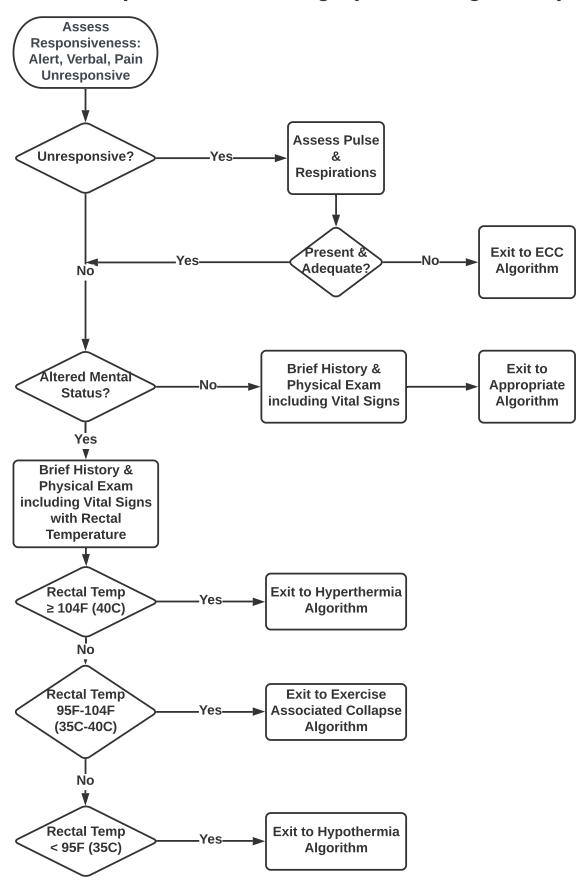
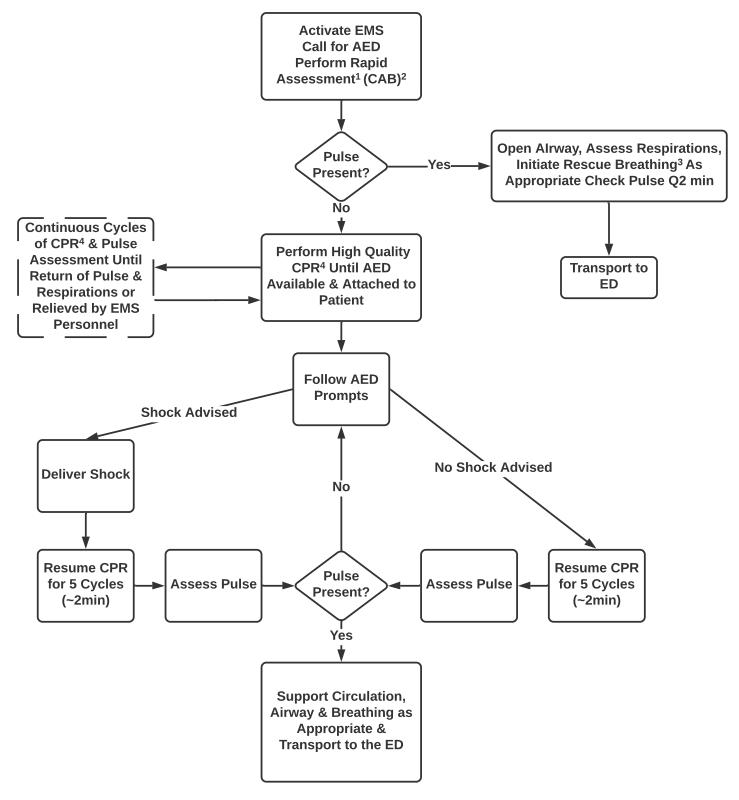
Collapsed Athlete Triage (Master Algorithm)



Emergency Cardiac Care (ECC)

