

Appendix 1. Survey on the therapeutic hypothermia (TH) protocol

I. Indication and contraindication

1. Is TH standard of care in your institute?
 - ☐ Yes ☐ No
2. How many times of TH do you perform in a month? Average, (standard deviation, SD) ()/month
3. Do you have a written protocol for TH?
 - ☐ Yes ☐ No
4. Indications for your TH include followings?
 - Out-of-hospital cardiac arrest ☐ Yes ☐ No
 - In-hospital cardiac arrest ☐ Yes ☐ No
 - Unwitnessed cardiac arrest ☐ Yes ☐ No
 - Pediatric cardiac arrest ☐ Yes ☐ No
5. Contraindications for your TH include followings?
 - ☐ Active bleeding ☐ Terminal illness
 - ☐ Trauma arrest ☐ Poor pre-morbid status
 - ☐ Severe sepsis ☐ Pregnancy
 - ☐ Uncontrolled arrhythmia ☐ Refractory shock
 - ☐ Do-not-resuscitate patient

II. Induction of TH

1. How do you measure body temperature ?
 - ☐ Esophageal ☐ Rectal
 - ☐ Tympanic membrane ☐ Axillary
 - ☐ Bladder
2. What sedatives and analgesics do you use for TH?
 - ☐ Midazolam ☐ Lorazepam
 - ☐ Propofol ☐ Dexmedetomidine
 - ☐ Pethidine ☐ Fentanyl
 - ☐ Remifentanyl ☐ etc. ()
3. Do you routinely use neuromuscular blockers?
 - ☐ Yes ☐ No
4. Do you routinely use preventive anticonvulsants?
 - ☐ Yes ☐ No
5. If yes, what kind of drug ?
 - ☐ Clonazepam ☐ Levetiracetam
 - ☐ Valproic Acid ☐ Phenobarbital
 - ☐ etc. ()
6. Do you alter target temperature of TH for each case?
 - ☐ Yes ☐ No

What is your routine target temperature? Average, (SD)

 - ☐ 32°C ☐ 33°C ☐ 34°C
 - ☐ 35°C ☐ 36°C ☐ etc. ()°C

7. What inducing methods do you use for TH?

- ☐ Cold saline infusion ☐ L-tube irrigation
- ☐ Bladder irrigation ☐ Evaporation
- ☐ Fan ☐ External cooling
- ☐ Internal cooling ☐ etc. ()
- ☐ Kind of machine ☐ Arctic sun
- ☐ Alsus ☐ Gaymer
- ☐ Blanketrol ☐ etc. ()

III. Maintaining TH

1. What is your target mean arterial pressure, PaCO₂ during TH?
 - MAP (mmHg) ☐ ≥ 55 ☐ ≥ 65 ☐ ≥ 75
 - PaCO₂ (mmHg) ☐ < 40 ☐ 40–45 ☐ > 45
2. What is your target TH duration? (hr)
 - ☐ 12 ☐ 24 ☐ 36 ☐ 48
 - ☐ 60 ☐ 72 ☐ etc. ()

IV. Rewarming and normothermia

1. What is your definition of normothermia? () °C
2. What is your rewarming rate? (°C/hr)
 - ☐ < 0.2 ☐ 0.25–0.3 ☐ 0.3–0.35
 - ☐ 0.35–0.4 ☐ 0.4–0.45 ☐ 0.45–0.5
 - ☐ > 0.5 ☐ Passive rewarming
3. What is your target normothermia duration ? (hr)
 - ☐ 12 ☐ 24 ☐ 36 ☐ 48 s
 - ☐ 60 ☐ 72 ☐ etc. ()

V. Methods to determine patients' neurologic prognosis

1. What kinds of test routinely used for determine patients' neurologic prognosis?
 - Imaging
 - ☐ Magnetic resonance imaging
 - ☐ Computed tomography
 - Neurophysiology
 - ☐ Somatosensory evoked potential
 - ☐ Visual evoked potential
 - ☐ Bispectral index
 - ☐ Electroencephalogram (EEG)
 - ☐ amplitude-integrated EEG
 - Biomarker
 - ☐ Neuron-specific enolase ☐ S-100
 - ☐ Procalcitonin ☐ etc. ()
2. Do you routinely use portable EEG
 - ☐ Yes ☐ No

If yes, what kind of test

 - ☐ Continuous EEG ☐ Intermittent EEG