

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. Assure adequate airway.
- D. Prevent and/or reduce further spinal column or spinal cord injury through application of appropriate evidenced-based immobilization.
- E. Presentation:
 - 1. Mechanism of injury consistent with potential for spinal injury.
 - 2. Cervical pain or tenderness.
 - 3. Numbness or parasthesias below the injury.
 - 4. Paralysis below the site of injury.
 - 5. Signs and symptoms of neurogenic shock.
- F. Assess the patient for any mechanism that could cause cervical spine injury, to include any of the following:
 - 1. History of loss of consciousness or unconscious.
 - 2. Disoriented or altered LOC with GCS < 15.
 - 3. Suspected use of drugs or alcohol.
 - 4. Midline cervical tenderness? Complaints of neck pain.
 - 5. Focal neurologic deficit.
 - 6. A painful and/or distracting injury that could mask cervical pain or injury.
 - 7. Patient is unable to communicate due to a language barrier.
 - 8. Patient is unable to appropriately respond to above questions.

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- G. If any of the above criteria are met, apply manual c-spine stabilization and, if it does not cause increased agitation or pain, apply a properly fitted cervical collar.
- H. If no high-risk criteria are present, assess for presence of low risk criteria:
 - 1. Low risk mechanism:
 - a. Low energy mechanism.
 - b. Simple rear-end collision without airbag deployment.
 - c. Glass rule: Age 16 - 65 year old, front seat occupant correctly wearing seatbelt without damage to any of the glass in the occupant compartment.
 - 2. NEXUS Criteria:
 - a. No neurologic signs.
 - b. No midline tenderness.
 - c. No distracting injury.
 - d. No intoxication causing GCS < 15.
 - e. No altered level of consciousness.
- I. 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. Patient(s) who are on the ground with c-collar applied, have altered mental status with GCS < 15, have neurologic signs of injury, and patient(s) 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.

Note: Patients with paralysis of upper extremities, lower extremities, and chest wall muscles may be using abdominal muscles to breathe and may require assistance with ventilation.