5/22/26 Morning Report with @CPSolvers

"One life, so many dreams" ***Case Presenter****: Victor Lopez(@)* ***Case Discussants****: Rabih(@) & Noah(@)*

https://clinicalproblemsolving.com/present-a-case/

Scribing (Lukas)

CC: 52 yo male p/w AMS 1x episode suspected seizure

HPI: EMS transportation to ED from rehab facility; jerky movements in upper and lower extremities; rhythmic movement, urinary incontinence; no history possible
Infos from charts reviewed;
Few months prior documented seizure, declined transportation then
Multiple relapses in rehab center
Recently finished "30 day black out phase". The day before presentation he went out of that backup period and left the facility.

PMH:
Seizure history
Alcohol, marijuana, opioid & cocaine use
Dyslipidemia
Vitamin d deficiency
Untreated hep C
Asthma
T2DM

Meds:
Atorvastatin 20 mg
Bupropion 150 mg
Buspirone 5 mg
Gabapentin 300 mg 3x daily
Keppra 1000 mg
Prazosin 2 mg
Chantix 1 mg
Methadone 120 mg
Glipizide 5 mg
Hydroxyzine 50 mg
Advair 250/50 mcg 1 puff BID
Vitamin D3 50 mcg

Fam Hx:

Social Hx:

Health-Related Behaviors:
Smoking history
Drugs opioids, cocaine, marihuana

Allergies:
penicillin

Vitals: T: - **HR**: 43-120 **BP**: 142/97 **Sat**: 96% 4l nasal canula **BMI**: **RR**: 25
Exam: Gen: awake, agitated, sweaty
HEENT: nl
CV: tachycardia followed by bradycardia
Pulm: coarse breath sounds
Abd: soft, non tender non distended
Neuro: pupils 10 mm bl; oriented 0x, spontaneous extremity moving; unable to follow commands, engage or answer any questions
Extremities/skin: no deformities

Notable Labs & Imaging:
Hematology:
WBC: 16.45 Hgb: 14.8 Plt: 114
Chemistry:
Na: 137 (corrected) K: 3.3 Cl:105 HCO3: 16 Cr: 0.54 BUN: 7 Glucose: 430 Ca: Mg:1.6
AST: 287 ALT: 170 Alk-P: 8 Bili: 1.6 Albumin: 4 Total Protein: 7.9 Ammonia: 58 Anion Gap: 9; Beta hydroxybutyrate: 0,09 (neg) Albumin: 4 tProtein: 7,9 Trop: neg 2x
UTox: pos benzos, methadone; else neg
Screening ethanol, salicylates, acetaminophen: neg
ECG: normal sinus rhythm, Q-waves in inferior leads, long qTC 558 ms (first ecg)
CXR: wnl
cCT: wnl
Echo: 55-60% EF, mitral, tricuspid and pulmonary regurgitation
Repeat ECG: normal SR, pvc and qTC 616 ms
Course: ED course severely agitated; greenish diarrhea episodes; gave multiple doses of benzos; midazolam 5 mg, ativan 2 mg. Diazepam 10 mg i.v. -> no agitation resolution
MECU Consult: deferred starting olanzapine due to qTC prolongation-> ICU step down unit, one on one monitoring -> IMC
Less agitated. More reoriented; non sustained Vtach, resolved spontaneously
-> **MICU**
Facility call: check of belongings -> K2 (spice) synthetic cannabinoid;
Course: treated with iv mag (12 g total for hospital course), benzos, qTC improved to normal
Dx: K2 spice intoxication

Problem Representation: 52 yo male p/w AMS and seizure (with previous seizure hx) from a rehab facility under polypharmacy with sympathetic overdrive symptoms, prolonged qTC turned out to have K2 spice intoxication.

Teaching Points (Anmolpreet)
I. AMS in patient with toxin/drug use or psychiatric disorders; should be evaluated removing the diagnostic bias as we might miss important pathologies. **First steps - ABC**
II. AMS - MIST - Metabolic | Infection | Structural | Toxin
III. Generalised seizure: higher probability of intrinsic neurologic disease- hereditary (channelopathies), tumor, polytrauma
Expected consequences: postictal confusion, repeat seizure, non-convulsive status epilepticus.
Substance > Structural
IV. Pupillary dilatation with diaphoresis: raises concerns for a sympathomimetic/ adrenergic response, especially in cases of polypharmacy.
V. Localisation in brain: 2/2 agitation, we are concerned for limbic system (basal ganglia)
VI. Sympathetic toxicity : Benzodiazepines are the go-to drug.
Agitation (?delirium): Haloperidol like antipsychotics is recommended
Both together? Benzodiazepines >> Haloperidol *(clinical context)*
The conditions in which sympathetic toxicity needs more than a BZD:
- Serotonin syndrome / NMS *- Cyproheptadine / Dantrolene*
- Agents on GABA-B receptors: *2 substances - Baclofen withdrawal, GHB intoxication - treat with baclofen*
- Clonidine mimics *- xylazine is an adulterant in fentanyl - treat with dexmedetomidine*
VII. K2: full agonist of cannabinoid receptors, increase sympathetic surge. TdP in K2 involves blockade of potassium channels, specifically hERG channel,