



01/23/24 Neuro Morning Report with @CPSolvers

“One life, so many dreams” Case Presenter: Kuchal Agadi (@AgadiKuchal) Case Discussants: Tansu Eris (@drtansue) and Gerardo Luna (@gerarlunap)



CC: Unable to grasp objects.

HPI: 9yo M, couldn't grasp objects on both hands. Apparently normal 2 days ago, then he found it difficult to hold his pencil during a test. 1 day ago had to skip cricket practice bc he could not hold his bat. Since morning **dropped everything at home** and had to be helped with ADLs such as bathing. Parents report **slurred speech**.

ROS: no double vision, weakness, HA, N&V, incontinence, difficult breathing. Developmental milestones normal.

PMH:
Recurrent sore throats. Had tonsillectomy + adenoidectomy 2y ago.

Meds:

Fam Hx:
Sister - migraines
Grandmother - DM.

Soc Hx:
Cricket player.

Health-Related Behaviors:

Allergies:

Vitals: T: HR: 100 BP: 100/70 RR: 16 SpO2 98% RA

Exam:

Gen: HEENT normal. Cardiac murmur.

Neuro:

Mental Status: Conscious, oriented x3.

Cranial Nerves: Occasional dysarthria.

Motor: **Involuntary movements** of both hands present happening throughout consult (*Michael Jackson's moonwalk-ish*). UL 4/5 LL 4/5. Milkmaid positive. Pronator drift.

Reflexes: Normal. Except for pendular knee jerk.

Sensory: Intact

Cerebellar: F-N normal. K-H Test normal. No

dysdiadochokinesia.

Other:

Next day had **unstable gait and emotional lability**. Rash on extremities were noted (mosquito bites).

Notable Labs & Imaging:

CBC: Hb 10. Plt 150k WBC ? N 78% L 18

ESR: 75, CRP 35

ECG nl. CXR: nl. Echo: mitral stenosis.

CTH: normal.

MRI brain: hyperintense lesions in basal ganglia.

ANA: neg. TSH: nl.

ASO titers high. Anti DNase B positive. Throat swab: GSA positive.

Dx: Sydenham Chorea - Rheumatic fever.

Problem Representation: A 9 y/o m w/ acute onset bilateral grasping difficulty, involuntary hand movts. and slurred speech, emotional lability and rash on extremities w/ PMH notable for recurrent sore throats, s/p tonsillectomy and adenoidectomy, MRI revealed hyperintense lesions in basal ganglia and echo showed MS.

Localization: CNS. Movement disorder characterized as chorea.

Teaching Points #EndNeurophobia (Umbish):

- ★ Anatomical localisation,, timecourse, umn vs lmn, central vs peripheral, symmetric vs asymmetric
- ★ ASK questions: onset,duration,progression,associations, recent trauma or illness, family hx, vaccinations
- ★ Slurred speech- Aphasia vs dysarthria, cortical vs cerebellum vs brainstem
- ★ Hand muscle exam, finger-nose test, neurological assessment, ataxia
- ★ Austin> The mnemonic **DANISH** is a helpful way of remembering the important points to cover in a cerebellar examination:
 - * Dysdiadochokinesia.
 - * Ataxia (gait and posture)
 - * Nystagmus.
 - * Intention tremor.
 - * Slurred, staccato speech (really enunciate syllables, have sort of robotic flow of words, sometimes people describe it as sounding drunk)
 - * Hypotonia/heel-shin
- ★ DDx: Pediatric Autoimmune Neuropsychiatric Disorders Associated with Streptococcal infections (PANDAS), GBS, primary tumors, cerebellar pathology, **Schmahmann's syndrome**, Rheumatic fever
- ★ ASO titers, treat the strep throat, steroids
- ★ Diagnosis of rheumatic fever is **clinical- Revised Jones criteria**
- ★ Chorea starts 8-12 weeks after infection! More common in females!