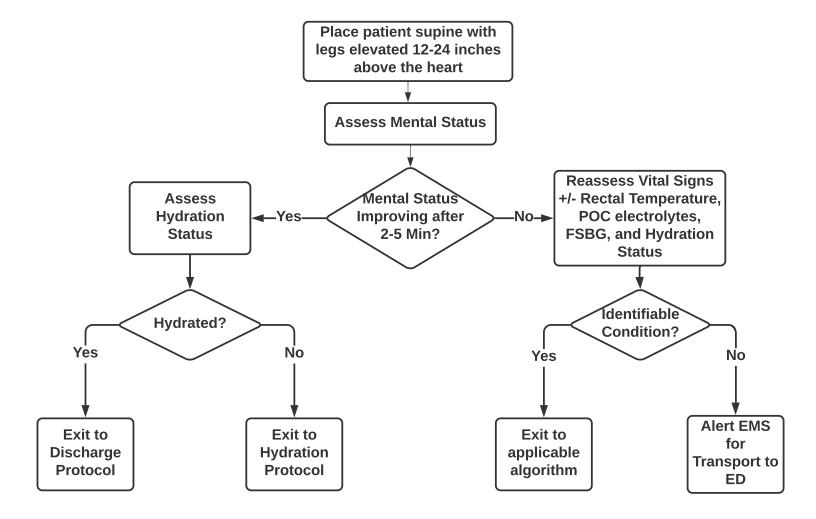


- 1) Rapid Assessment Includes: Open Airway, Assess Breathing & Check Pulse, no more than 10 seconds
- 2) ABC priority changed to CAB (Circulation, Breathing, Airway)- Initiate Chest Compressions ASAP
- 3) Adult Rescue Breating Rate: 1 Breath every 5-6 seconds
- 4) Adult CPR- 30 compressions:2 ventilations; 100 compressions/minute, depth of 2" with full chest recoil

^{**} For Cardiac Arrest refractory to initial ACLS interventions and defibrillation attempts, consider 1 ampule of Sodium Bicarbonate IV Push, as patients who collapse in the midst of strenuous exertion often have a profound concomitatnt lactic acidosis

^{**} Do Not Delay Transport or Transfer of Care to EMS for Repeat Interventions

Exercise Associated Collapse (EAC)

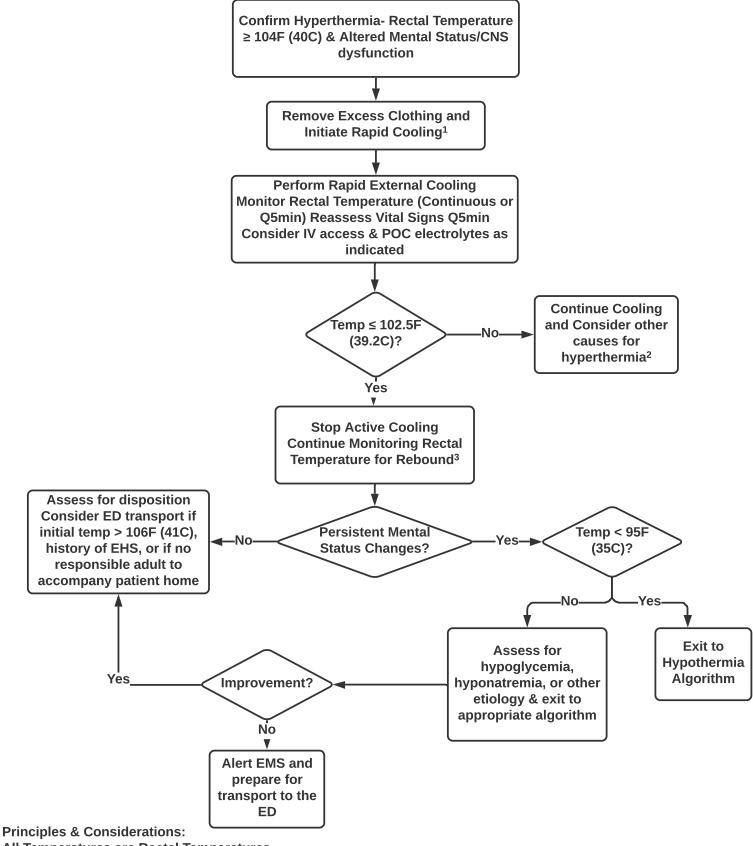


POC- Point of Care testing for serum electrolytes FSBG- finger stick blood glucose, if not included on serum testing

