

Head Injury

Aliases

None noted

Patient Care Goals

1. Limit disability and mortality from head injury by limiting secondary brain injury through
 - a. Promoting adequate oxygenation and preoxygenating to protect against unanticipated deterioration
 - b. Promoting good cerebral perfusion and avoid hypotension
 - c. Preventing hypocapnia (by avoiding hyperventilation and overventilation)

Patient Presentation

Inclusion Criteria

Adult or pediatric patient with blunt or penetrating head injury – loss of consciousness or amnesia not required

Exclusion Criteria

None noted

Patient Management

Assessment

1. Maintain cervical stabilization [See [Spinal Care Guideline](#)]
2. Primary survey per the [General Trauma Management Guideline](#)
3. Monitoring:
 - a. Continuous pulse oximetry
 - b. Frequent systolic and diastolic blood pressure measurement
 - c. Initial neurologic status assessment [See [Appendix VII. Neurologic Status Assessment](#)] and reassessment with any change in mentation
 - d. Moderate/severe head injury: apply continuous waveform EtCO₂, if available
4. Secondary survey pertinent to isolated head injury:
 - a. Head: Gently palpate skull to evaluate for depressed or open skull fracture
 - b. Eyes:
 - i. Evaluate pupil size and reaction to light to establish baseline
 - ii. Reassess pupils if decrease in mentation
 - c. Nose/mouth/ears: evaluate for blood/fluid drainage
 - d. Face: evaluate for bony stability
 - e. Neck: palpate for cervical spine tenderness or deformity
 - f. Neurologic:
 - i. Perform neurologic status assessment (GCS or AVPU)
 - ii. Evaluate for focal neurologic deficit: motor and sensory

Treatment and Interventions

NOTE: These are not necessarily the order they are to be done, but are grouped by conceptual areas

1. Airway: