9/18/20 Morning Report with @CPSolvers

***Case Presenter**: Ravi Singh (@rav7ks) **Case Discussants**: Rabih Geha (@rabihmgeha) and Reza Manesh (@DxRxEdu)*

CC: Found down

HPI: 69 M found down, with loss of consciousness and in a pool of blood by neighbors. He did not remembered what had happened. He had bilateral paralysis of extremities that started 4 days ago, dysarthria, slurred speech and weakness in upper extremities

ROS: NO bleeding, GI bleed, fever, shakes. Only reported loose stools.

PMH:
HTN
Left DVT
IVC filter removed
Inguinal hernia

Meds:
Amlodipine
Oxycodone
Lidocaine
Ciprofloxacin due to UTI,
Mg oxide
Potassium chloride

Fam Hx:

Soc Hx:

Health-Related Behaviors:
No ETOH, no drugs

Allergies:

Vitals: **T**: **HR**: 90 **BP**: 90/50 **RR**:19 **SpO_2**: 95
Exam:
Gen:
HEENT: Dry mucous membranes.
CV: Regular
Pulm: CTAB
Abd: Large inguinal hernia, non tender, reducible. Diminished BS
Neuro: Dysarthric speech, followed commands, ⅕ strength, diminished reflexes. Visual fields and cognition intact. Hoffman and Babinski negative. Sensory normal
Extremities/Skin:Tenderness in the back and difficulty to move torso.

Notable Labs & Imaging:
Hematology:
WBC:14.43 Hgb:12 Plt:210

Chemistry:
Na: 146 K: 1.5 Cl: 109 CO2: 23 BUN:23 Cr:1.18 glucose: 96
Ca: Mg: 0.9 Lact 2.9

Imaging:
Head CT: Normal
Chest and abdominal CT: Enlarged LS1- compression fracture and sigmoid colitis.
Stool: C. Difficile positive.

Resolved hypokalemia w/repletion. He was already on supplements (K and Mg supplements). C Difficile treated
Final Dx: Hypokalemic periodic paralysis

Problem Representation: 69 M found down with loss of consciousness and blood. He had dysarthric speech, diminished reflexes and paralysis. His labs showed severe hypokalemia and no acid base disturbance. Final Dx: Hypokalemic periodic paralysis

Teaching Points (Maria):

- **Found down**: Think about time and possible triggers.
  - ABCs > Dx Think of Dx that can be quickly reversed (4S, sugar, drugs)
- **Blood as a clue!** How hard they fell.
  - Coag cascade: PT, INR. Be careful with hypothermia.
  - Plt: Pt count. Look out for vWF deficiency, ASA use.
  - Blood vessels: Trauma (*think proportionality!*). Primary disease. Venous stasis (venous hypertension: variceal bleed, varicose veins). Scurvy. Amyloidosis.
- **HTN + Neuro VD**: Vascular dementia, Hemorrhagic stroke, HTN Encephalopathy, Posterior Reversible Encephalopathy Sx.
- **Sudden Neuro Deficits** (Hyperacute vs Acute) **+ Thrombosis VD**: PFO, Bleeding..
- **Localization (Mental Status, Motor, Sensory, Autonomic)**
  - Bilateral paralysis: NM Axis *(Cortex all the way to NM Junct.)*.
    Use Reflexes to Further Lx: Low Reflexes: Spine, Peripheral neuropathy.. Normal Reflexes: NM Junct, Myopathy. Imaging can differentiate Spine vs Periph. Neuropathy
  - Dysarthria: Bulbar deficits - Brain Stem; Slurred speech: CN 9/10 Medulla; Loose stools: Myelopathy; Encephalopathy can occur after loss of consciousness as a consequence of the fall.
- **Colitis**: 4Is - Infection, Inflammation, Infiltrative, Ischemia.
- **Hypokalemia pH approach**
  - AB disturbances: Loss in GI tract, kidney (aldosterone, RTA)
  - No AB disturbances: Shifted into cells (hypoMg, albuterol, insulin, inherited channelopathies)
- **Hypokalemic periodic paralysis**: can be precipitated by large meal (insulin driven). Can be accompanied by thyrotoxicosis.