

Clinical Scenario Dehydration

Scenario:

36 yo male, construction worker, co-workers found him acting 'strangely' sitting on the ground. Heat index 110.

Initial vital signs: T 102.5, HR 140, BP 172/104.

ED Course: Confused AAOx1, flushed skin, IVFs X 3 liters then 75cc/hr

IVFS X 3 liters then 75CC/hr

Initial Labs: K 5.4, Na 146, Creatinine 1.4 (0.8 baseline), Lactate 2.2

At Time of Decision:

+ Vomiting, doesn't want to drink PO

Medical Hx: negative

Vital Signs: T 99, HR 112, BP 150/60, AAO x3 **Labs:** K 4.8, Na 147, Creatinine 1.4, WBC 12k

Recommended Workflow

- C- Consider appropriate care setting
 - Hospitalization
- A- Ask what the principal diagnosis is?
 - Dehydration
- R- Review INPT guideline first, then OBS
 - INPT Criteria NOT Met -> toggle to OBS
 - OBS Criteria MET
- **E-** Enter bed status / level of care order
 - Observation
- D- Document criteria in medical record

12 hours later, MD re-evaluates:

Persistent nausea, no urine output despite IVFs, creatinine 1.8, Na 154 HR sustained 106-115

Re-evaluation

- 1. Patient presently in OBS status
- 2. Review "Dehydration" INPT: met
- 3. Place INPT order
- 4. Document change in status with selected criteria in medical record

INPATIENT

- ☐ Unstable VS
- ☐ Persistent vomiting despite care
- ☐ Severe dehydration, one:
 - ☐ Findings, one:
 - acute weight loss > 5%
 - unstable VS
 - ☐ ARF (stage 3)
 - ☐ AKI (stage 2), one:
 - ☐ Creatinine X 2 rise
 - □ >50% eGFR
 - ☐ low urinary output
 - ☐ AKI requiring INPT admit, one:
 - ☐ unstable VS
 - worsening labs (creatinine)
 - AMS
 - ☐ Cardiac arrhythmias
 - Severe hypertension
 - Respiratory findings***
 - ☐ Abnormal electrolytes***
 - Metabolic abnormality***
- Na > 150 mEg/L
 - ☐ Dehydration persistent, one:
 - □ oral rehydration inadequate
 - ☐ IVFs not readily correcting
- AMS, severe
- ☐ Severe abnormal electrolytes, all:
 - □ not acceptable post treatment
 - ☐ Severe levels (see criteria)
- ☐ Needs IVFs, unable to maintain oral hydration during OBS care
- ☐ Parenteral nutrition regimen that must be implemented on inpatient basis

***Significant, despite obs care received

OBSERVATION

- ✓ VS abnormality**
- Vomiting persists despite ED care Electrolytes not corrected in ED
- □ **A**MS
- Oral hydration unclear, IV support needed

Teaching Points

- Always use specific diagnosis before using general guidelines. Heat stroke is in "systemic or infectious general guideline" but in this case "dehydration" is more appropriate.
- OBS admit appropriate since VS, labs and patient overall condition improving with treatment received in ED.
- Once patient condition fails to improve or worsening, it is appropriate to review the INPT guideline to determine if conversion from OBS to INPT is appropriate





