Therapeutic Hypothermia

Rationale:

Increased brain temperature following successful resuscitation from cardiac arrest has been shown to contribute to worsening ischemic brain damage. Studies have shown that lowering brain temperature decreases the ischemic damage.

Indications/inclusions for therapy include:

1. Cardiopulmonary arrest with return of spontaneous circulation (ROSC)
2. Known time of cardiac arrest. Downtime of less than 1 hour is desirable. No time limit on duration of resuscitative effort.
3. Persistent coma defined as not following commands, no spontaneous eye opening, no purposeful movements to noxious stimuli; brainstem reflexes and pathological/posturing movements are permissible.
4. Blood pressure can be maintained at MAP >80 mmHg spontaneously or with low to moderate dose pressors.
5. Endotracheal intubation and mechanical ventilation required.
6. Age > 18 years.

Exclusion Criteria for therapy:

1. Significant cardiac arrhythmia or hemodynamic instability (BP<60mmHg).
2. Evidence of sepsis.
3. Known hypersensitivity to hypothermia (Sickle cell disease).
4. Alternative reason for comatose state (head trauma, drug intoxication).
5. Pregnancy with evidence of a gravida uterus.
6. Trauma patients.

We offer educational sessions on this topic that are PA DOH approved for continuing education credit. Please contact us with questions or for more information.