6/9/20 Morning Report with @CPSolvers

Case Presenter: *Danya Rizwan (@RizwanDania)* ***Case Discussants***: *Ashley Wallace(@) and Marcia Barnett (@_mar_c_b)*

CC: Difficulty speaking

HPI: 72M w difficulty speaking since 3 weeks ago,He was in his usual state of health and started to notice slurring that worsened with time. It is difficult to formulate words and associated with nasal voice. 2 weeks ago he started to have problems with swallowing. First, he had problems with solids then liquids. At the moment, he cannot swallow his own saliva. He is unable to drink or eat for the last 3 days.

He complains of fatigue, no weight loss, no headache, numbness on right side, difficult in breathing when he lays down. No double vision, no nausea
Pyridostigmine: improved

PMH:
HTN, DM, Cataract (2 years ago)
Meds:
Glimepiride
Artovastan
ADA
Amlodipine losartan (no medicine for 15 days due to difficulty swallowing)

Fam Hx:
DM, HTA
Soc Hx:
Retired police officer
Health-Related Behaviors:
No smoke, no drugs
Allergies:
None

Vitals: **T**: Afebril 37 **HR**: 80 **BP**:140/80 **RR**: 18 **SpO_2**: 98%
Exam:
Gen:No distress
HEENT: PERRLA
CV, Abd: normal
Pulm: Right basal side decreased breath sounds
Neuro: EOMI, CN intact. Bilateral facial nerve weakness no sparing the forehead. Poor gag reflex, nasal speech, tongue and uvula central, no fasciculation. Sensory: normal Motor: 5/5 all extremities. Reflexes Upper. Not well elicited, 2+ in lower limbs
Extremities/Skin: wnl

Notable Labs & Imaging:
Hematology:
WBC: 17 Hgb: 16 Hct: 47.3 Plt: 316
PT INR: 1.5

Chemistry:
Na: 140 K: 3.6 Cl: 102 CO2: 21 BUN: 54 Cr:1.94
Trig: 147 LDL: 68 HDL: 34 cholesterol: 137 HgA1c: 6..1
LP: 5 WBC 5 RBC gluc 68 prot 35 LDH 24
Anti-AChR ab: 90, anti-titin:positive
T3: 103 T4:7 TSH: 0.9

Imaging:
CT brain: normal, cerebral atrophy (age related)
EMG: normal
Receptive nerve stimulation: Postsynaptic neuromuscular disorder
Chest CT: Enlarged hypodense thyroid with multiple nodules

Problem Representation:
72M w 3wk dysarthria, dysphagia, difficulty breathing, w/ exam notable for b/l facial weakness and UE hyporeflexia, repetitive nerve stimulation c/f postsynaptic NMJ disorder, and neuronal Ab positive for Anti-AchR consistent with Dx of Myasthenia Gravis.

Teaching Points (Priyanka):
Difficulty speaking- non specific neuro syndrome. Dysarthria > aphasia given other neuro Sx.
Dysphagia- Oropharyngeal (neuro) vs Esophageal (less likely neuro); also consider anatomic lesion (cancer/stricture)
CP1: Likely neuro etiology since local/anatomic lesion would have a greater severity index.
Neurologic approach- cortical (brainstem); UMN (ant. Horn cells); nerve (neuropathy, infxn, inflamm); NMJ (Bulbar Sx); Muscle. Specifically with **dysphagia, dysphonia, dysarthria**, consider CN 9, 10, 11→ localized to medulla. Consider **demyelinating process** ie: Miller Fisher syndrome (GBS variant)**, NMJ disorder** myasthenia gravis (anti-MuSK)
Orthopnea in Neuro disease- diaphragmatic involvement; cervical cord and distal (nerve, root)
Cranial Nerve exam: CN 3-4 nl (EOM), CN7 facial nerve motor- B/l facial weakness- less likely stroke; CN 9-10 (no gag reflex); **Phrenic nerve**- diaphragmatic innervation- origin in cervical cord
UMN v LMN: hyporeflexia points us to motor nerve issue; unless acute myelopathy
NMJ Disorders: Presynaptic: Lambert Eaton, Toxins (Botulinum, shellfish, paralytic tic); intrasynaptic: organophosphate toxicity; postsynaptic- MG
Myasthenia Gravis- Ocular, Bulbar, Respiratory muscles; ice-pack test @bedside → incr Ach-> improvement in ptosis. Always check CT for thymoma.