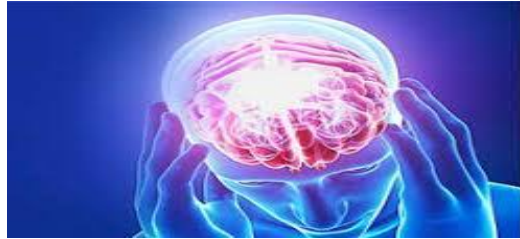


Management of Moderate to Severe Traumatic Brain Injuries (TBI)



Assessment

- Vital signs (Temp, Pulse, B/P, SpO₂, Respirations, include Glucose)
- Limb sensation and movement
- Pupillary response
- GCS: (eye opening, motor response, verbal response)
 - 13-15: Mild injury
 - 9-12: Moderate injury
 - < 8: Severe TBI

Interventions

- Secure ABC's, IV access, CT scan (*EARLY!*)
- Correct anticoagulant and/or antiplatelet action
- Short-acting sedation only (Propofol, Midazolam, Fentanyl) plus analgesia
- Use Normal Saline or Ringer's Lactate for resuscitation
- Mannitol dose is 0.25 – 1 g/kg with filter (on advice of Neurosurgeon)
- Hypertonic Saline 3% (250 cc bolus IV)
- Seizure precautions
- HOB elevated at 30 ° or reverse Trendelenburg
- Neutral head alignment

Use if signs of increased cerebral pressure (ICP) are present

Goals of Treatment

SpO₂: 92-96%

BP: >110 mmHg

Temp: 36.0-38.0

PaCO₂: 35-45 mmHg (Lower if signs of ICP)

References

1. American College of Surgeons (2019). ACS TQIP Best Practice Guidelines: *The Management of Traumatic Brain Injury*. Retrieved from: <https://www.facs.org/quality-programs/trauma/tqp/center-programs/tqip/best-practice>
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