



01/04/22 Neuro Morning Report with @CPSolvers



Case Presenter: Debora Loureiro (@deboracloureiro) **Case Discussants:** Vivek Paul (@vjpaull88) and Antonia Angeli Gazola

CC: 28 yo M w/ sudden facial paralysis

HPI: 3 days after sudden paralysis, pt went to neurologist and dx with Bell's palsy. 3 weeks later, pt had episode of generalized tonic clonic seizures for 3 minutes and post-ictal state. No sphincter incontinence, did not bite his own tongue. Loss of strength and sensibility on right side of body. COVID 2 months before. No known hx of seizures.

PMH:
No recent surgery

Meds:
none

Fam Hx:
Brother with schizophrenia surgery

Soc Hx:
No recent vaccination or trauma

Health-Related Behaviors:

Allergies:
No allergies

Vitals: T: HR: BP: RR: SpO₂: all normal

Exam:

Systemic: normal

Skin: erythematous, pustular lesions on anterior and posterior trunk

Neuro

- **Mental Status:** oriented to person, place, time
- **Cranial Nerves:** slow to follow orders, pupils isocoric and reactive to light, no visual problems, peripheral facial paralysis on left
- **Motor:** hemiparesis on left; ¾ motor strength in left lower limb, ½ if proximal right arm?, ½ in distal left arm
- **Reflexes:** preserved reflexes
- **Sensory:** preserved.
- **Cerebellar:** yes dysmetria and dysdiadochokinesia on L. preserved equilibrium
- **Other:** spastic gait

Notable Labs & Imaging:

Hematology: Hb 14.55 Hct 44.38 Plt 161,400 WBC Lymph 1,275

Chemistry: Na 135.7 K 3.5 BUN 50?? Cr 1.02 Alb 6.14

Syphilis test non-reactive VDRL non-reactive

LP: clear liquid, 23cm, pro 19, glu 79, cells 16

Imaging:

MRI brain with contrast: Extension area of alteration of signs in the white matter in the supratentorial hemispheres of brain L>R suggesting leukoencephalopathy. Sparing areas of unspecific alterations in the white matter

Acute disseminated encephalomyelitis associated with COVID

Problem Representation:

28 yo M, w/ prior COVID infxn, presents w/ sudden facial paralysis, episode of tonic-clonic seizure and post-ictal state, weakness on the right side of body

Teaching Points (Gabi Pucci): #EndNeurophobia

- **FACIAL PARALYSIS:**
Cranial nerve VII innervates the face
Peripheral (whole face) versus central lesion- UMN - "upper spares upper" (lower part of the face) -- LMN ipsilateral "backup" is present for the upper face
- Sudden causes: vascular (stroke), seizure (Todd's paralysis)
- Stroke: hemorrhagic versus ischemic stroke. Causes:
Related to the heart: cardiac malformation, arrhythmias, endocarditis
Related to the blood vessels: atherosclerosis, arterial dissection, vasculitis - inflammatory/infection
Related to the blood: sickle cell anemia, hyperviscosity (e.g. cancer)
- Post-ictal state: Todd's Palsy -> paresis/aphasia/ focal neurologic signs after a seizure
- Guillain-Barré syndrome (+/- Miller Fisher variant with ataxia and ophthalmoplegia)
- Spasticity -> takes some time to develop (acute stroke usually presents with diminished tone)
- Benign tumors such as meningiomas -> usually have a very chronic onset of symptoms.