9/15/20 Morning Report with @CPSolvers

Case Presenter: *David Deng(@ddeng_22)* ***Case Discussants***: *Sharada Narayan and Kannu Bansal (@KannuBansalMD)*

CC: sudden onset L sided facial droop, L arm weakness, dysarthria

HPI: 26 yo male

- Symptom onset while driving
- Lasted 5-6 hours
- On ED presentation (12 hours after onset): symptoms had self-resolved
- No fatigue, malaise, vision changes, difficulty speaking, HA, loss of bowel/bladder function
- 3 months prior to admission had autologous stem cell transplant, now on maintenance Brentuximab

PMH:
Nodular sclerosing lymphoma

Meds:
Brentuximab
Acyclovir

Fam Hx:
None

Soc Hx:
Prior welder, originally from UAE

Health-Related Behaviors:
No smoking, drug use

Allergies:
None

Vitals: T: HR: BP: RR: SpO_2:
Exam: normal
Neuro: normal

Notable Labs & Imaging:
Negative serologic bacterial, fungal and viral tests.

Imaging:
MRI: multifocal lesions with hyperintensity and diffuse restriction in periventricular white matter, basal ganglia, subcortical areas; also with contrast enhancement

LP:
0 WBC (63% lymph), 0 RBC, normal glucose and protein. OP 6
Negative biofire, cytology, flow cytometry and paraneoplastic panel
Neg CMV, JC virus, BK virus, HSV, West Nile
Neg toxo, crypto

Brain biopsy:
Negative bacterial, fungal, AFB
Pathology: diffuse large B cell lymphoma

Problem Representation:
26 yo man with a h/o lymphoma with recent autologous stem cell transplant on maintenance Brentuximab presenting with acute onset of transient neurologic symptoms (L sided deficits and dysarthria) found to have multifocal lesions on MRI with normal LP studies and brain biopsy revealing **diffuse large B cell lymphoma.**

Teaching Points (Maria): #EndNeurophobia

- **E=MC2**
  - **Sudden time course:** Stroke. Seizures (Todd's paralysis - post ictal). Toxic, metabolic. Migraine (w/aura, hemiplegic)
  - **Localization:** Brainstem ipsilateral to the face and contralateral to body.
- **Facial Weakness:** UMN vs LMN according to forehead sparing. LMN its "paradoxically worse" and affects forehead and lower face. UMN "Upper spares upper" affects only lower face affected.
- **Dysarthria** - motor problem. **Aphasia** - language - think cortex!
- **Stroke:**
  - Young adults: sickle cell, drugs - vasospasm (*usually w/ thunderclap headache*), cocaine HTN crisis can cause hemorrhage. Don't forget general risk factors.
  - TIA: Doesn't correlate w/mechanism (ischemic vs hemorrhagic). Used to mean no focal symptoms in <24 hours but with DW images you might find a small stroke.
  - Mechanisms: Heart vs Vessels vs Blood.
- **Migraines:** not all migraines have aura or report headache.
- **Cancer + Neuro VD:** direct effect (compression), tx related, paraneoplastic. *"If neuro is consulted on a patient with a cancer diagnosis; diagnosis 1, 2, 3 is cancer."*
- **PML -** suspect w/immunosuppression (JC Virus reactivation) and subacute deficits.
- **Neuroradiology:** Multifocality of small lesions might not have overt symptoms. Bilateral multifocal infarcts think of cardiogenic causes. Contrast enhancement - blood brain barrier open usually means infection, inflammation or tumor.
- **Oligoclonal bands:** non specific inflammatory process, not just MS.