

Catastrophic Brain Injury Guidelines

These guidelines are to support organ function in the neurologically-devastated patient.

Organ donation should not be mentioned to the patient's family. LifeNet Health will consult with the healthcare team before discussing donation options with the family.

Maintain SBP>100 (MAP>60)

1. Consider invasive hemodynamic monitoring (arterial monitoring and central venous access)
2. Adequate hydration: adequate volume resuscitation to maintain euolemia
3. Vasopressor support: If hypotensive post adequate rehydration, use Neosynephrine as the first pressor of choice up to 2mcg/kg/min, followed by Dopamine

Maintain Urine Output >0.5ml/kg/hr<400ml/hr (consider DI if >400ml/hr x 2hrs)

1. Treat DI with Vasopressin drip 1-2.5 units/hr, if UO still >400ml/hr
2. If UO falls below 0.5ml/kg/hr, assess fluid status—may need rehydration or BP support

Maintain PO₂> 100 and pH 7.35-7.45

Adequate ventilation maintained by:

1. Peep 5.0-8.0
2. Aggressive pulmonary hygiene if not contraindicated by patient's condition (suction and turn every 2 hrs)
3. Respiratory treatments to prevent bronchospasm

Hypothermia

Maintain core body temperature between 36°C and 37.5°C

Labs

1. Basic metabolic panel, magnesium, phosphate, heme8, ABG's, liver panel, initially and as needed
 - a. Maintain Hgb>8g/dL and Hct >30%
 - b. If PT>18, give 2 units FFP
 - c. Monitor and treat electrolytes as needed
 - d. Monitor glucose and treat with insulin drip if needed (keep 80-200)
 - e. Maintain Na < 155mmol/L
2. Blood bank sample for ABO typing