6/21/22 Neuro Morning Report with @CPSolvers

***Case Presenter**: Maria Aleman* ***Case Discussants**: Chloe Griggs and James Plumb*

CC: Intractable hiccups

40yoM p/w 3 weeks of constant hiccups that he describes as annoying and distressing. He has been to other PCP who have ruled out an MI and GI pathology. He has been treated with gabapentin 2 weeks and is currently taking lansoprazole and metoclopramide without any relief.

Denies any other symptoms.
Is administered chlorpromazine 50mg IM in the ER.

30 minutes later husband calls for help. When you get to the room the patient is racing around his room, he sits down on the bed and quickly gets back up. He says he feels restless with an irresistible urge to keep moving.

PMH:
None

Meds:
None

Fam Hx:
None

Soc Hx:
None

Health-Related Behaviors:
None

Allergies: None

Vitals: **T**: **HR**: **BP**: **RR**: **SpO_2**:
Exam:
Systemic
Neuro
- **Mental Status:** normal
- **Cranial Nerves:** normal
- **Motor:** normal
- **Reflexes:** normal
- **Sensory:** normal
- **Cerebellar:** normal
- **Other:** frequent hiccups.

Notable Labs & Imaging:
Hematology: CBC normal
Chemistry: BMP normal

Imaging:
EKG and CXR normal

Final Dx: Akathisia 2/2 chlorpromazine.
Possible NMO - area postrema syndrome.

Problem Representation: 40yM w/no PMHx p to the ED w/ 3 week course of constant hiccups. After receiving chlorpromazine starts having restlessness and feeling fidgety.

Teaching Points (Maria): #EndNeurophobia
- Intractable hiccups - only consider after doing maneuvers - like Singultus: applying pressure to the sternocleidomastoid muscle -clavicle union.
- Intractable hiccups: consider stroke, brainstem pathology or the presenting symptom of Neuromyelitis optica.
  - **NMO**: previously thought to be a clinical presentation of MS involving optic neuritis and neuromuscular manifestations. Now its defined by the presence of AQP4 antibodies. Another DDX: AntiMog syndrome.
  - Optic neuritis can be present in all MS, NMO, AMog. In MS usually unilateral; NMO usually bilateral or rapidly involving both.
  - Most common presentations of NMO: transverse myelitis, optic neuritis and can cause hiccups in area postrema syndrome. AMog common presentations: transverse myelitis, optic neuritis or ADEM.
  - Consider MRI w/contrast to look out for lesions (typically around 3rd or 4th ventricle).
  - Important to differentiate between MS, NMO and AMog sx to treat correctly.
- Clinical Reasoning Pearl: Sometimes we use fast pattern recognition thinking and other times we use slower N=LxT2.
- Antipsychotic (D2 blocker) adverse effects:
  - + Metoclopramide: NMS - **rigidity (**helps differentiate NMS to SS - myoclonus and tremor**)**, hyperthermia, sympathetic overactivity
  - Acute Dystonic Reaction - oculogyric crisis. Tx: Benztropine or Diphenhydramine.
  - Akathisia: difficulty sitting still. Tx: Benztropine, Benzodiazepines, Beta Blockers. DDX: restless leg syndrome.
  - Parkinsonism
  - Tardive dyskinesia