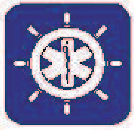

Spinal Immobilization/Clearance

General

CRITERIA

- Blunt trauma and distracting injury
- Altered mental status or suspected intoxication with possible spinal injury
- Neurological complaint associated with trauma (numbness or weakness present)
- Trauma patients with spinal pain, tenderness or deformity
- High energy mechanism of injury with the patient unable to communicate
- Any clinical suspicion of injury
- Age greather than or equal to 18 years

PROTOCOL

<table>
<tr><td>EMR</td><td>Follow General - Universal Patient Care/Initial Patient Contact protocol.</td><td>EMR</td></tr>
<tr><td colspan="3"><u>Spinal Immobilization</u></td></tr>
<tr><td>EMR</td><td>• Explain the spinal immobilization procedure to the patient
• Assess pulses, sensation and movement, before and after the spinal immobilization procedure
• Apply appropriate sized C-collar or equivalent to the patient while maintaining manual stabilization of the C-spine
• If indicated, place the patient on a long spine board and secure to the board
• Secure torso and legs with securing straps
• Secure head to long spine board
• Place immobilized patient supine on ambulance stretcher for transport and secure board from movement on the stretcher
• Documentation of all assessments and findings whether selecting to immobilize the spine or not shall be recorded on the PCR.</td><td>EMR</td></tr>
<tr><td colspan="3"><u>Spinal Clearance</u></td></tr>
<tr><td>EMR</td><td>• Neurological examination is normal, no focal deficits
    o Patient denies midline spine or neck pain
    o Absence of spinal or neck tenderness, no deformity on palpation/step offs
    o Absence of spine or neck tenderness with Range of Motion (ROM)
• No significant Mechanism of Injury (MOI)</td><td>EMR</td></tr>
<tr><td>EMR</td><td>• Patient is Alert, Awake & Oriented to Person, Place, Time & Event
• No language barrier
• Patient is a reliable historian
• No intoxication or provider suspicion of intoxication by drugs or alcohol
• No distracting injury</td><td>EMR</td></tr>
</table>

PEARLS:

- Any time the EMS provider is unsure whether spinal immobilization is appropriate or not, the EMS provider should consult with online Medical Control to determine appropriate therapy.
- The long spine board should be used as an extrication device and may not be required for all patients.
- The long spine board is beneficial for providing a firm surface to perform CPR on.
- Utilization of the long spine board should take into consideration the risks versus the benefits for specific patient care and should be documented on the PCR.
- Patients who are ambulatory at the scene of blunt trauma generally do not require spinal immobilization, however careful assessment and consideration must be evaluated.
- Whether or not a long spinal board is utilized, spinal precautions are still very important in patients at risk for spinal injury. Adequate spinal precautions may be achieved by placement of a C-collar (or similar device) and securing the patient firmly to the ambulance stretcher, ensuring minimal movement.
- Self-extrication of patients from vehicles involved in motor vehicle accidents may best be achieved with guidance by the EMS provider. This may, in some cases, lessen the amount of movement that may occur to the patient during an extrication when the patient is not entrapped.
- Spinal immobilization may be achieved by multiple appropriate methods. Some patients, due to size or age may not be able to be immobilized by traditional spinal immobilization procedures.