

Marathons
4/17/2017

One of the best events you can volunteer for as a medical student is your local marathon. You learn about musculoskeletal injuries, heat injuries, electrolyte emergencies, as well as prepare yourself for the occasional seizure, cardiac arrest, and case of anaphylaxis. You learn procedures like starting IVs, obtaining vitals, and basic wound care. It really is a great place to learn the basics of Emergency Medicine. In this episode, we will discuss marathon related emergencies.

If you remember one thing from today: **screen for Altered Mental Status (AMS)!**

5 things to look for when evaluating a marathon athlete:

1. Screen for **AMS**:
 - a. Pt with AMS: confusion, agitation, etc. (continue to step 2)
 - b. Pt w/out AMS: nausea, leg cramps, etc (treat supportively)
2. Check **rectal temperature** for hyperthermia
 - a. Pt with AMS + temp > 104F = Heat Stroke
 - i. Tx: Cool them NOW. Ice bath immersion.
 - ii. Better to over-diagnose than under-diagnose
 - b. Pt with AMS + temp < 104F (continue to step 3)
3. Check sodium for **Hyponatremia**
 - a. Pt with AMS + temp < 104F + low sodium = Hyponatremia
 - i. Counterintuitive, running and sweating does NOT = hypernatremia
 - ii. Can lose salt in sweat
 - iii. Can rehydrate too frequently (free water or Gatorade)
 - iv. Tx: Hypertonic saline
4. Check sodium for **Hypernatremia**
 - a. Pt with AMS + temp < 104F + high sodium = Hypernatremia
 - i. Pure dehydration from standing around (evaporation)
 - ii. Tx: Rehydration
5. Check **urine**
 - a. Rule out **rhabdomyolysis**
 - i. Tx: Give fluids. Stop running.