

This is a general guideline and does not represent a professional care standard governing providers' obligations to patients. Care may be revised to meet individual patient needs.

UNC Pediatric Traumatic Brain Injury Clinical Pathway

Alarming signs

- Blown pupil: enlarged and fixed
- New lateralizing exam

Preferred mode of administration for 3% saline is central line.

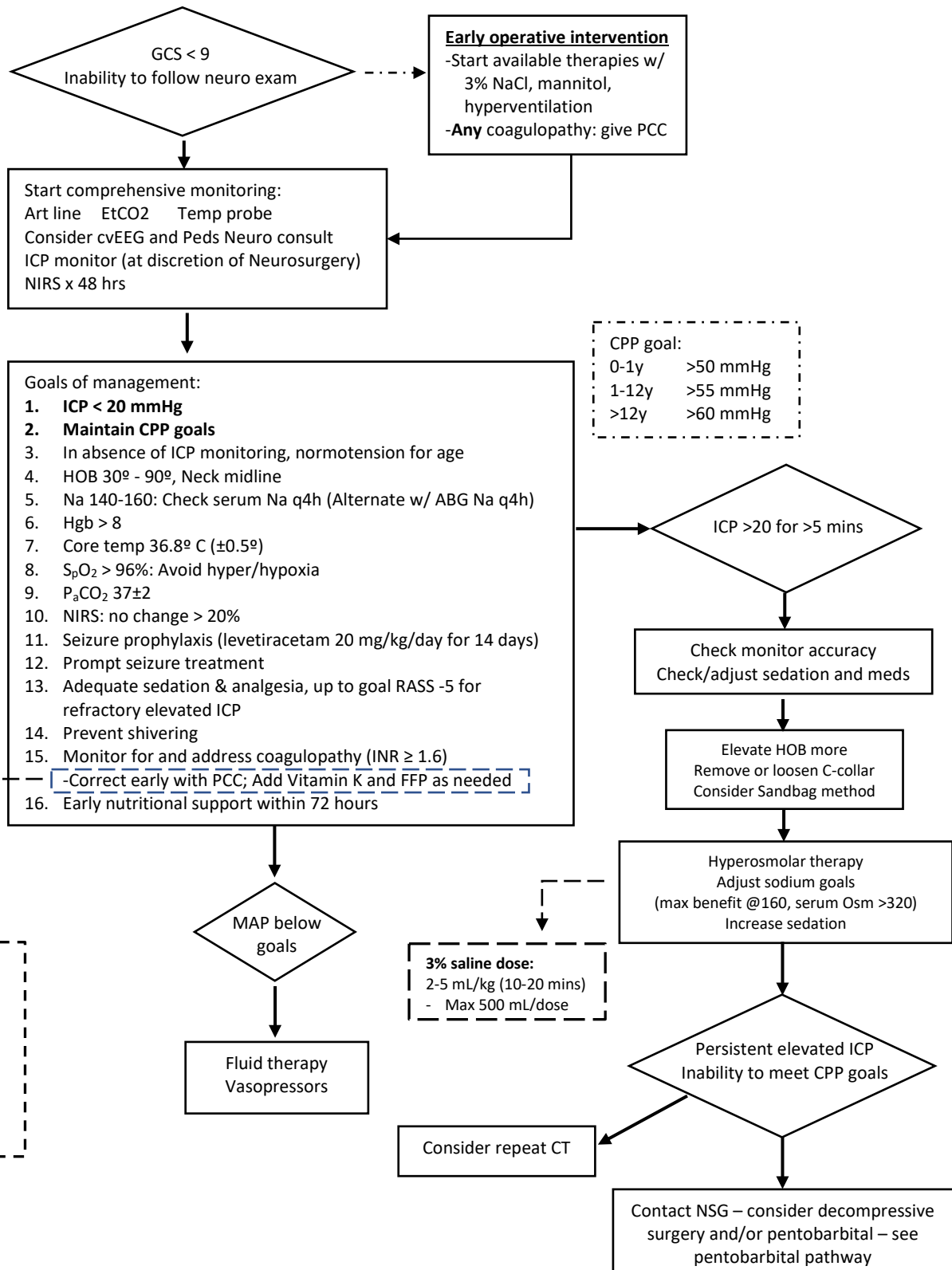
23.4% saline **cannot** be administered without central access.

Abbreviations used:

- PCC = prothrombin complex concentrate
- CPP = cerebral perfusion pressure
- ICP = intracranial pressure
- CVP = central venous pressure
- HOB = head of bed
- NIRS = near infrared spectroscopy

23.4% saline dose:

- 0.5 mL/kg
- Max 30 mL/dose
- ATTENDING ORDER ONLY**



Kochanek, Patrick M et al. "Guidelines for the Management of Pediatric Severe Traumatic Brain Injury, Third Edition: Update of the Brain Trauma Foundation Guidelines, Executive Summary." *Neurosurgery* vol. 84,6 (2019): 1169-1178. doi:10.1093/neuros/nyz051

Daniel Lercher, Afsaneh Pirzadeh, Kimberly Hamilton, last revision 1/14/2026