Assess Hydration:

a. Mild to Moderate Dehydration- signs and symptoms include: thirst, fatigue, headache, vomiting, reduced sweating, cold/clammy skin, decreased skin turgor, and sunken orbits b. Severe Dehydration- signs and symptoms include: orthostatic hypotension, relative tachycardia, and capillary refill of >2 seconds, in additions to the findings described above.

Hyperthermia



All Temperatures are Rectal Temperatures

Cool First and Transport Second

- 1. Preferred cooling methods are: 1) Ice Water Immersion, 2) Ice Water Baths with Dousing and Ice Passage and Packing with Fans (if available), May add cold IV fluids if serum sodium is normal
- 2. Consider Malignant Hyperthermia, Underlying infection, Neuroleptic Malignant Syndrome, patients with Altered **Thermoregulation**
- 3. Return to Active Cooling as clinically indicatedd
- 4. Mental status recovery may be delayed; some pateints will not return to normal mental status with temperature drop.

Hypothermia Confirm Hypothermia- Rectal Temperature < 95F (35C) & **Syptomatic Patient Initial Therapy for Hypothermic Patients:** 1. Remove wet clothing 2. Prevent further heat loss (move to warmer environment, warm blankets, etc) 3. Monitor core temp (continuous or Q5min) 4. Initiate passive external re-warming¹ 5. Avoid rough movements/patient handling Core **Temperature** 93F (35C) - 95F (36C) 86F(30C) - 93F(35C) < 86F(30C) **Initiate Active Initiate Active** Reassess in 15-20 **External External Rewarming** Rewarming² min **Consider Active** Reassess in 15-20 Internal Rewarming³ min Temp/Symptoms Improved? Reassess in 15-20 min Temp/Symptoms Improved? Yes Temp/Symptoms To Discharge Improved? Algorithm No **Consider Athletes** with Altered Thermoregulation Alert EMS & prepare for transport to the

