**ICU Targeted Temperature Management Post-Cardiac Arrest-Phase 1**

**Version 2 Approval 9/25/2018**

**Inclusion Criteria**

* All cardiac rhythms
* Glasgow coma scale less than or equal to 7
* Age greater than or equal to 18
* Pregnancy negative
* No defined neuropathology
* Establish Code status

**General**

* Requires mandatory Intensivist as consult

**PHASE 1: ON ADMISSION AND PRIOR TO COOLING**

 ***Nursing Orders***

 Vital signs every 15 minutes x 4 then hourly including temperature from 2 routes (esophageal, rectal and/or bladder)

 Elevate head of bed 30 degrees

 Nasogastric/orogastric tube insert/maintain to low intermittent suction

 Point of Care Capillary Blood Glucose every 6 hours and as needed

 Foley Catheter with Protocol

 If having seizures, notify provider

 If shivering, notify provider

 ***Respiratory***

 Initiate Ventilator Management Protocol

 Maintain O2 Sat > 94%

 Maintain PCO2 35-45 mmHg

 ***Diet***

 NPO

 ***IV/ Line Insert/Maintain***

 Arterial line insert/maintain

 Peripheral IV insert/maintain

 Central line maintain

 ***IV Fluids***

 Sodium Chloride 0.9% IV

 30 milliliter/hour continuous intravenous infusion

 ***Medications***

 ***Sedatives /Analgesics/Paralytics***

 **Initiate Propofol and Fentanyl together and titrate Propofol to RASS -2 sedation level**

 propofol 10 mg/mL intravenous emulsion (DIPRIVAN)

 5 microgram/kilogram per minute continuous intravenous infusion. Titrate to achieve -2 RASS sedation level (MAX 80 microgram/kilogram per minute)

 fentaNYL

 1 microgram/kilogram intravenous push bolus once (MAX 100 microgram) followed by fentanyl continuous infusion

 50 microgram/hour continuous infusion following bolus.

 **\*\*IF RASS -2 not achieved and Propofol infusion is at MAX:**

 LORazepam (ATIVAN)

 2-4 milligram intravenously every 30 minutes as needed if RASS -2 not achieved and Propofol infusion is at MAX

 fentaNYL

 50-100 microgram intravenous push every 30 minutes as needed if RASS -2 not achieved within 30 minutes of first Lorazapam dose and Propofol infusion is at MAX

 **\*\*IF seizures: Contact provider**

 LORazepam (ATIVAN)

 2 milligrams intravenously push every 30 minutes as needed

 **\*\*IF shivering: Contact provider**

 meperidine (DEMEROL)

 12.5-25 milligram intravenous push every 4 hours as needed (GIVE FIRST)

 vecuronium

 If shivering is unrelieved by Demerol, contact provider for appropriate dosing and RASS score

 ***Vasopressors: Contact provider if initiating pressor***

 **\*\*Initiate norepinephrine (LEVOPHED) first**

 norepinephrine bitartrate (LEVOPHED) in NS 4 mg/250 mL IV

 0.1 microgram/kg/minute continuous intravenous infusion. Titrate to keep MAP greater than 65 mmHg (MAX 30 microgram/minute)

 **\*\*IF desired MAP not obtained ADD:**

 vasopressin in NS 100 unit/250 mL IV

 0.04 unit/minute continuous intravenous infusion

 **\*\*IF desired MAP not obtained ADD:**

 phenylephrine (NEO-SYNEPHRINE) in NS 20 mg/ 250 mL (80 mcg/mL) IV

 20 - 180 microgram/minute continuous intravenous infusion. Titrate to keep MAP greater than 65 mmHg begin if desired MAP not achieved with norepinephrine and vasopressin)

 ***Insulins***

 ***Insulin Sliding Scales***

 Low

 Medium

 High

 If blood sugar is >250, initiate insulin drip. Select Dynamic Insulin Drip orders

 Insulin, regular in NS 250 unit/250 mL (1 unit/mL) IV.

 ***Other***

 Lacri-Lube eye ointment

 0.5 inch in each eye every 12 hours as needed while sedated

 aspirin

 300 milligram suppository rectally once a day

 325 milligram tablet by nasogastric tube once a day

 ***Laboratory***

 Obtain the following STAT labs:

 Blood Gas Study, arterial

 Pregnancy test, serum. Select for women of child bearing age

 Amylase

 CBC/AUTODIFF

 Comprehensive metabolic panel

 Magnesium (Mg) level, plasma

 Phosphorus level, plasma

 CK (CPK)

 Cortisol, plasma

 Calcium, ionized

 Lactic acid, plasma

 Lipase

 PT (PROTIME AND INR)

 PTT

 Troponin-I

 Type and screen

 If fever or evidence of infection present:

 Blood Culture

 Culture, sputum

 Culture, urine

 Procalcitonin Level

 ***Radiology & Diagnostic Tests***

 CT Head without Contrast

 STAT. Reason for exam: post cardiac arrest

 XR Chest Single AP View Only, portable,

 STAT. Reason for exam: post cardiac arrest

 12-lead ECG

 STAT. Reason for exam: post cardiac arrest

 Echocardiogram, transthoracic (2D cardiac ECHO)

 Reason for exam: post cardiac arrest (DO NOT DELAY COOLING PROTOCOL IF NOT OBTAINED)

 EEG (Electroencephalogram), continuous,

 STAT. Reason for exam: post cardiac arrest (DO NOT DELAY COOLING PROTOCOL IF NOT OBTAINED)