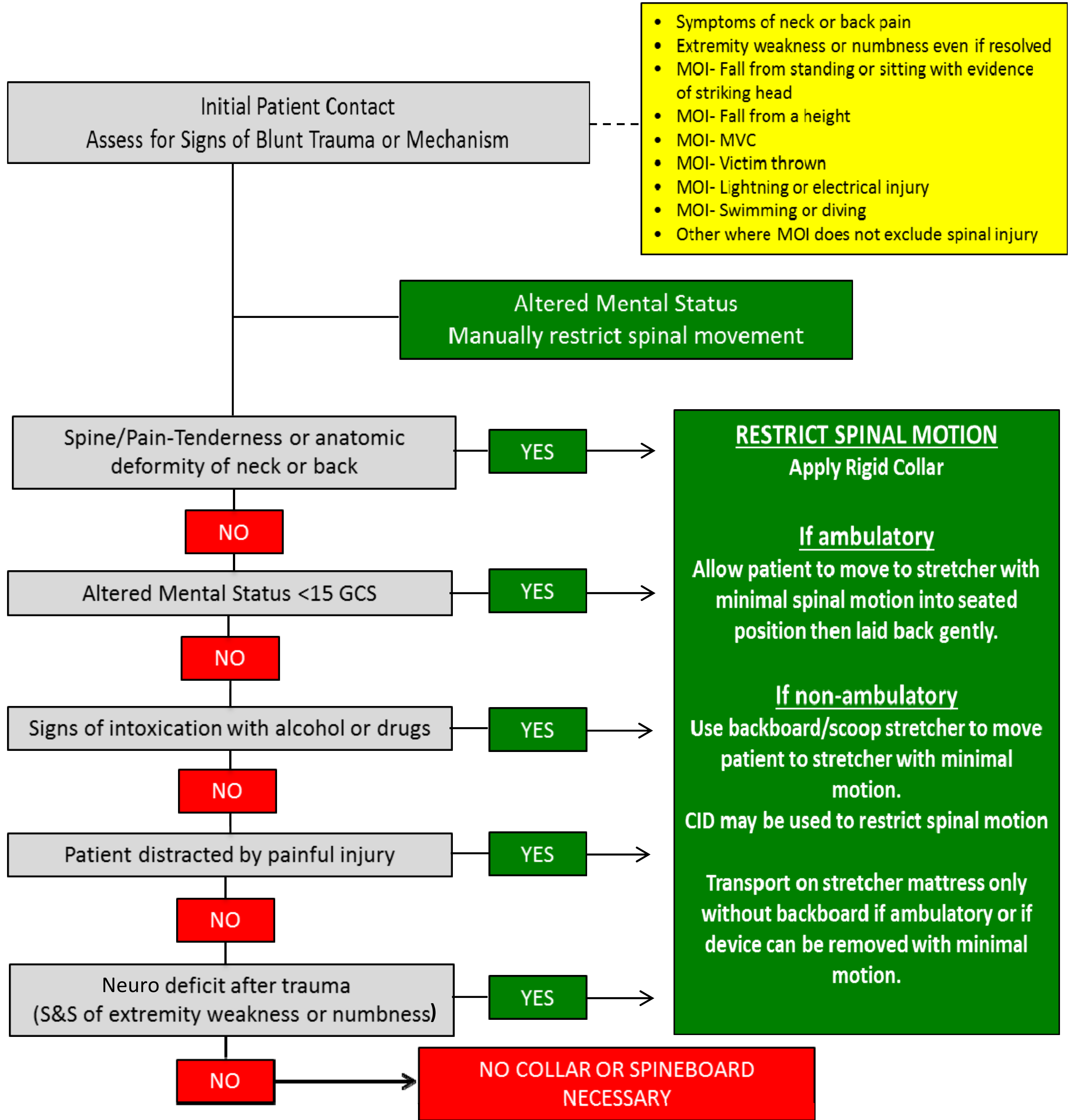
Pennsylvania Statewide BLS Protocol #261: Spinal Care



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2. "EMS Spinal Precautions and the Use of the Long Backboard" http://www.naemsp.org/pages/position-statements.aspx
3. "EMS Spinal Precautions and the Use of the Long Backboard—Resource Document to the Position Statement of the National Association of EMS Physicians and the American College of Surgeons Committee on Trauma. http://www.naemsp.org/pages/position-statements.aspx