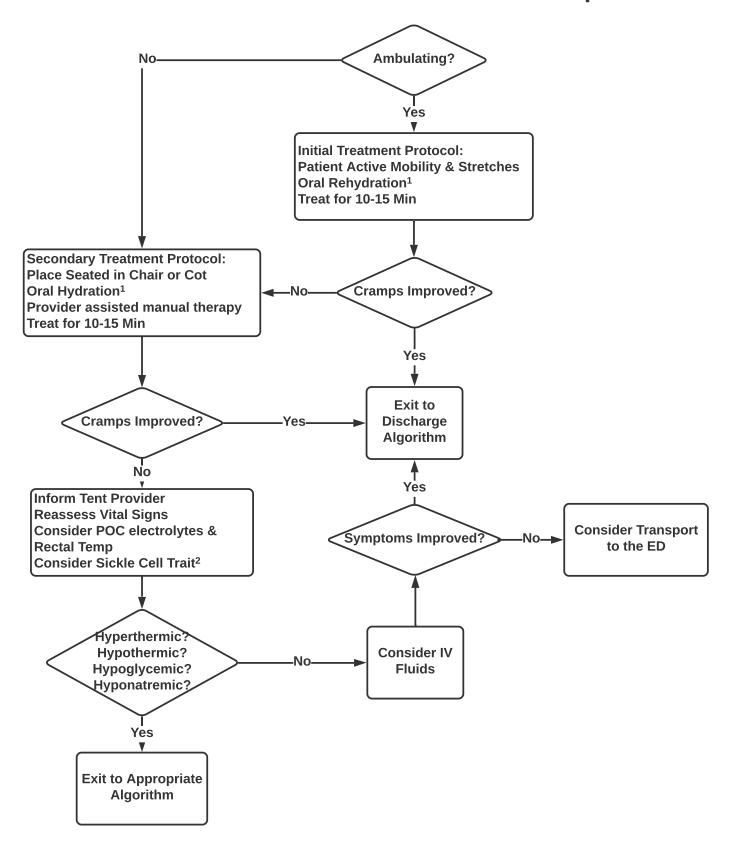
Principles & Considerations

All temperatures are Rectal Temperatures

- 1. Passive Exernal Rewarming- Cotton, Wool, or Mylar Blankets
- 2. Acitve External Rewarming- Warmed Blankets, Heating Pads, Forced Warm Air
- 3. Active Internal Rewarming- Warm oral fluids (if patient has normal mental status and is tolerating PO), warmed IV fluids (40-42C), warmed O2

In General- warm core/trunk before extremities. Consider POC electrolyte and finger stick glucose testing. If patient becomes pulseless- activate EMS and begin CPR

Exercise Associated Muscle Cramps

