02/11/25 Neurology Morning Report with @CPSolvers

"One life, so many dreams" Case Presenter: Dr. Sebastian Green *(@sebfgreen)* ***Case Discussants:*** Aye Thant *(@AyeThant94), Dr. Aaron Berkowitz (@AaronLBerkowitz)*

CC: confusion

HPI: 77M with hx of 2 punctuate strokes ~3 months ago, left CRAO, migraines on Botox. Progressive impairment in cognition (talking slowly, needs redirecting in conversation, unsteady, wears diapers, memory of recent events impaired, long term memory intact). Previously functionally independent.

ROS: weight loss 10 pounds, fatigue to the point he couldn't get out of the car. Wife called ambulance.
No weakness, numbness, headaches, abnormal mvt, seizures, trauma, medications

PMH: strokes, CKD, migraines

Meds: aspirin + clopidogrel switched to apixiban
Botox for migraines
Atorvastatin

Fam Hx: -

Soc Hx: retired professor

Health-Related Behaviors: does not smoke or use any drugs

Allergies: -

Vitals: T: afebrile **BP:** 112/56 **RR:** 20 **HR**: 53 **Sat:** 96%
Exam:
Gen: ill appearing **Neck**: no neck rigidity. **MSK:** no rashes
HEENT: Lt eye can count fingers, not reactive to light. Rt nl
CV, Pulm and Abd: wnl
Neuro: Awake. Not alert. Profound psychomotor retardation. Poor attention. Can't spell world backwards or serial sevens. Slow speech and dysarthria. Follows 2 step commands. Intact memory to remote events but impaired to recent events. Sensory intact.
Increased tone, strength 5/5, Rt upgoing plantar, Lt flat reflexes, 3+ reflexes at the knee, 2+ at ankle, slow but accurate coordination, unsteady gait.

Notable Labs & Imaging:
Labs:
CBC, ESR, CRP, LDH, Metabolic panel and Coagulation studies wnl
Thiamine and B12 nl, HIV and syphilis negative. Blood cultures negative

Imaging:
MRI w and w/o contrast: supra and infratentorial infarcts bilaterally, abnormal scattered, patchy and confluent foci of FLAIR signals in white matter.
MRA: no stenosis, aneurysm or occlusion
TEE and TTE: EF wnl, no vegetations
PET scan no evidence of malignancy

LP: clear CSF, opening pressure 18, 1 RBC, 3 WBC, protein 101, glucose 61.
Oligoclonal bands, paraneoplastic panel, meningoencephalitis panels and VZV IgG negative
Cytology: pleocytosis (lymphocytes and monocytes)

Cerebral angiogram: mild atherosclerotic narrowing. diffuse multifocal areas of narrowing and dilation concerning for vasculopathy.
Brain Biopsy: intravascular large B cell lymphoma

Dx intravascular large B cell lymphoma

Clinical course: pt continued to have strokes during the admission. Started on R-CHOP chemotherapy. Pt gaining weight.

Problem Representation: 77M presenting with multiple strokes and subacute confusion and cognitive decline over the period of 2 months.

Teaching Points (Gerardo):
Confusion: time course is key, mostly medical > psych > neuro, 1st approach: MIST mnemonic (metabolic, infectious, structural, toxin), post-ictal phenomenon from a seizure, psych, can be drugs (opioid, alcohol, amphetamine, cocaine withdrawal), it can also be confused with aphasia/amnesia
Assessment of AMS: 1st is attention (can bias the rest of the exam)
Rapidly progressive dementia: CJD, stroke, autoimmune (tend to be antibody mediated): Hashimoto's encephalitis, can be chronic if the history is bad

Stroke causing confusion: bl frontal lobe, **Percheron artery occlusion**, hemorrhagic stroke, vascular dementia (2 flavors: a) chronic microvascular injury in periventricular white matter and deep gray matter, b) strategic stroke)
Stroke: heart (thrombus), blood vessels (arteriolosclerosis, carotid stenosis, DVT with PFO, amyloid angiopathy), blood (hypercoagulability: intravascular lymphoma, cancer, pregnancy, systemic diseases)

Basic dementia panel: electrolytes, vit b12, HIV, Syphilis, TSH & T4, toxicology screen
Asymmetric pupils: CRAO can cause them due to the retinal insult
Multifocal punctate strokes with different ages: vasculitis
Hypercoagulability panel: exclude malignancy, coagulopathy (PT, PTT, D-dimer, Factor V Leiden)
Cerebral angiogram: vascular malformation, vasculopathy, vasculitis (Dx is pathology)

Final Dx: intravascular large b-cell lymphoma, diagnosis with random skin biopsy, 2 phenotypes