Neonatal Transport Initiated Therapeutic Hypothermia for Neonatal Hypoxic Ischemic Encephalopathy (HIE)

Guidelines for Nurses at Referral Hospitals

Rationale: Moderate therapeutic hypothermia (TH), or “cooling”, is standard of care for neonates with a diagnosis of Hypoxic Ischemic Encephalopathy (HIE) and moderate or severe encephalopathy with a beneficial effect on both mortality and neurodevelopmental outcomes extending into childhood. However, TH has significant time constraints, with efficacy requiring patients to begin treatment by 6 hours of life. Several studies have shown faster time to target temperature and better temperature control with a specific, servo regulated active cooling device in transport. There is also a potential for improved outcomes if TH can be started sooner.

Angel II Neonatal Transport will start standard of care cooling on neonatal transport in appropriate patients with the Tecotherm Neo which was specifically designed for therapeutic hypothermia in neonates.

It is the goal of the neonatal transport team to initiate TH or cooling within 40 minutes of arriving in your NICU. The following tasks listed below with significantly decrease the team’s stabilization time and aid us in initiating the TH process as soon as possible.

1. All IV and arterial fluids drawn up in 35ml or 60ml syringes and labeled with micro-tubing attached.
2. If at all possible, have at least one parent available to sign our consent for transport documents and receive transport information. Please note, that a trip to Mom’s room may not be possible prior to departure due to time restraints.
3. It is best practice to avoid hyperthermia, which is associated with poor outcomes. However passive cooling or pre-cooling in the absence of a servo-regulated device can lead to excessive hypothermia and subsequent side effects. We recommend setting the bed temperature at 35-35.5 C to avoid hyperthermia
4. Hypothermia causes peripheral vasoconstriction, making IV access more difficult. If there is no placement of a UVC and UAC, please place 2 PIVS if possible.
5. Please try to have all procedures (x-rays, lab draws, line placement, medication administration) completed prior to transport team arrival
6. Monitor glucose levels, correct hypoglycemia, please contact tertiary center (receiving hospital) for instructions for hyperglycemia.
7. Discharge Summary, Medication Administration Record (MAR) and x-rays copied to give to transport team.

Thank you so much for your time, attention and assistance this process. As always it is an honor and a pleasure to serve you and transport your babies.