# 1/17/23 Neuro Morning Report with @CPSolvers

***Case Presenter**: Yazmin Heredia (@minheredia ) **Case Discussants**: Kiara Camacho (@kiaracamacho96 ) and Maria Aleman (@mariamjaleman )*

**CC**: 39 year old male with lethargy and myoclonic jerking.

The px fiance reports he was newly diagnosed with colorectal CA with METS lesions to the liver and received his first dose of **FOLFOX (leucovorin calcium, FU, oxaliplatin)**, two days prior to presentation.
Since receiving chemotherapy, **he reported fatigue that progressed to disorientation** and the development of myoclonic jerking involving BOTH his upper extremities that lasted several minutes.
The lethargy **continued to progressively worsening therefore he was taken to the ER**
Fiance denied him complaining of fever, headaches, chest pain, shortness of breath, abdominal pain, nausea, vomiting and dysuria.

**PMH**: Essential HTN, Non insulin dependent DM 2, CKD (Cr 2.1), Colorectal carcinoma with mets to the liver. Recent colonoscopy and liver biopsy.
**Meds**: Hydralazine, Carvedilol, Amlodipine, Glipizide

**Fam Hx**: Denied fam hx of neurodegenerative dz, no seizures. Mother has lupus.

**Soc Hx**:

**Health-Related Behaviors**: No EtOH, No smoking.

**Allergies**:

**Vitals**: **T**: 37,3 C 98,6 F **HR**: 96 **BP**:211/114 **RR**:28 **$SpO_2$**: 87% -> 95% on 3L
**Exam**:
General: Somnolent, decreased work of breathing, acute distress. **Lung:** fine rales bilaterally in mid posterior lung fields.
**CV:** RRR, no MGR.
**Neuro**
- **Mental Status:** Disoriented to time. Slow speech.
- **Cranial Nerves:** Pupils equal, reactive to light, EOM intact, no trauma to tongue, no facial asymmetry.
- **Motor:** Spontaneous movement. Unable to assess strength.
- **Reflexes:** +1 in upper and lower extremities.
- **Sensory:** unable to test.

**Notable Labs & Imaging**:
**Hematology**:
WBC: 12,3 Hb: 8,1 Plt: 502 000
**Chemistry**:
Na:138 K: 4.6 Cl: 98 BUN: 53 Cr:3,7 Glucose: Ca:8.9 P:6.3 Mg:1.3 ALT:107 AST: 109 T.Bili:0.4 ALP:204 Total protein:7.3 Albumin:3.6
Lactate: 1 Uric acid: 13,8 Ammonia: 10 Troponin peak: 0,10
TFT: normal
Blood cultures: negative HSV, HIV, Hep panel: negative.
**Lumbar puncture:** RBCs 20, Glucose: 104.

**Imaging**:
MRI w/o contrast: diffusion signal abnormality b/l hemispheres compatible with PRES.

**Final Dx:** PRES

**Problem Representation**: 39yoM w/ metastatic CRC s/p FOLFOX QT, CKD2, HTN presenting w/ progressive AMS and myoclonus of UE, w/ vitals notable for BP 211/114 and nonfocal exam.

**Teaching Points (Laura 😈)**: #EndNeurophobia
- **Movement disorders:** characterize the movement.
  👀Observe the patient when he's not paying attention.
  Main categories: Hyperkinetic/hypokinetic
- **Myoclonus:** rapid jerking movement of a muscle across a joint in a rhythmic way. All over the body or focal.
  💥Causes:
  - Primary neurologic: myoclonic epilepsies
  - Systemic conditions: cardiac arrest, renal failure (metabolic conditions)
  - Medications: opioids, SSRIs
- **Lethargy:**
  Tired/sleepy -> narcolepsy? Depression in level of consciousness? Renal /liver failure or intoxication?
- **PMH: cancer** -> metastasis to CNS? Complications of meds? Paraneoplastic or autoimmune disorder?
  Immunocompromised -> opportunistic infections
  🔥 Neuro manifestation + cancer PMH = cancer is **probably** involved in the presentation!
- **Folfox:** peripheral neuropathy, mainly sensitive.
- **Blood pressure**: herniating? -> pupils wouldn't be working.
  💣Cushing reflex (increase in blood pressure a reflex to brainstem ischemia in increasing ICP from intracranial hemorrhage, mass effect from a tumor, cerebral edema, etc)
- **PRES (**Posterior Reversible Encephalopathy Syndrome): headache, AMS, seizures, visual disturbance.
  Causes: primary/secondary HTN, chemotherapy, eclampsia
  Imaging: Leukal encephalopathy - not always in the posterior region.
  🔥Not always reversible! + assoc. w/ CKD
- Hypercoagulable state (Cancer) -> Venous sinus thrombosis -> cerebral edema -> general encephalopathy