

## Kittitas County Prehospital Care Protocols

**Subject:** SPINAL TRAUMA

### Specific information needed:

- A. Mechanism of injury and forces involved: be suspicious with falls, decelerations, diving incidents, and motor vehicle incidents
- B. Past medical problems and medications

### Specific objective findings:

- A. Vital signs, including neurologic assessment
- B. Level of sensory and motor deficit: presence of any evidence of neurologic function below level of injury
- C. Physical exam, with careful attention to organs or limbs which may not have sensation

### General treatment:

- A. Assess airway and breathing: treat life-threatening difficulties, use controlled ventilations for high cervical cord injury associated with abdominal breathing, and maintain inline cervical immobilization while managing ABC's
- B. Administer O<sub>2</sub>
- C. Control hemorrhage
- D. Immobilize cervical, thoracic and lumbosacral spine
- E. Obtain initial vital signs and neurologic assessment
- F. Establish venous access. If signs of hypovolemia, fluid bolus 10-20cc/kg to maintain SBP>100
- G. Consider narcotic analgesia per protocol
- H. Monitor airway, vital signs and neurologic status frequently at scene and during transport

### Specific precautions:

- A. Be prepared to turn entire board on side if patient vomits
- B. Neurogenic shock is likely with significant spinal cord injury. Raise the foot of the spine board. Be sure respirations remain adequate
- D. If hypotension is unresponsive to simple measures, it is likely due to other injuries. Neurologic deficits make these other injuries hard to evaluate. Cord injury above the level of T-8 removes tenderness, rigidity and guarding as clues to abdominal injury
- E. Spinal immobilization in patients with penetrating trauma is required only when neurologic deficits or altered mentation exists.

#### ***F. Providers may consider clearing the spine if:***

- 1. No spine or neck pain/tenderness on palpation or otherwise
- 2. No neurologic deficit
- 3. No major distracting pain or long bone injuries
- 4. No altered mental status
- 5. Not chemically altered (alcohol or drugs)
- 6. No pain with cough

**Effective Date:** March 10, 2009

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