11/26/20 Morning Report with @CPSolvers

Case Presenter: *Noah Rosenberg (@NSRosenberg)* ***Case Discussants***: *Morton Machir (@MMMachirMD) and Gurleen Kaur (@Gurleen_Kaur96)*

CC: Bilateral facial weakness

HPI: 38yM w/bilateral facial weakness.

Initially started having symptoms a few months prior - nonspecific abdominal pain. Presented to ER and had non concerning cardiac workup. Pain continued. He started having discomfort: "burning sensation" in legs when they were touched and then progressed upwards to torso and later arms.

Couple weeks ago - vision changes. Increased intraocular pressure. Prescribed tx for open angle glaucoma.

Facial palsy started in R side → L side. Unable to drink or speak clearly.

PMH: None.

Meds: None. B12, vitD.

Fam Hx: MI. No history of neurological disorders or early neoplasms.

Soc Hx: Lived alone in NYC. Had been soc. distancing.

Health-Related Behaviors: 4 beers a day for a few years → cut down recently. Smoking: A pack a day → a few cigarettes a day for last 10y.

Vitals: T: HR: BP: RR: SpO_2:
Exam:
Gen: no acute distress.
HEENT: no scleral icterus. Extraocular mov intact.
CV: normal RR, no murmurs, rubs or gallops **Pulm**: CTAB
Abd: No abd tenderness
Neuro: Mental status intact x4, slightly dysarthric - inability to activate facial muscles. CN - 2,3,4,6 intact. Facial sensation: intact and symmetric. 7 - no activation with smiling, eyebrows. When asked to think a lot - eyes rolled back to his head (Bell's phenomenon?). Rest of CN intact and symmetric. Gross motor lower and upper extremities 5/5 bilateral, no pronator drift. Reflexes: fairly symmetric, 2-3/4 bilaterally. Babinski negative. Cerebellar: Normal finger-nose-finger test and gait. No hyperacusis or lacrimation.
Extremities/Skin: No skin rash visible.

Notable Labs & Imaging:
Hematology: WBC:7.3 (no predominance) Hgb:15.9 MCV 90 Plt: 336

Chemistry:
Na: 132 K:5.1 Cl:100 CO2:18 BUN:5 Cr:0.75 glucose:98 Ca: 9.2 Mag:2.0
AST:44 ALT: 26 Alk-P:55 Albumin:4 TP: 8 Anion gap: 14

HIV neg. Lyme serology and other tick borne: ? Syphilis: neg.
LP: elevated protein w/ no pleocytosis. Gram stains neg. Glucose nl. Albuminocytological dissociation.

Imaging:
MRI: abnormal asymmetric enhancement of R and L CN7 and CN5→ sequelae of infection, inflammation or Miller Fischer syndrome.
CT Chest: diffuse mediastinal and hilar lymphadenopathy. Biopsy: granulomatous inflammation. **Final Dx: Neurosarcoidosis.**

Problem Representation: 38yM previously healthy p/w bilateral facial weakness after months of neuropathic sensory pain in legs and abdomen.

Teaching Points (Sukriti):
Bilateral facial weakness
Possible etiologies: Thinking fast = bilateral facial palsy vs thinking slow = infectious, infiltrative, inflammatory, malignant
Bell's palsy = idiopathic, monophasic, isolated and unilateral that develops over days and resolves over weeks
Etiology: Infectious >>
Localising Weakness: Asthenia vs true weakness -- (E=MC2) **anatomical localisation x time**, layering on other neuro deficits and pattern of facial weakness to make progress (eg. forehead sparing = UMN)
Localising facial weakness: b/l weakness without forehead sparing -- LMN: facial nerve > NMJ, facial myopathy

Systemic clues: Exploring vision changes more deeply (uveitis-- inflammatory syndrome like sarcoidosis), looking for a hidden rash: erythema migrans of lyme disease, ramsay hunt vesicular rash along path of 7N (ear)
Non gap MA: Diarrhea, renal tubular acidosis (type 1, 2, 4), early chronic kidney disease, Iatrogenic (NS),
Type 4 RTA-- NGMA + hyperkalemia: diabetes, tubulointerstitial dz

Framing our Hypothesis: Isolated neurological disorder w/ b/l facial palsy, abdominal radiculopathy and neuropathy = Lyme Dz. Rule of 7 Lyme - Lyme meningitis unlikely --70% mononuclear predominance in CSF, 7d of headache, and absence of 7 CN palsy

Testing our hypothesis: albuminocytologic dissociation + diffuse mediastinal and hilar lymphadenopathy