11/19/24 Morning Report with @CPSolvers

"One life, so many dreams" ***Case Presenter****: Franco (@FrancoMurilloch)* ***Case Discussants****: Ravi (@rav7ks) and Kirtan (@KirtanPatolia)*

CC: 60 y/o female B/L leg pain

HPI: 60 y/o female with acute on chronic b/l leg pain. Reports 3 weeks of worsening of her chronic b/l lower extremities weakness. Reported that she could not stand up in the morning of admission and family called an ambulance.

→ Hospital course: rapid response for hypoxia and dysphagia. Started on 4lt 02

PMH: HFpEf, CAD s/p stent placement, AV block s/p pacemaker, Afib, SBO s/p ex lap with Normal pathology, treated C diff, Exophthalmos, remote h/o abducens nerve palsy

Meds: Tylenol, Cyclobenzaprine, Apixaban, Clopidogrel, Atorvastatin, Pantoprazole

Fam Hx: Lung cancer in uncle

Soc Hx: Non smoker, Non-alcoholic

Health-Related Behaviors: None

Allergies: Bactrim, ibuprofen

Vitals: T: 36.7 **HR:** 88 **BP:** 107/72 **RR:** 17, Sat O2: 99
Exam: Gen: Not ill appearing.
HEENT: Exophthalmos, gingival hyperplasia
CV: Pulm: Abd: Normal
Neuro: A/O x4, horizontal nystagmus to the left, proximal weakness, 2/5 shoulder abduction, 3/5 elbow flexion/extension, intact b/l hand grips. 2/5 hip flexion, 3/5 knee flexion/extension, intact ankle plantar flexion b/l.Diminished sensation to light touch, temperature and vibration in b/l distal legs compared to arm Deep tendon reflexes absent in b/l upper and lower.
Extremities/skin: Edema in B/L legs

Notable Labs & Imaging:
Hematology:
WBC: 9.7 Hgb:9.2 MCV: Normal Plt: 183

Chemistry: Na, K, Cl, HCO3, BUN,Cr, glucose, Ca, Mag:normal
AST: 458 ALT:349 Alk-P: Albumin:2.1, Total protein: 5.1, T. bili: 2.9, D.bili: 1.6
CPK: 4000 TSH, T4: Normal

Imaging:
Ultrasound: No abnormalities in the liver
MRI : L4-L5 degeneration, with mild spinal stenosis
MRI brain: no infarcts, MRCP: WNL
MRI muscles: Extensive muscular edema with fluid in deep fascia
MRI liver : T2 hyper, T1 hypointensity right hepatic lobe lesion with capsular retraction
CT: Multi subcentimeter lung nodules with negative PE
Liver biopsy: benign, hemangioma. Muscle biopsy: necrotizing myopathy, type 2 fiber atrophy. Myomarker: Anti Ro positive, rest all negative
VGCC type P/Q antibody: Highly positive

Dx: Immune-mediated Necrotizing myopathy and Lambton Eaton Syndrome

Problem Representation: 60Y/F with PMH of HFpEF, CAD s/p stent, Afib on apixaban, abducens nerve palsy % B/L leg pain, exophthalmos, nystagmus, proximal muscle weakness with sensory impairment , elevated CPK, transaminitis, muscular edema on MRI muscle, T2 hyper and T1 hypointense right hepatic lobe, with negative biomarkers, positive P/Q antibody

Teaching Points(Parisa):

Frame the problem → make sure there is not a weakness →
Severe leg pain→ might overlook other findings like neurological weakness; sever pain (toxin metabolic)
Subacute cause → anatomical approach(muscle; nerves) (inflammatory myositis do not cause severe pain; infection; transverse myelitis dermatomal pattern) → **exam**: reflex/skin(vasculitis)/look for edema/ temperature dysregulation;disorders in lung/heart could accompanied/ detailed h/o trauma, family
Painful myopathy causes→ metabolic mitochondrial disorders (younger population/ Fabry's/ Pompe dx/)→ all cells with high amounts cardiac skeletal muscle orbital muscle nerves → hearing changes; pigmentary changes; endocrinopathies(TSH)
Mitochondrial disorders + cardiac involvement→ kearn-Sayre syndrome KSS/ muscular dystrophies that affect heart and muscles → Duchenne and Becker
Abducens nerve palsy→ systemic dx (vascular/DM/inflammatory ANCA associated vasculitis/histiocytic disorders/IgG4 dx/MS/neoplastic disorders/sinus disorders/alcohol); direct head trauma
Exophthalmos → genetic defective ossification; space occupying lesion; hyperthyroidism
Statin muscle injury → immediate pattern; antibody against HMG COA reductase→ immune-mediated necrotizing myopathy
Small bowel obstruction→ w/o h/o surgery keep in mind motility problems autonomic nervous system causes → infiltrative disorders amyloidosis; sarcoidosis; lymphoma; histiocytic disorders
Medium vessel vasculopathies→ PAN; Kawasaki→ myalgia; nerve involvement
Hyporeflexia → peripheral nervous system; weak muscle
Gingival hyperplasia → Amlodipine; phenytoin; leukemia promyelocytic
Elevated CPK→ Rhabdomyolysis(5k-10K); myositis; **dermatomyositis** (Heliotrope rash; Gottron's papules; Shawl sign; Mechanic's hand)
Metabolic TSH: VitD; Growth hormone; Inflammatory ANA ANCA IgG4 level; Amyloidosis SPEP; IF; Genetic testing
Liver mass → pseudotumor(IgG4/plasma cell dyscrasia); mass
T2 hyperintensity → hypervascularity→ malignant sarcoma; hepatocellular carcinoma; angiosarcoma
Antibodies associated w/ Myositis→ Anti TIF1-gamma; NXP-2; anti-SAE