11/10/24 Morning Report with @CPSolvers

"One life, so many dreams" ***Case Presenter****: HeeMun(@)* ***Case Discussants****: Maddy (@) and Elena (@)*

CC: 38 y/o F presents with seizure, AMS, and lower extremity weakness.

HPI: 2 weeks earlier, she had been on a family trip to Hawaii where she experienced sore throat, abdominal pain, N&V. she was admitted for three days and discharged. In patients chart she described abdominal pain as " like thousand of hot inflamed knives stabbing my stomach" and blamed it on the seafood from first day of the trip . since then she has eaten very little. 2 weeks later she experiences seizures and reported weakness in her LL for one day. She has lost 10 pounds over the past month due to decreased appetite .ROS: +Constipation, no fever, no joint pain, no hematuria , no diarrhea, no skin rash.

PMH:
IBS
Endometriosis
Recurrent UTI

Meds:
OCP

Fam Hx:
none

Soc Hx:
Lives in Utah , originally from Brazil(10 years ago)

Health-Related Behaviors:

No smoking or alcohol

Allergies:

Vitals: T: afebrile **HR:** 100 **BP:** 150/80 **RR:** 20 SPO2 98%

Exam:

Gen: confused and disoriented

HEENT: no icterus , no pupil abnormality , moist mucous membrane no cervical LN

CV: nl **Pulm:** nl

Abd: no tenderness, no rigidity, no rebound tenderness, no HPS

Neuro: decreased deep tendon reflexes, decreased sensory and motor function, AMS , strength ⅗ in LL limbs no cranial nerve involvement

Notable Labs & Imaging:

Hematology:
WBC: 8.5 (nl diff)Hgb: 11 Plt: 200k MCV 77

Chemistry:
Na:113 K:3.5 Cl:73 HCO3: 24 BUN:18 Cr: 0.9 glucose:105 Mag: 1.5 (mildly dec) Ca 8.5, Phos: 2.5 , nl LFT.
Serum Osm 244 L, urine osm 470 H , urine Na 128 H , urine K 25, urine Cl 113 H , TSH nl 3.2, morning cortisol 23 nl
HIV,TB, heavy metals : neg , B1,B12,Folate nl , mild Iron def, urine porphobilinogen and autoimmune tests neg.
Started hypertonic saline 3% for AMS, patient was improving and discharged , but returned 2 weeks later with severe abdominal pain and seizure treated with midazolam and later phenytoin. Condition worsened and required intubation. Mother reported similar symptoms .

Imaging:
EKG: nl CXR: nl
Brain and spine MRI : showed no structural changes or ischemia
AXR: constipation with bowel dilatation or signs of mild ileus.
Dark urine via catheter was noted, patient improved when given glucose.
Urine porphobilinogen test was +

Dx: HMBS gene mutation detected, AIP

Problem Representation: A 38 Y/O F, who presents with seizure,AMS, LL weakness. The patient also complains of abdominal pain and N,V. labs show picture of SIADH ,mild anemia, and hyponatremia. AXR showed constipation and urine porphobilinogen was positive. Final dx: AIP

Teaching Points::

- AMS: how long has it been going on? Hyperacute: intracranial. Acute: M(metabolic: electrolyte disturbances), I (inflammation: infectious & non infectious: pneumonia, uti, sepsis) S (structural: subdural hemorrhage) T (toxins & medication side effects) - *also useful for seizure*
- LE weakness: CNS, myelin, NM junction, muscles. Is it b/l? Time course? True motor weakness or generalized fatigue?
- UMN or LMN? - decreased deep tendon reflexes —> LMN
- It's important to find out what the patients baseline and go deeper into order of events.
- was abdominal pain isolated or is it still going on?
- Confused and disoriented- how did she get to the emergency?
- Consider acute intermittent porphyria (abdominal pain, mental status changes, constipation) or GBS (LE weakness preceded by abdominal pain)
- Low Na can cause cerebral edema bc of water toxicity so it's important to confirm if it is true HypoNa by checking the serum osmolality —> urine osmolarity to find out if it is an ADH dependent (if high) or ADH independent (if low) process —> Urine Na
- This patient has low serum osmolarity & high urine osmolarity—> hypotonic hyponatremia, ADH dependent —> could be SIADH —>imaging of the brain to make sure we don't miss any intracranial process
- Meningoencephalitis is also a possibility (seizure, AMS, tachycardia) like West Nile virus
- Central (seizure AMS) & peripheral (neuropathy) s&s: where is the problem located? What connects them? Eg. Postinfectious transverse myelitis or paraneoplastic syndrome
- Starvation triggers AIP, also explains the hematuria. Phenytoin can also trigger AIP (which was given here)