04/10/24 Morning Report with @CPSolvers

"One life, so many dreams" Case Presenter: Abeer Almusleh(@AbeerAlmusleh98) Case Discussants: Sharmin Shekarchian(@Sharminzi) and Jack Penner

CC: Hematuria

HPI: 50M chronic gross hematuria

Resides in care facility, typically maintains alertness and orientation to person, place and time.

Cystoscopy: Benigns

EM: Seizure

PMH (from daughter): HFpEF (50-60%), MI, Prostate cancer sp prostatectomy, Pancreatic pseudocyst sp open cystogastrostomy, HIV, GERD

Meds: Atorvastatin, Losartan, Gabapentin, Carvedilol, Quetiapine, Biktarvy (HIV).

Fam Hx: Unknown

Soc Hx: Alcohol, resides in care facility

Health-Related Behaviors

Allergies: Bactrim

Vitals: T: 36.4 **HR:** 79 **BP:** 170/111 **RR:** 25
Exam:
Gen: Awake, not oriented
HEENT, Pulm, Abd: Nl
Neuro: Alert, not oriented to place, or time. Decrease strength grip bilat and withdraws extremity to pain

Notable Labs & Imaging:
Hematology:
WBC: 8.8 Hgb: 13.3 Plt: 94 Coag PT 16.8 INR 1.4

Chemistry:
Na: 140 K: 3.8 Cl:106 HCO3: 20.8 BUN: 21 Cr: 1.56 glucose: 141 TP 8.3
Ca(ionized) 0.89 Ca 9.7 Alk-P: 188 AST, AST Nl Ammonia 65 PT 16.8 INR 1.4 GFR 51
Tox: Neg **UA: Heme** 3+ Trace leuk esterase, RBC 147 WBC 9. **Culture**: E coli
LP (2nd day): Unsuccessful due to dehydration.
CD4 479, viral panel <20

Imaging:
CT Head: Encephalomalacia, micorvasc changes, cortical vol loss.
CT Angio: No evidence of intracranial vessel occlusion or MAV, No carotid or vertebral stenosis.
EEG 24 h: Nl
Echocardio: No changes from previous
Chest Abd Pelvis: Bladder wall thickening 56 x 24mm cystic lesion in the pancreatic tail, Hepatic cirrhosis
MRI (2nd day): Watershed infarcts without corresponding carotid or intracranial atherosclerosis.
Final Dx: Posterior Reversible Encephalopathy Syndrome (PRES)
Follow-up:Cr improvement, resolving of MRI lesions, and discharged.

Problem Representation: Middle aged man with significant cardiac, cancer and HIV PMH p/W chronic hematuria, AMS and seizures in the ED. He was found to have watershed infarcts without atherosclerosis.

Teaching Points (Kuchal):
1. **Hematuria: nonglomerular causes:** Cystitis, tumor, stricture or Cancers, or infections. Stones
Glomerular causes : GN : Seizures +hematuria: - TTP/ HUS. MAHA
Hematuria with normal Cystoscopy: clotting disorder, Vascular issue. Glomerular cause; Disseminated infections, cancers.
2. Seizures: Important to consider the type of seizure; (focal, generalised) Management to be done as soon as possible: ABC, ; Benzo/ Ativan. Management is like that for AMS. - Mnemonic for the causes is MIST; Important to rule out seizure mimics. ECG (to rule out arrhythmias); Important to reevaluate the patient for any focality in neuro examin;
3. Helpful labs in this case: lactate, brain imaging. Toxicology screen. Blood work up to r/o underlying MAHA. LP. TEE (to look for Endocardial issue like Non infective endocarditis;
4. Presence of seizure: important to rule out if the cause is intracranial or due to extracranial cause. MRI of the brain is important;
5. Bladder wall thickening: r/o Infection, infiltration, obstruction in the lower urinary tract.
6. PRESS: Posterior Reversible Encephalopathy Syndrome. Degree of High Blood pressure; hyperintense lesions on T2 weighted images.