

Spinal trauma

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Rationale

Traumatic spinal cord injuries may have life-altering effects on patient, family, and community. Initial immobilization and maintenance of airway and ventilation can limit further injuries.

Causal Conditions

(list not exhaustive)

- Traumatic (e.g., fracture/dislocation of vertebral column, penetrating injury)
- Acute disc rupture

Key Objectives

Given a patient with spinal trauma, the candidate will diagnose the cause, severity and complications, and will initiate an appropriate management plan. Particular attention should be paid to initial immobilization and maintenance of airway and ventilation.

Enabling Objectives

Given a patient with spinal trauma, the candidate will

- list and interpret critical clinical findings, including
 - a. status of airway and respiratory function before ensuring protection;
 - b. information from history and examination performed as the patient is being immobilized;
 - c. history about the mechanism of injury and the presence of symptoms and physical signs of spinal injury;
 - d. results of a complete neurological examination aimed at determining the function of major cranial and peripheral nerves;

- e. consideration of the fact that spinal injuries commonly occur in association with other serious injuries;
- list and interpret critical investigations, including
 - a. diagnostic imaging for assessment of spinal stability, while keeping in mind that such tests should be deferred until the patient has been stabilized and immobilized;
- construct an effective initial management plan, including
 - a. initiate and maintain spinal immobilization;
 - b. perform catheterization of the bladder if indicated;
 - c. initiate proper medical therapy;
 - d. counsel and support patient and family;
 - e. refer the patient for specialized care (e.g., surgical care, rehabilitation), if necessary.