01/23/25 Morning Report with @CPSolvers

"One life, so many dreams" Case Presenter:Parisa (@parisabediii) Case Discussants:Rabih(@), Gerardo(@gerarlunap)

CC: 57 Y/F brought in with progressive confusion.

HPI: History Provided by son. Pt was in usual state of health, independent with ADL, starting 3 days ago become forgetful, making odd statements. Feeling like "brain was on fire"
10 days dx with conjunctivitis with keratitis received oral and topical agents, remained stable with redness, reduction in visual acuity.
Mentation was progressively worsened, becoming more confused with slurring of speech. She was having some delusions and hallucinations. Felt sx were similar to prior hypoglycemic episodes, blood glucose was normal.
Began to have jerks in her extremities with quick resolution. Recently sick with URI, temperature was 103F, did not happen again.
ROS: chills, dizziness, dry cough, N/V(+)
Diagnosed w/ left bacterial keratitis, started on ceftazidime, atropine drops, valacyclovir.
Microbiology: Haemophilus parainfluenzae.

PMH:
DM, HTN,
ESRD(3x week)
IDA, HLD.

Meds: Atorvastatin, furosemide,metformin, insulin, losartan

Fam Hx: HTN, HLD(Mom)

Soc Hx: lives in Houston, no recent travel
Health-Related Behaviors:

Allergies: Amlodipine swelling

Vitals: T: Afebrile 36.8c BP: 160/86(baseline) **RR:** 18 **HR**: 73 **Sat: 96@RA**
Exam: Gen: obese female, not in distress
HEENT: left eye conjunctival injection, serous discharge, No neck pain
CV: 2/6 systolic murmur throughout the precordium
Pulm: clear, B/L airentry(+)
Abd: soft, non distended.
Neuro: AAx2, able to move her limbs with occasional jerks, no focality. Normal neck movements.
MSK: no asterixis, left UE fistula with palpable thrill, warm, no rashes

Notable Labs & Imaging:
Hematology:
WBC: 8.1 (N:80%)Hgb:10 Plt: 200 MCV:94
Chemistry
Na: 138K: 4.3Cr: 8.1(baseline)BUN: 63Ca: 9.6Ph: Mg: Glu: 174
AST:nl ALT:nl, Alb nl
ABG: PH:7.39, PCo2: 37, HC03: 23
HIV, blood culture, RSV, influenza, covid Treponemal antibody: Neg
UA: no hematuria. Urine culture: Negative
Free T3, T4 : normal, lactic acid: Normal
Ammonia: nl, Salicylate: nl, EtOH:neg, Beta-Hydroxybutyrate: nl

Imaging:
EKG:NSR
CXR: Normal
CT brain: Normal, without any bleed.
On Med reconcile, **prescribed 1000 mg Valacyclovir instead of 500mg.**
Valacyclovir d/c and Hemodialysis continued. Patient was getting better with lack of fevers, improvement in her eye, MRI and Lumbar puncture were deferred.

Dx: **Valacyclovir induced Neurotoxicity.**

Problem Representation: 57Y/F with PMH of ESRD, recent Dx of bacterial keratitis presenting with Acute/subacute diffuse encephalopathy with myoclonus Dx as **Valacyclovir induced Neurotoxicity 2/2 to medication misdosage.**

Teaching Points: (Masah)
Confusion can be associated with **AMS**: MIST mnemonic: (metabolic, inflammation, Structural, Traumatic).

Ddx: localization x time course (not just in AMS, also applicable in other presentations eg. chest pain)

Confusion → doesn't mean diffuse cortical process
Confusion can be misinterpreted: frontal lobe involvement → personality change , Parietal lobe involvement → neglect, BG involvement → mood affected

keratitis: result of trauma (eg. contact lenses)
Keratoconjunctivitis → Viral infection or STI (gonorrhea, chlamydia, HSV, VZV)

Psychiatric disturbances + movement disorders → BG involvement → is it MRI +ve or -ve?
Slurred speech → aphasia (diffuse cortical issue) , dysarthia (BG issue)
If LP is being considered, MRI before LP bc leptomeningeal enhancement can occur as a result of trauma from the LP

ESRD can explain AMS due to metabolic derangements
ESRD + AMS: uremia, PRES (*check vision*), medications (*valacyclovir - nephrotoxicity from crystal deposition & neurotoxicity (mostly seen in acyclovir)*)

Cr in patients who undergo dialysis: Cr decreases after dialysis then gradually builds up again, so best marker of kidney function in dialysis patients is how frequently the patient does dialysis

Twitchy and confused: medication side effect or metabolic issue