Therapeutic Hypothermia ED Protocol FOR AGE >/= 16
(addressograph)

Emergency Physician Orders

THERAPEUTIC HYPOTHERMIA PROTOCOL POST CARDIAC ARREST

Allergies: _________________________________

Patient Weight: _________________________________

Guidelines for the Use of Therapeutic Hypothermia following Cardiac Arrest

1. Answer all questions below prior to initiating the Therapeutic Hypothermia After Cardiac Arrest Protocol.

<table>
<thead>
<tr>
<th>INCLUSION CRITERIA</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient is over 18 years of age</td>
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<tr>
<td>If female, is over 50 years of age or has negative pregnancy test documented</td>
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<tr>
<td>Patient had cardiac arrest (VF or pulseless VT) followed by successful return of spontaneous circulation</td>
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<td>Cardiac arrest is presumed to be of cardiac origin</td>
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<td>Patient is in a persistent coma at the time of entry into the Therapeutic Hypothermia protocol (defined as no eye opening to pain or response to verbal stimulation)</td>
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<td>Patient down time was &lt; 60 min (time of collapse to return of spontaneous pulse)</td>
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<td>Patient is comatose for another reason (besides anoxic encephalopathy) including drug overdose, head trauma, CVA</td>
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<td>Patient is pregnant</td>
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<td>Patient has cardiogenic shock or persistent hypotension (&gt;30 min) requiring vasopressors</td>
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<td>Patient has severe hypoxemia (SpO2 &lt; 85%) &gt; 15 min after return of spontaneous pulse</td>
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<td>Patient has a known terminal illness</td>
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<td>Patient has a known pre-existing coagulopathy</td>
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<tr>
<td>Initiation of cooling protocol is &gt; 1 hour after ED arrival</td>
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2. Determine if patient is eligible for Therapeutic Hypothermia After Cardiac Arrest.

   - Yes, this patient is eligible for Therapeutic Hypothermia After Cardiac Arrest. This patient meets **ALL** of the Inclusion Criteria and meets **NONE** of the Exclusion Criteria.

   - No, this patient is not eligible for Therapeutic Hypothermia After Cardiac Arrest. This patient does not meet **ALL** of the Inclusion Criteria or meets one or more of the Exclusion Criteria.

3. Nursing
   - NPO
   - Cardiac Monitor, SaO2 Monitor
   - Vitals q 5 minutes, q 15 minutes when stable
   - Pupillary reaction and GCS baseline and q 1h
   - Continuous Rectal Temperature Monitor if available

Therapeutic Hypothermia ED-Prot-18 January 18, 2010
● Rectal temperature q 15 minutes
● Expose Patient (excluding genitalia) to ambient air
● Wrap hands and feet in dry towels
● Apply Ice Packs around Head, Axillae and Groins
● Use Cooling blanket whenever available

● **Target Temperature 32-34 °C**
● D/C Ice packs and cold NS infusion and notify physician if T< 33°C

- □ IV NS @ _________ ml/hr
- □ Refrigerated or cooled NS _____ ml (10-20ml/kg) over 30-60 minutes
- □ IV _______Bolus _____ ml x _____ prn if BP < _____ systolic
- □ Gastric tube to straight drainage post intubation prior to CXR

● Foley catheter, Urine Output q 1h, notify physician if < 25ml/hr
● Consult Respiratory Therapy
- □ Consult Internist    Dr ______________
- □ Consult Anesthesia Dr ______________

4. **Investigations**
● ED Cardiac Panel
● Portable CXR
● ECG
● VBG
- □ ABG

5. **Medications for Sedation and Paralysis**
● Sedation and paralysis to be given prior to initiation of cooling and maintained during therapeutic hypothermia

- □ Midazolam _____ mg IV (0.5-2 mg) q_________mins prn.
- □ Rocuronium 1 mg/kg IV q_________mins prn.

5. **Medications for Sedation and Paralysis**

6. **Ventilation**
● EVAC Tube and protocol whenever possible
● Titrate FIO2 to keep SaO2 > 90 %
● Tidal Volume____ml/kg ( 6-10 ml/kg )
● ETCO2 monitor

- □ ABG 30 minutes after ventilation starts
- □ Notify MD if Ppeak > 30 cm H2O
- □ Elevate HOB to reduce aspiration

- □ Arterial Line by ______________________
- □ PEEP _____ cm H2O ( 5 cm usually)

Date ___________________        Physician’s Signature __________________
Time ___________________        Print Name ___________________
References:

- ILCOR Advisory Statement. Therapeutic Hypothermia After Cardiac Arrest: An Advisory Statement by the Advanced Life Support Task Force of the International Liaison Committee on Resuscitation.
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