7/26/24 Morning Report with @CPSolvers

"One life, so many dreams" Case Presenter: Maddy (@MadellenaC) Case Discussants: Rabih (@rabihmgeha) and Reza (@DxRxEdu)

CC: difficulty walking

HPI: 41 yo male brought into the ER in wheelchair. Difficulty walking and leg weakness. Smoked crack cocaine and few hours later started noticing leg weakness suddenly.
Not wheelchair bound at baseline.
No recent falls.
ROS (-): chest pain/SOB, sensory changes, n/v, diarrhea, headache.
Hasn't urinated since day prior.

PMH: Schizophrenia vs schizoaffective disorder - not on any medication. Several digits amputation.

Meds: none

Fam Hx: unknown

Soc Hx: unhoused, lives in the street. Food insecurity.

Health-Related Behaviors: Smokes 1 pack of cig/day. Smokes cocaine weekly

Allergies: none

Vitals: **T:** **HR:** 92, **BP:** 110/90, **RR:** 20, **SpO2** 96% on RA, **BMI** 18
Exam:
Gen: ill appearing, flat affect
HEENT, CV, Pulm: normal
Abd: soft, non tender, non distended
Neuro: bilateral lower extremity weakness, ⅖ proximally, ⅗ distally. Cranial nerves normal. No sensory changes.
Extremities/skin: several digits amputated. No edema. Chronic wounds in extensor parts of elbows.

Notable Labs & Imaging:
Hematology:
WBC: 12.600 (diff nl), Hgb: 12.3, Plt: 119.000

Chemistry:
Na: 129 K: 5.2 (progressed to 5.8) Cl: 102 HCO3: 10 Glucose 60, BUN: 52 Cr: 6.3 (previous 4 years before, 0.9), Anion gap 17, calcium 5.6, iCa: 0.9, Mag: 2.4, Phos 7.8
CK 162,000 (peak 205.000), AST 1000, ALT 262, LDH 4063, UA 19.7, CRP 100
TSH nl, HIV neg, Urine drug screen not performed

Imaging:
EKG: sinus rhythm, PR nl, narrow QRS with mild peaked T waves, QT 524
Bladder scan: 140cc
Renal US: no hydronephrosis, trace bilateral perinephric fluid.

He was given allopurinol, Lokelma, calcium gluconate and fluids. Underwent emergent dialysis, with improvement in renal function.
He had persistent negative psychiatric symptoms (affect was flat).

Dx: **rhabdomyolysis due to cocaine**

Problem Representation: 41 M p/w difficulty walking and leg weakness, inability to urination, with history of cocaine abuse disorder, found to have lower extremity weakness and elevated CK.

Teaching Points (Parisa):
Approaching **difficulty in walking** → identify baseline functional status; sequence of events(tempo)
Inability to walk: focal neurological problem
Weakness vs asthenia; neuromuscular lesion vs chronic condition
Severe bl lower extremity weakness : nerve root (radiculopathy); spinal cord (myelopathy), cauda equina syn , muscle neuromuscular junction, muscle disorders
1.reflexes: Cord issue (reflex high); cauda equina syn (low reflex); muscle problems (normal)
2.autonomic dysregulation(vital sign cardiovascular dys); lack of urination (PVR; MRI w/ gad)
3.Muscle disorders: CK; BMP (K, P) acute myopathy
4.Kidney injury: high (Cr; K) ; low Na/ AKI incompatible w/ neurological exam
5.Urinary retention w/o abdominal distention might be a clue to muscle problems.
Chronic kidney dx accompanied with sarcopenia; low BMI; Cr never high; food insecurity and cachexia
Lack of urination: macroscopic tubular occlusion(crystalopathy); urethral obstruction (height of Cr); CK (rhabdo)
When CK is elevated other lab elements lose their importance.
Acute onset rhabdomyolysis: CK 5-10K; myoglobin causes kidney injury; causes : cocaine (substance); trauma; autoimmune necrotizing (statin); viral infection; TSH→ Mechanism: cocaine arterial vasoconstriction ischemia, sympathomimetics
Management: fluid 150-200cc/hr; increasing urine output; uric acid lowering agents (allopurinol & rasburicase); prevent crystallization; phosphate/potassium binders (lokelma)
Lab pattern compatible with TLS except elevated CK.