

Hypothermia Management

CARDIAC ARREST

Measure central temperature (use oesophageal probe); *may need low-reading thermometer*

Warmed IV fluids (42°C) plus additional rewarming methods (see below)

Intubate and ventilate with warmed humidified oxygen

Continue CPR *for at least* 20min (+/- mechanical device, e.g. LUCAS)

Cardiac arrest thought to be prior to hypothermia

Temp > 34.9°C

Use standard APLS algorithm
(commonest cause of hypothermia in UK is a prolonged cardiac arrest leading to hypothermia and resuscitation may need to be stopped before normothermia obtained)

Temp 30 - 34.9°C

Double the interval between resuscitation drug doses

Temp < 30°C

Check pulse for up to 1min (+/- POCUS)

No resuscitation drugs to be given

Maximum 3 DC shocks then no more

Poor prognostic factors

Potassium > 12mmol/L

Temp > 32°C and remains in cardiac arrest

Cardiac arrest prior to hypothermia
(in this case, a senior clinician may stop resuscitation efforts after a period of effective CPR and consideration/treatment of reversible factors)

PATIENT RESPONSIVE AND TEMP \geq 32°C

Aim to warm by 0.5°C/hour using:

Warm environment

Blankets with patient warming device such as Bair hugger

Warmed fluids (38°C) if required for resuscitation

Close observation with cardiac monitoring

PATIENT UNRESPONSIVE OR TEMP < 32°C

Commence rewarming

Secure airway as indicated

Cardiac monitoring (high risk of arrhythmia)

Minimise exposure & handling (risk of VF)

Further PICU management (e.g. ECMO) esp. if:

Persistent fluid-resistant hypotension

Ventricular arrhythmias

Ongoing temp < 28°C

WARMING MEASURES

Remove all wet clothes

Warmed humidified oxygen

Warmed fluids (38°C)

Bair hugger (over & under)

Bladder irrigation

(5ml/kg fluid, ideally 42°C, instill for 1min, drain & repeat)

Peritoneal dialysis with warmed PD fluid

Temp management systems / haemofiltration / ECMO

Additional equipment to have available:

Oesophageal temperature probe, trauma shears, humidifier, warm fluids, Bair hugger, bladder syringe

SORT Sept 2024 Review 2028
www.sort.nhs.uk