Treatment of Elevated Intracranial Pressure

Head injury patient with GCS <8 and no surgically correctable lesion

ICP ≥ 20mmHg

YES

Sedation/paralysis
HOB elevated 30°
Drain CSF if ventriculostomy present

ICP ≥ 20mmHg after above therapy

Hypertonic Saline (3% saline)
Bolus 2-5 mL/kg
Continuous: 0.1-1.0 mL/kg/h
Titrate for ICP <20mmHg keeping serum Sodium 150-160 and serum Osm <360

ICP still ≥ 20mmHg

NO

Slowly withdraw ICP treatment

Second Tier Therapy:
Decompressive craniectomy: Salvageable patient with bilateral or unilateral swelling: consider
Barbiturate coma: EEG activity with normal hemodynamic status
Hypothermia (32-34°C)