

## ***Traumatic Brain Injury Guideline***

Definition: Any traumatic injury to the face or head which results in an injury to the brain, as manifested by some degree of impairment in mental function. Typically, these patients range from being comatose to wild and combative.

### ***Basic Life Support:***

1. Evaluate patient according to *Initial Trauma Assessment and Treatment Guideline*. Maintain high index of suspicion for C-spine injury. Provide supplemental oxygen.
2. If patient is hypoventilating, assist or provide ventilations (with supplemental oxygen) at a rate of 16-18 per minute.
3. Have suction hooked up and readily available. Be prepared to roll patient, if necessary, should vomiting occur.
4. Take seizure precautions.
5. Prepare for rapid transport.
6. Elevate head of backboard 15 to 30 degrees. DO NOT try to elevate head by flexing neck!

### ***Advanced Life Support:***

7. Appropriate airway management may require endotracheal intubation while observing C-spine precautions. If patient is unconscious or has decreased LOC without a gag reflex, endotracheal intubation with in-line cervical spine stabilization and ventilation should be performed to control the airway.
8. Start IV with LR or NS at TKO rate, unless hypotension, evidence of significant volume loss, or traumatic arrest exists - then run at appropriate rate for condition.
9. Apply cardiac monitor (If available, monitor oxygen saturation).
10. If seizures occur and are prolonged (greater than 15-30 seconds), administer diazepam (Valium) slow IV push in 2.5 mg increments (10 mg maximum for adult) until seizure stops. If intubation not performed prior to seizure, it should be performed after diazepam has been administered so that ventilation may be more effectively performed and the airway is better protected.

11. Lidocaine 1 mg/kg IV push can be administered 30 seconds to 1 minute prior to intubation to help decrease the temporary increase in intracranial pressure associated with endotracheal intubation.
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