General Protocols

GENERAL – Spinal Motion Restriction

Perform initial assessment and treat priority conditions. Any one high-risk factor which mandates spinal motion restriction? No Yes Age ≥ 65 \bigcirc R В OR Dangerous mechanism \bigcirc \bigcirc Numbness or tingling in extremities NO Any one low-risk factor which allows safe assessment of range of motion? Yes No Simple rear-end MVC Spinal motion restriction NO OR (place c-collar) Ambulatory at any time on scene В OR No neck pain on scene High Risk Criteria: Absence of midline c-spine tenderness MVC high speed, rollover, ejection from NÓ vehicle YĖS Motorcycle crash > 20mph Auto vs. pedestrian or bike at > 20mph Patient voluntarily able to actively rotate neck 45 Axial load to head (i.e. diving) degrees left and right when requested? Fall from 3x patient's height or 5 stairs В Yes No Simple Rear-end MVC Excludes: 0 0 Pushed into oncoming traffic Hit by bus/large truck YĖS Rollover Hit by high speed vehicle (> 60 mph) NO spinal motion restriction

Follow Spinal Motion Restriction Procedure

Patient documentation must specially include all of the above findings.

Contact Medical Control for further consideration.

KEY POINTS/CONSIDERATIONS

- <u>Patients > 65 years</u>: When injury is suspected, regardless of a negative spinal assessment, place a C-collar
 on this age group. Studies have shown older adults (> 65 years) without midline tenderness may still have a
 significant cervical fracture. Cervical fractures are twice as common in this age group.
- Penetrating trauma patients without neuro deficits should NOT have spinal motion restriction.
- Long backboard may still be used in patient extrication even if spinal motion restriction is not required by protocol, but should be removed as soon as possible.

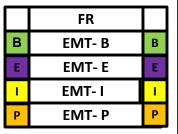
Spinal Motion Restriction

Objective:

To determine whether it is appropriate for the certified provider to apply spinal motion restriction in the pre-hospital setting.

The following constitutes a positive spinal assessment and any ONE positive finding indicates the need for spinal motion restriction:

- Midline cervical and/or thoracic spinal tenderness or palpable deformity during exam
- Any neurologic complaint (numbness, weakness).
- High energy mechanism of injury plus any of the following:
 - a. Altered mental status
 - b. Drug/alcohol intoxication
 - c. Inability to communicate (includes language barrier)
 - d. Presence of a painful, distracting injury
 - e. Age < 3



Procedure:

- 1. Place the patient in the appropriately sized C-collar.
- 2. If the patient is **ambulatory** on scene or if the patient can safely self-extricate:
 - a. Assist the patient to the EMS stretcher,
 - b. Transport the patient in a supine position. If the patient is having respiratory issues, then the head of stretcher can be elevated 30 degrees.
- 3. If the patient is **not ambulatory** or if extrication is required:
 - a. Use a rigid extrication device (e.g. scoop stretcher/vacuum mattress) as needed to move the patient to the EMS stretcher if possible.
 - b. Remove the rigid extrication device once patient is on the EMS stretcher, if possible. If you use a long backboard, remove the device once the patient is on the EMS stretcher, if possible.
- 4. The head may be supported with head blocks or similar device to prevent rotation.
- 5. Secure the patient with seatbelts to the EMS stretcher in the supine position.

Patients who do not require spinal motion restriction must have all of the following:

- 1. GCS 15
- 2. No spine tenderness or anatomic abnormality.
- 3. No acute neurologic impairment.
- 4. No distracting injury.
- 5. No evidence of intoxication/cognitive impairment.

If the patient has a negative spinal assessment:

- 1. Transport in a position of comfort.
- 2. Place the patient in an appropriately sized C-collar if age > 65. In patients > 65 years and injury is suspected, regardless of a negative spinal assessment, place a C-collar on this age group. Studies have shown older adults (> 65 years) without midline tenderness may still have a significant cervical fracture. Cervical fractures are twice as common in this age group.



Spinal Motion Restriction (continued)

NOTES

- No patient shall be transported on a rigid extrication device unless removing patient from the device interferes with critical treatments or interventions.
- Patients who are victims of penetrating trauma without focal neurologic deficits should not have spinal motion restriction.
- Patients may be transported on vacuum boards or scoop stretchers if available.
- Upon arrival at the receiving hospital, the patient shall be transferred to the hospital gurney via a sliding board.
- C-collars may be removed if they interfere with airway management, or if causing extreme distress.
- Examples of a patient with a distracting injury include either obvious or suspected long bone fractures, large burns, or injury producing acute functional impairment.

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В	EMT- B	В
E	EMT- E	Е
1	EMT- I	1
Р	EMT- P	Р

