Critical Pathway for Treatment of Intracranial Hypertension in the Severe Head Injury Patient

Insert ICP Monitor

Maintain CPP >70mmHg

Intracranial Hypertension?*

YES

Ventricular Drainage (if available)

NO

Intracranial Hypertension?*

YES

Mannitol (0.25 - 1.0 g/kg IV)

May repeat Mannitol if serum osmolality <320 mOsm/L and patient is euvoletic

Consider repeating CT scan

NO

Carefully withdraw ICP treatment

Intracranial Hypertension?*

YES

Hyperventilation to PaCO₂ 30 - 35 mmHg

Intracranial Hypertension?*

NO

NO

Other Second Tier Therapies

High Dose Barbiturate Therapy

Hyperventilation to PaCO₂ <30 mmHg Monitoring SiO₂, AVDO₂, and/or CBF recommended

*Threshold of 20-25 mmHg may be used. Other values may be substituted in individual conditions.