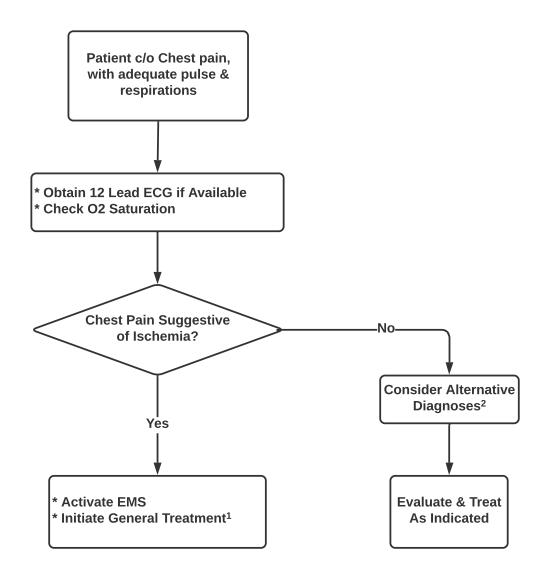


Priciples & Considerations:

- 1. Oral Hydration with Clear Fluids (Water, Sports Drink, Broth) per patient preference
- 2. Consider Exercise Associated Collapse/Cramping associated with Sickle Cell Trait and/or Compartment Syndrome if: African American, Perisstent cramping without visible cramps/fasiculations, muscle rigidity, and/or sustained severe pain.

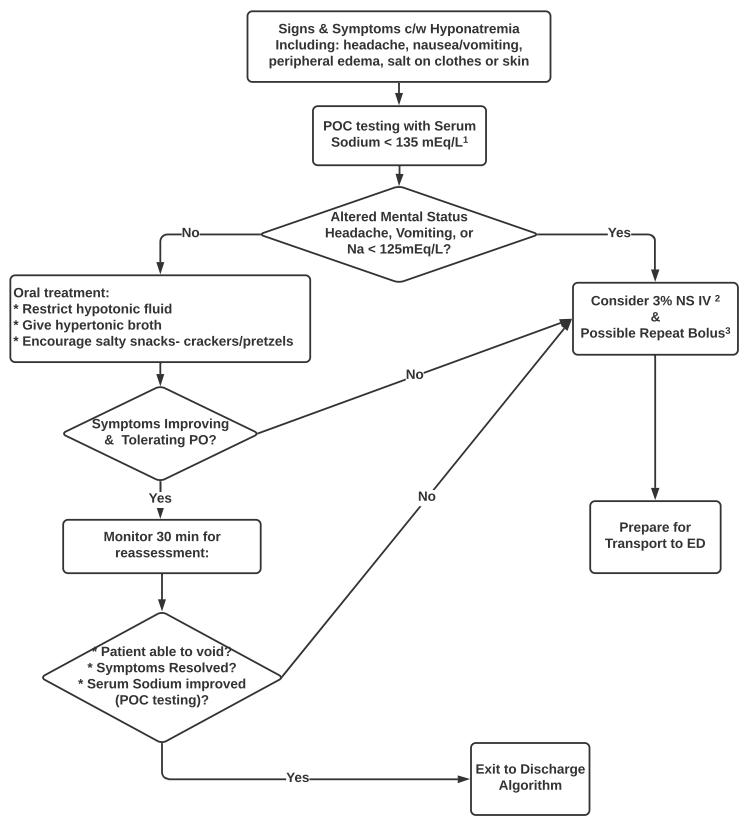
Obtain detailed medication history and consider medications which may contribute to dehydration, hyperthermia, and cramping.

