# 06/22/21 Neuro Morning Report with @CPSolvers

***Case Presenter****: Maria Aleman (@MariaMjaleman)* ***Case Discussants****: Mattia Rosso (@MattiaRosso3) and Mathieu Brunet*

**CC**: Increased drowsiness

**HPI**: 13yr girl p/w unresponsiveness. Mom says the day before she % headache, blurry vision and sleepiness after school - Tx tylenol, woke up from nap tripping over things on floor and babbling.
Girl complained of blurry vision, slept through the day and the next day had difficulty being woken up by her mother and was confused w/ slurring of speech.

Tx w/ Naloxone in neighbouring hospital - Sx did not improve.
Mother says she had the"Flu" last week

**PMH**: Previously healthy

**Meds**: None

**Fam Hx**: Father recently passed away from a GSW

**Soc Hx**: Recently moved to another school -- reports children in new neighbourhood consumed drugs

**Health-Related Behaviors**:

**Vitals**: Normal
**Exam**: Lethargic
**Neuro**
- **Eyes:** horizontal/vertical impaired, pupillary rxn sluggish but reactive and isocoric no papilledema
- **Mental Status:** Not oriented to time place person, consciousness oscillates b/w stuporous 7 lethargic
- **Cranial Nerves:** Gag reflex present, no facial palsy
- **Motor:** Moved all 4 extremities spontaneously, but could not follow commands
- **Reflexes:** Hyporeflexia

**Notable Labs & Imaging**:
**Chemistry**:Normal
**Imaging**:
MRI- Normal ; Head CT - Normal
LP: N opening pressure, 0 RBC, few WBC glucose N increased protein; Gram culture -ve, viral panel -ve
EEG: diffuse slowing no seizure activity
**Hospital course:** Pulses Methylpred, IVIG → weaned from mech ventilation ext ophthalmoplegia, hyporeflexia, finger-nose/heel to shin, broad based gait, oriented in 3 spheres but speaks w/ difficulty

Anti-GQ1b ab +

**Dx: Bickerstaff encephalitis**

**Problem Representation**: 13yF p/w rapidly progressive altered level of consciousness, blurry vision and ataxia after an upper respiratory infection. Examination notable for hyporeflexia, normal imaging and albuminocytological dissociation in LP.

**Teaching Points (Vale)**: #EndNeurophobia
- **Drowsiness:** Impairment of awareness? AMS? Sleep disorder?
- **Location:** Systemic (Metabolic, toxins, lungs, heart) vs Neurologic (Cerebral hemispheres, reticular formation)
- **Time Course:** Hyperacute (syncope, seizure), acute (encephalitis) subacute-chronic (degenerative, granulomatous infxs, autoimmune).
- **AMS = MIST** (Metabolic, Infection, Structural, Toxins) / Medical vs Neurological.
- Prioritize reversible and life-threatening causes: ABC + vitals -> metabolic causes (BMP + ABG) -> look for signs of focalization nd GCS -> Imaging.
- **Venous Sinus Thrombosis:** headache, visual changes and crescendo progression of AMS.
- Headache + Blurred vision + AMS -> Elevated intracranial pressure: Changes in blood, CSF or parenchyma.
- **Recent Infection:** ADEM, Myasthenia gravis.
- **ADEM:** Acute demyelinating disorder. Anti-MOG antibodies. Can be initial presentation of MS.
- **Tylenol intoxication** -> pyroglutamic acidosis. **Reye Syndrome** -> liver failure.
- **Pupils:** Pinpoint (pons, opioid intoxication), blown (medical emergency-herniation, amphetamines, cocaine), anisocoria.
- **Oculocephalic Reflex:** Differentiate peripheral vs Central etiologies. True ophthalmoplegia (reflex absent) vs comatose patient (reflex present).
- True ophthalmoplegia + blurred vision + headache -> Could this be Cavernous Sinus Thrombosis?
- In children the most common tumors are primary CNS tumors with predilection to the posterior fossa.
- **Cysticercal Encephalitis:** More common in young girls. Miliary lesions, presents as AMS. Don't give anti-parasitic -> causes brain edema.
- **Hyporeflexia + Ataxia + Ophthalmoplegia: Miller Fisher Syndrome + AMS -> Bickerstaff Encephalitis (anti-GQ1b antibody)**