Clinical Practice Guideline for Intracranial HTN

Tier 1	Tier 2	Tier 3
Low Risk	**Evidence of Intracranial HTN or Cerebral Edema**	**Impending Herniation**
Treatment Guidelines • Maintain Sodium > 135 with Hypertonic Saline 300mL Bolus. Check serum sodium daily. • Avoid hypotension (MAP < 65). Maintain euvolemia.	Treatment Guidelines • Maintain Sodium ≥ 140 with 3% NaCl 300mL boluses. Check serum sodium Q 8 hrs. If greater than two boluses of 3% NaCl is required within a 24 hr period and Na < 140, start fludrocortisone 0.1 mg PO daily (rule out SIADH first). • Maintain ICP < 20 and CPP > 60 if ICP monitor is present. • Permissive Hypernatremia up to 155 is acceptable when using hypertonic saline. • If ICP > 20 after above interventions, initiate sedation with fentanyl and propofol (and notify NSG).	Treatment Guidelines • Notify NSG, STICU/NSICU attending immediately. • Administer 3% NaCl 500mL bolus STAT. • Hyperventilate up to 5 minutes. • Consider IV mannitol 1g/kg (maximum dose of 100g) if refractory to above measures. Goal: Reduce ICP quickly as a bridge toward emergent craniectomy. ** 23.4% NaCl is not included in this protocol because it is not immediately available but can be considered as an option in patients with central venous access.

Acute Neurological Change (non-herniation)

- 3% NaCl 300mL Bolus immediately (only if serum Na < 155)
- Notify Neurology/Neurosurgery and attending for STICU/NSICU
- Obtain stat CT head

Standard Practices for All Tiers

- Maintain Head of Bed > 45° (or reverse Trendelenburg)
- Target PCO_2 35