Chest Pain



- 1. Immediate General Treatment Guidance
 - * Oxygen: by mask or nasal cannula if O2 < 93% on room air
 - * Aspirin: 325mg tablet should be administered and chewed (unless contraindicated)
 - * Nitroglycerine:
 - -Administer (unless contraindicated)
 - * One sublingual tablet (0.03 0.04mg)
 - OR
 - * One sublingual spray
 - May repeat twice at 5 minute intervals
 - Systolic Blood Pressure should be greater than 90-100mg Hg before administration of each dose
- 2. Consider Alternative Etiologies of Chest Pain: PE, Pneumonia, Myocarditis/Pericarditis

Hyponatremia

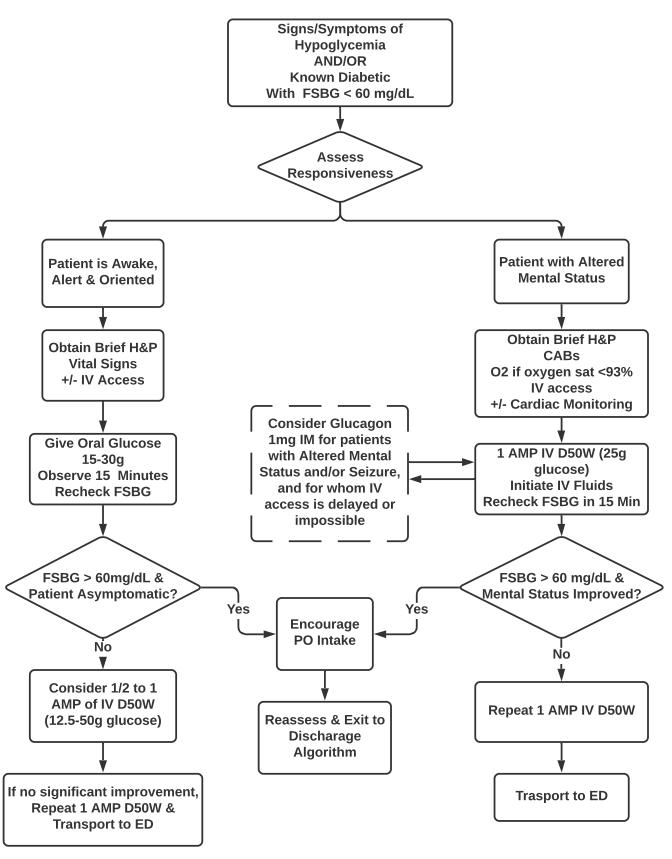


Principles & Considerations

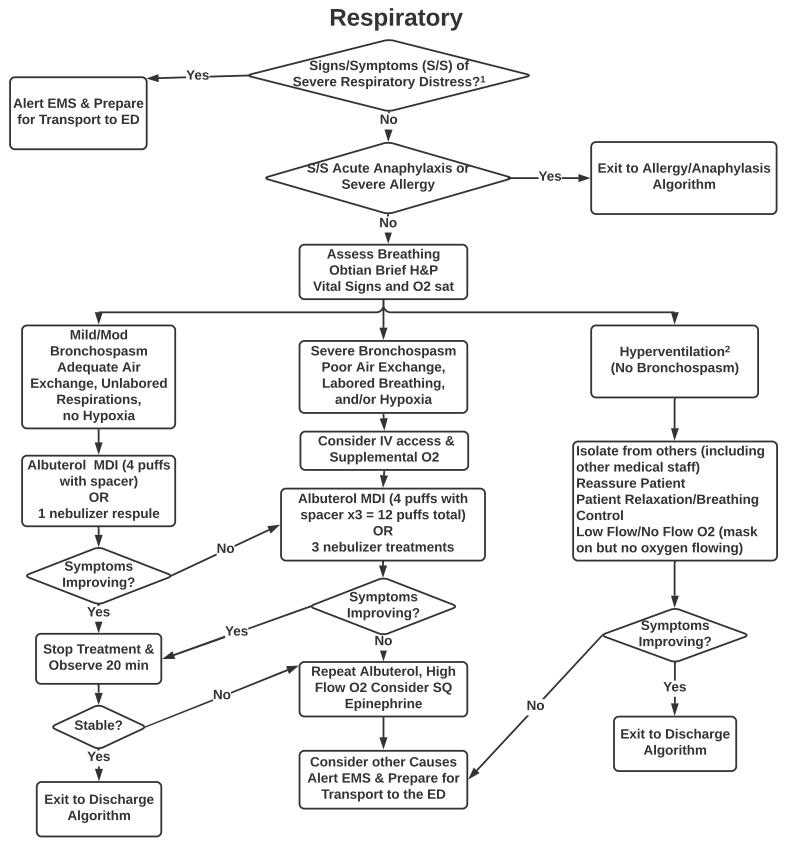
- 1 Patients with Serum Sodium (Na) 130-135 are rarely symptomatic- Consider other causes of altered mental status
- 2. 100mL 3% NS will raise serum sodium 1-2 mEq/L
- 3. Consider repeat bolus for:
 - * Delay in transport
 - * Worsening mental status/symptoms
 - * Serum sodium <124 mEq/L

NOTE- there have been NO CASES of CNS myelinosis reported from 3% NaCL treatment of race-associated hyponatremia

