

# Anesthesia Guidelines for Traumatic Brain Injury

## Document ICP

1. Document baseline ICP prior to transport from ICU
2. Document ICP every 15 minutes while in OR (found under 'Comments key/Non-Transduced Data')
3. Document ICP upon return to the ICU

## Goals of TBI therapy

1. Maintain ICP less than 20 mmHg
2. Maintain MAP-ICP greater than 70 mmHg
3. Maintain SBP greater than 90 mmHg
4. Maintain SpO<sub>2</sub> greater than 90%

## Suggested Monitoring

1. ICP
2. Arterial pressure line
3. CV +/- PA pressure line(s)

## Interventions to maintain SBP

1. Maintain fluid status: CVP 8-12 mmHg
2. If available: Maintain PCWP or PAD 12-18 mmHg
3. Neosynephrine or Dopamine to maintain SBP

## Interventions to reduce ICP

1. Assure adequate hypnotics, analgesics, NMR and anesthetic levels
2. Elevate HOB 30 deg or place in reverse trendlenberg as tolerated
3. Mannitol 0.25 - 1.0 grams/kg IV
4. Thiopental 2-4 mg/kg IV in divided doses as tolerated
5. Maintain arterial pCO<sub>2</sub> 35-40 mmHg, avoid hyperventilation

## For sustained ICP greater than 20 mmHG

1. Contact the Surgical Critical Care Attending (#3933)
2. Consider termination of non-critical surgery