10//21 Neuro Morning Report with @CPSolvers

***Case Presenter**: Maria Aleman - HDx case (@mariamjaleman) **Case Discussants**: Ravi Patel and Gabriel Talledo (@gabrieltalledop)*

CC: Episodic transient loss of consciousness

HPI: 72yM w/ loss of consciousness for the past year happening several times per month. The events are preceded by dizziness and almost always occur shortly after eating. They last seconds to minutes with a spontaneous return of consciousness and no confusion. No associated chest pain, palpitations or SOB.

ROS: He has frequent falls. He was walking independently one year ago and now requires the use of a walker. Also has urinary incontinence which has been progressive for the last 6 months. No dysuria, no pain and no sensation of full bladder.

PMH: Hyper - lipidemia, constipation

Meds: ASA, Simvastatin, Laxatives

Fam Hx:

Soc Hx:

Health-Related Behaviors:

Allergies:

Vitals: Afebrile

Exam:

Systemic: Normal findings**. Orthostatics:**

- Supine: 144/90 mmHg with a heart rate of 85
- Standing after 1m: 102/61 mmHg with a HR of 85
- Standing after 3m: 105/63 mmHg with a HR of 87

Neuro

- **Mental Status:** Alert and oriented. No hallucinations or delusions. MMSE 21/30 - difficulty drawing and word generation. Speech decreased, slow but easily understandable.
- **Cranial Nerves:** normal
- **Motor:** Coarse resting tremor in the hands, right > left. Increased muscle tone and cogwheeling.
- **Reflexes and Sensory:** unavailable.
- **Cerebellar:** dysmetria and dysdiadochokinesia.
- **Other:** Posture: unstable on feet, unable to stand unassisted to test Romberg. Gait: Very slow, shuffling wide based gait.

Notable Labs & Imaging:

CBC and BMP normal. Hgb A1c: Normal. Vitamin B12 and folate levels: Normal. RPR: Non-reactive. HIV: Negative

EKG: normal.

Imaging: MRI brain non contrast: normal.

Postprandial hypotension and orthostasis. Patient's parkinsonism responded only partially and briefly to escalating doses of levodopa.

Final Dx: Multiple system atrophy

Problem Representation: 72yM p/w chronic postprandial orthostasis and syncope and parkinsonism.

Teaching Points (Rafa): #EndNeurophobia

- **EPISODIC TRANSIENT LOC**

Syncope - decreased perfusion to the brain most often d/t drop in BP

Usually vasovagal syncope w/ prodromal symptoms - history is MVP!

Make sure to rule out malignant causes like arrhythmia (eg, ventricular tachyarrhythmia)

Seizure - side tongue lacerations, post-ictal episode, loss of sphincter - bowel/bladder incontinence, tonic-clonic episodes

Other causes: sugar (hypoglycemia), traumatic brain injury, intoxications, metabolic disturbances, conversion disorders, narcolepsy, and structural cardiac causes (eg, aortic stenosis).

- **FREQUENT FALLS + URINARY INCONTINENCE + LOC AFTER EATING**

Swallow (deglutition) syncope - neurally mediated situational syncope - swallowing results in excessive vagal stimulation - results in cardiac inhibition and bradyarrhythmias.

Frequent falls and urinary incontinence - Parkinson plus syndromes (Lewy body syndrome, MSA), frontal gait disorder

- **PE SHOWING ORTHOSTATIC HYPOTENSION / DECREASED AND SLOW SPEECH / CEREBELLAR FOCAL FINDINGS**

Orthostatic hypotension: drop in BP on standing from the supine position (>20 mm Hg systolic and/or >10 mm Hg diastolic).

Vasodilators (a-1 blockers), volume depletion (diuretics, adrenal insufficiency) , and sympathetic blockade (metoprolol)

Parkinson disease/ parkinsonism - cerebellar focal findings are unusual

Levodopa can be used a tool for the diagnosis - patients can get better

Romberg sign - test of proprioception used to distinguish sensory from cerebellar ataxia. If positive - sensory ataxia! Defect in posterior column or neuropathy (vitamin B12 deficiency)