Hypoglycemia

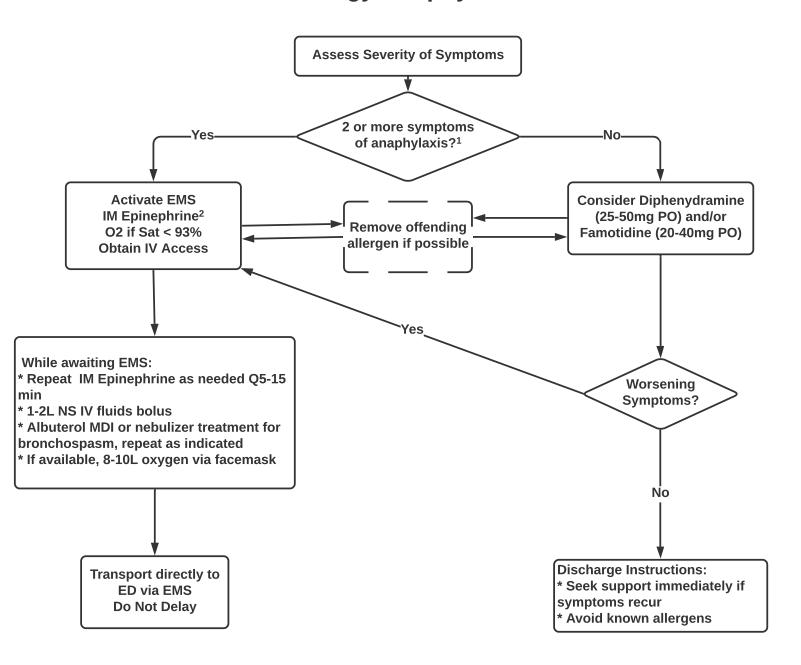


- * FSBG- Finger Stick Blood Glucose
- * Evaluate for Insulin Pump and If Present, PAUSE the Pump
- * Consider discharge for patients with
 - * FSBG > 60mg/L
 - * Patient NOT on a long acting hypoglycemic agent
 - * Normal Mental Status, No focal neurologic Deficits
 - * Tolerating PO and can eat a full carbohydrate meal

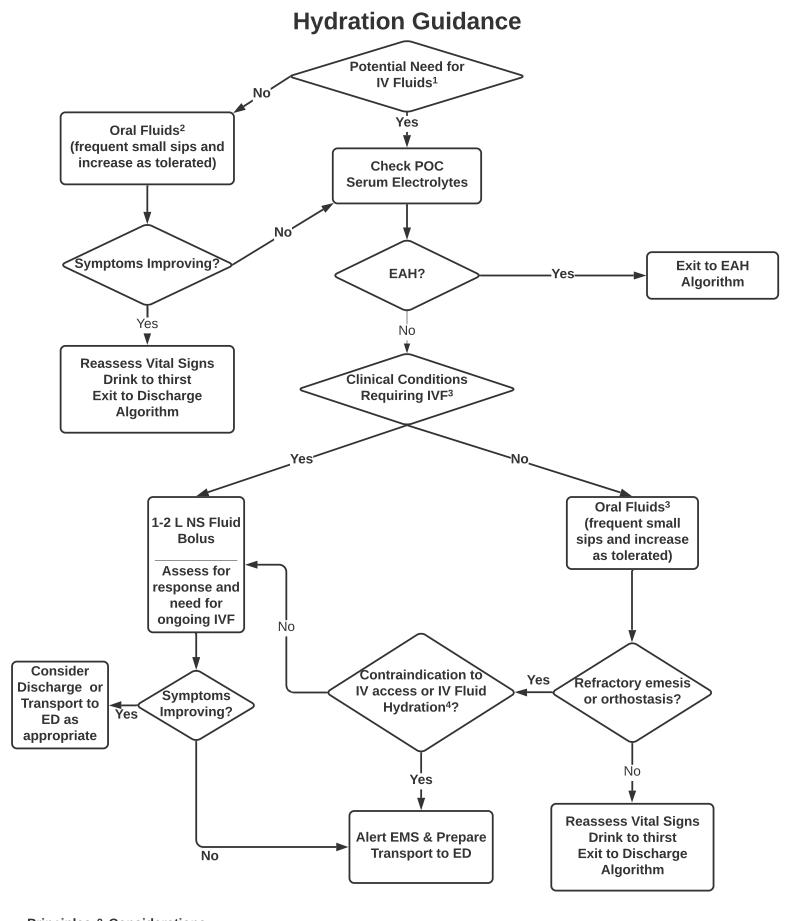


- 1. Severe Respiratory Distress- Tripod Position, 2-word sentences, stridor, cyanosis
- 2. Exercise Induced Hyperventilation
 - Common cause of shortness of breath in athletes, especially at the finish line
 - Contributing factors: new to event, sprinting to finish, faster pace than usual; acidosis --> anxiety .->hyperventilation
- Characteristics include:chest tightness, lightheadedness, perioral/hand/foot paresthesias, carpo-pedal spasm, nausea +/- vomiting; O2 sats will be normal; lung exam will reveal good air entry, and clear breath sounds,
 - May have referred vocal cord sounds (louder on ascultation of the larnyx); Instruct patient to stop making noise
- * Bronchospasm can limit airflow and wheezing may be louder after albuterol treatment
- * Albuterol may cause tachycardia and may lower serum potassium
- * Aid stations have limited supply of inhalers-- DO NOT give inhaler away; If no spacer available- improvise by cutting a hole in a plastic water bottle, cup, or toilet paper roll

