

GUIDELINES FOR MONITORING THE MILD HIE INFANT

If a neonates who has a

1. Gestational Age greater than or equal to 35 weeks gestation
2. Birth weight greater than or equal to 1.8 kg
3. Less than or equal to 6 hours since insult occurred

And has biochemical evidence of a possible hypoxic-ischemic insult as evidenced by:

- a) pH less than or equal to 7.0 with base deficit of greater than or equal to 16 on arterial blood gas determination (base excess more negative than -16)
- b) pH 7.01--7.15, base deficit 10-15.9 or no blood gas available and acute perinatal event (cord prolapse, heart rate decelerations, uterine rupture) and either:
 - APGAR less than or equal to 5 at 10 minutes or assisted ventilation at birth required for greater than or equal to 10 min
- c) or a difficult birth or resuscitation

However, the baby does not have seizures; meet 3 of the 6 of the neurologic exam criteria for entry into the therapeutic hypothermia. The bedside clinician should consider:

1. Serial neurologic exams for the first 6 hours of life. Consider admission to the NICU for close monitoring. If the neonate is admitted to the nursery during the day, the newborn staff should perform a neurologic exam. If brought to the newborn nursery after hours, the NICU fellow on-call will perform the exam.
2. Monitor temperature closely and prevent from becoming warmer than 37°C.
3. If the bedside clinician is very concerned about possible injury, ie. There was a sentinel event such as an abruption, the pH was less than 7.0 on a cord gas, the clinician may consider:
 - a. LFTs (abnormal with an AST or ALT above 100)[1]
 - b. Cardiac enzymes (Tropin T (greater than 0.1) or I and CK total and CK-MB (greater than 25 IU/l)[1]
 - c. Lactic acid (greater than 7.5)[1]
 - d. Coagulation studies
 - e. NICHD hypothermia score (hopefn3.org)
 - f. May consider aEEG monitoring for 30 minutes to determine background pattern

Labs should be drawn at 1 hour of age [1].

1. Shah, S., M. Tracy, and J. Smyth, *Postnatal lactate as an early predictor of short-term outcome after intrapartum asphyxia*. J Perinatol, 2004. **24**(1): p. 16-20.

From: FN3 @<http://hopefn3.org> 2017