3/01/22 Neuro Morning Report with @CPSolvers

✨✨dDO✨✨ ***Case Presenter***: *Seyma Yildirim (@seymss15)* ***Case Discussants***: *Suresh Reddy (@sureshred31) + Nitya Kumaran*

CC: Fine motor impairment of R hand for 3y.

HPI: 69yF w/worsening fine motor impairment of the R hand - difficulty in dressing, eating, using computer mouse. Used to work a lot with computers. Also refers decline in short term memory which worsens in stressful situations and trouble in finding words. All the symptoms have been present for the last 3 years.

Started after her sister had a MVA which temporarily impaired the sister's ability to move her arms.

ROS: Weight loss (8kg/2m) thought to be 2/2 gluten free and vegan diet.

PMH:
Tonsillectomy

Meds:None

Fam Hx:
Mother - DM1
Father - HTN

Soc Hx: Lives together with husband and daughter.

Health-Related Behaviors: Hasn't consumed alcohol for the past 8 months. Before consumed approx 1-2 glasses of wine daily.

Allergies:None

Vitals: Stable
Exam:
Neuro

- **Mental Status:** AxO, no hallucinations or delusions. MOCA test normal. Difficulty in drawing and word generation. No problems in repeating sentences or naming things.
- **Cranial Nerves:** Hypometric antisaccades (rapid eye movement)
- **Motor:** ideomotor apraxia - pathological Luria test. Micrography.
- **Reflexes:** +++ R sided biceps reflex, +++ bilateral adductor and knee jerk reflexes. R sided rigidity, cogwheel phenomenon in UE and LE.
- **Sensory:** R sided cortical sensory deficits - graphesthesia.
- **Cerebellar:** R sided dis and brady diadochokinesis, dysmetric finger - finger and finger- nose test.
- **Other:** Romberg neg.
- Stool and micturition normal.
- **Summary: Hypokinetic rigid syndrome RUE > RLE , cortical sensory deficits and hypometric antisaccades.**

Notable Labs & Imaging:
Chemistry: Vit B12: normal, Folate normal.
CSF: Normal
Imaging:cMRI: L sided parietal atrophy.
MEP: normal. No differences between R and L side.
Sonography substantia nigra: normal.
Levo-Dopa: no response.
Schelllong- Test (orthostasis): normal. Sonography bladder: normal.
DAT Scan: normal. FDG-PET: asymmetrical cerebral glucose metabolism w/hypometabolism in L parietal cortex and lesser in L putamen.

Final DX: Corticobasal degeneration.

Problem Representation: 69yF w/no PMHx p/w a chronic hypokinetic rigid syndrome associated with cortical signs and hypometric antisaccades w/no response to Levo-Dopa and an asymmetrical cerebral glucose metabolism.

Teaching Points (Debora): **#EndNeurophobia**

- Move the R hand: Peripheral nerve, spinothalamic tract, left brain (cortical side tract), muscle → upper or lower motor problem.
- Can course with: Weakness, sensory loss, small deficits, ataxia, temperature.
- Time course is crucial! **Suddenly:** Stroke, isquemia (blood supply). **Days:** Neuropathy, infections, Inflammatory (Guillain Barre syndrome), Meningioma. **Year:** ALS, spine issue, Parkinson (normally symmetric), multiple sclerosis, dementia (Pyramidal or extrapyramidal signs).
- **Gerstmann syndrome:** Acalculia, agraphia, R-L confusion and finger agnosia.
- Gluten free diet, vegan → **B12 deficiency** can cause peripheral neuropathy, cognitive symptoms and subacute combined degeneration.
- **Alzheimer** Memory loss specially recent events,, cognity, executive dysfunction and visual spatial impairment.
- Hyperreflexia: too much. Upper motor neuron, CNS.
- **Localized x Multisystem** → this case multisystemic: Caudal spine, cortical spine sensory deficiency.
- **Parkinson** (tremor rest, rigidity, bradykinesia postural instability) x **Parkinson plus** (Parkinson + spinal motor atrophy).
- 6 most common forms of Parkinson plus are: MSA, PSP, CBS, DLB, drug induced parkinsonism and VP.