



07/07/21 Morning Report with @CPSolvers



Case Presenter: Zaven Sargasyan (@sargsyanz) **Case Discussants:** Kirtan Patolia (@KirtanPatolia) and Ann Marie Kumfer (@AnnKumfer)

CC: 61 yo M came to the hospital w/ facial twitching

HPI:
1 week ago- Admitted to the hospital and diagnosed w/ gluteal abscess. Rx w/ required and antibiotics. Discharged w/ levofloxacin. 2 days ago - twitching started initially on the face and then myoclonus on extremities. The symptoms increased in frequency during the CD.
No other neurologic symptoms. No pain.

PMH:
CKD stage 5 not yet on dialysis

Meds:
Levofloxacin, Sodium bicarbonate, Calcium, Vit D Sevelamer, Nifedipine, Multivitamins.

Fam Hx:
None

Soc Hx:
Retired. No smoking or alcohol consumption. No drugs.

Health-Related Behaviors:
None

Allergies:
None

Vitals: T: HR: BP: RR: SpO₂: nl

Exam:
Gen: Oriented in person, space and place. Able to walk w/o difficulty.
CV: Cardiac murmur.
Pulm: Lungs fields clear to auscultation
Abd: No abnormalities.
Neuro: Hyperreflexic. Constant facial twitching and UE myoclonic movements.

Notable Labs & Imaging:
Hematology:
WBC: nl Hgb: Plt:

Chemistry:
Na: 135 K: 5.5 Cl: nl CO₂: BUN: 96 Cr: 6.6 (previous records 5-6) glucose: nl. Corrected Ca: 7.1 (previous records similar values) Phos: 4.5 Mag: 2.2
AST: ALT: Alk-P: T. Bili: Albumin: a little low.

Imaging:
EKG: unremarkable
CXR: unremarkable.

Clinical evolution: Twitching and UE myoclonus improved.
Further medical history: Patient took double dose relative to the prescribed.

Final diagnosis: Myoclonus due to FQ overdosing

Problem Representation:
61yoM w/ PMHx of stage 5 CKD presents w/ facial twitching, UE myoclonus and no other neurologic symptoms. Recent taking of levofloxacin due to a gluteal abscess.

Teaching Points (Gabriel):

- **Facial twitching + CKD:**
 - Electrolyte abnormalities (hypocalcemia, hypomagnesemia), hemodynamic instability, medication side effect (inquire about dosing, time, contraindications)
 - FQs side effects: Encephalopathy, myoclonus, tendinopathy, QT prolongation, GI upset, C. diff diarrhea.
- **Myoclonus:** primary neurologic insult vs secondary (infections, electrolyte disturbance, meds).
- **Sevelamer:** phosphate resin binder. Hyperphosphatemia binds Ca⁺⁺ → hypocalcemia.
- **Uremia - neurologic manifestations**
 - Neuropathy
 - NMJ disorders.
 - Encephalopathy. Basal ganglia affected.
- **Hypocalcemia**
 - PTH mediated or non-mediated (CKD, vit D deficiency, Mg deficiency, rare → pseudohypoparathyroidism calcium deficiency)
 - Clinical signs: Chvostek, Trousseau
- **AMRF (Action myoclonus-renal failure syndrome):** Progressive myoclonus associated with renal dysfunction. Fatal if left untreated.