Allergy/Anaphylaxis



- 1. Anaphylaxis is HIghly Likely with rapid onset of symptoms (over minutes to hours) and with 2 or More of the Following Symptoms after exposure to allergen
 - Respiratory Compromise: wheezing, cough, stridor, shortness of breath, choking, or throat closures
 - Hypotension and End Organ Dysfunction: syncope, hypotonia, dizziness, collapse
 - Skin or Mucosal Symptoms: Hives, itching, flushing, swelling of mouth, lips, tongue, or uvula, peri-orbital edema
 - Gastrointestinal Symptoms: nausea, vomiting, diarrhea, crampy abdominal pain
- 2. Epinephrine dose for adults is 0.3mg and should be given IM in the anterior/lateral thigh
 - If using an auto-injector- hold for 10 seconds after activating the device
 - Pediatric patients can use an adult auto-injector if needed.



- 1. Dehydration, hypotension, orthostasis, severe muscle cramping,
- 2. Electrolyte drinks are preferred, but high sugar content may affect tolerance, consider concurrent salt replacement/salty foods if heavy sweating, salt lines on clothes, or salt crusting on skin
- 3. Conditions which may require IVF: DKA, EHS, Severe Rhabomyolysis, AKI, EAC with Sickle Cell Trait
- 4. Celluitis at site, obvious signs of fluid overload (e.g., pulmonary edema) warrant precautions

Discharge Considerations

General Discharge:

- 1. Provide a copy of the medical encounter form to the patient
- 2. Ensure patient's information is correct in the medical database
- 3. Recommend follow up with an appropriate provider
- 4. All patients should be given instructions, precautions, and warning signs, and should understand under which conditions they should seek emergency care.
- 5. Patients should be discharged with dry clothing if at all possible
- 6. Patients who have received sedating medications (including diphenhydramine) should not drive home; should be discharged to the care of a responsible adult

EMS Transfers:

- 1. Provide a copy of the medical encounter form to the patient and EMS
- 2. Notify Medical Information Tent of the transfer
- 3. Notify Medical Director/Coordinator of the transfer

Pediatric Patients:

- 1. Notify guardian/emergency contact as soon as the patient arrives in the Medical Tent
- 2. Relase patient to parent/guardian only
- 3. Provide a copy of the medical encounter form to the parent/guardian

Signing out Against Medical Advice (AMA)

- 1. Ensure the patient signs the encounter form with "AMA" circled
- 2. Provide a copy of the medical encounter form to the patient
- 3. Notify Medical Director/Coordinator about patient signing out AMA
- 4. Flag the encounter in the medical database

Exertional Heat Stroke

- 1. Ensure temperature remains between 95.5F- 102F (35C-38.9C) prior to discharge
- 2. Notify Medical Director/Coordinator of injury and max. temperature
- 3. Ensure all temperatures/labs/data are entered into the medical tracker
- 4. Flag the encounter in the medical database

Exertional Hyponatremia

- Ensure that POC lab values are entered into the medical tracker
- 2. Recommend follow up with appropriate provider

Exercise-Associated Muscle Cramps

- 1. Provide precautions regarding muscle soreness and worsening symptoms
- 2. Recommend gentle stretching, oral hydration, and salty foods for 24 hours

Hypolycemia

- 1. Ensure that POC lab values are entered into the medical tracker
- 2. Ensure patient is NOT on a long acting hypoglycemic agent
- 3. Patient must have normal mental status, no focal neurologic deficits and should be tolerating PO and can eat a full carbohydrate meal

Respiratory, Alergy/Anaphylaxis

- 1. Instruct patient to seek support immediately if symptoms recur, many patients will need additional doses of medication
- 2. Instruct patient to avoid known allergens