Assessing baby for therapeutic hypothermia

Does therapeutic hypothermia need to commence?

If the baby presents with evidence of acute perinatal/intrapartum hypoxia-ischaemia as suggested by at least one of the following:
- Apgar score ≤ 5 at 10 minutes
- Blood gas (cord/arterial/venous/capillary) within 60 minutes of birth includes either a:
  - pH < 7.0, or
  - Base excess equal to or worse than minus 12 mmol/L
- Ongoing resuscitation for ≥ 10 minutes

Commence assessment of encephalopathy severity*

Does baby meet criteria for probable moderate or severe HIE?

Yes →
- Usual care
- Consider discussion with neonatologist

No →

Is the baby:
- ≥ 35 weeks, and
- ≥ 1800 grams, and
- Less than 6 hours old?

Yes →

Discuss with neonatologist

No →

Baby meets criteria for therapeutic hypothermia
- If CSCF Level 1–5 neonatal service discuss the type of cooling (passive or active) to be provided with neonatologist

Criteria for probable moderate or severe HIE: (seizures or any two of:)
- Level of consciousness: Lethargy or stupor/coma
- Spontaneous activity: Decreased or no activity
- Posture: Distal flexion, complete extension, or decerebrate
- Tone: Hypotonia (focal or general e.g. head/neck tone) or flaccid
- Primitive reflexes: Weak/absent suck or incomplete/absent Moro response
- Autonomic system: Constricted/deviated/dilated/non-reactive pupils, bradycardia/variable heart rate, periodic/irregular breathing, apnoea

Assess and document at least hourly for the first 6 hours following birth or until threshold for TH are met

*Use Sarnat scoring form

CSCF: Clinical Services Capability Framework; HIE: hypoxic ischaemic encephalopathy; QCG: Queensland Clinical Guidelines; RSQ: Retrieval Services Queensland