



02/22/24 Morning Report with @CPSolvers



“One life, so many dreams” Case Presenter: Kara Lau (@ytk_lau) Case Discussants: Rabih Geha (@rabihmgeha) and Ann Marie Kumfer (@AnnKumfer)

CC: 20 yr gentleman debilitating whole body pain
HPI:
3rd presentation to urgent care 3 months ago- rash in arm(immediately after working) and improved with Steroid cream
 Next 3 months - burning pain in muscle, bone, skin severely affected - had to quit work and require family support
 Nausea, dizziness
 Now Dyspnea on presentation to ER - tachypneic
 ER: swallowing difficulty, diffuse redness head to toe. No Raynaud/nail changes

PMH: Nil
Fam Hx: Nil
Soc Hx:
Health-Related Behaviors: No exposures
Allergies: Nil

Vitals: T:36.8 HR: 109/min BP: 140/85 RR: 28/min SpO2: 100% RA
Exam:
Gen: Uncomfortable, in Pain. Rash(+)
HEENT: eye redness, pain with EOM. No LAD. Increased Swallowing
CV: S1S2 no murmurs
Pulm: Chest clear. tachypneic
Abd: unremarkable
Neuro: Intact EOM(?dysconjugate gaze). No fatiguable upgaze. Cranial Nerve,Sensory, coordination, reflexes- normal.
Neck flexion,deltoid, iliopsoas- %
 Gait grossly normal.
Extremities/skin: **Rash :** neck, chest, belly, arms, knuckles- Painful to touch

Notable Labs & Imaging:
Hematology:
 WBC:9.1 Hgb:16.2 Plt:245
Chemistry:
 Na:138 K:3.4 Cl:104 HCO3:20 BUN: Cr:0.6 glucose: Ca: Mag:
 AST: 86 ALT:55 Alk-P: CK 406 CRP 3.5 ESR 09 Lactate: Normal
 Dermatology: Biopsy - Interface dermatitis consistent with CTD. findings concerning for MCTD/Dermatomyositis.
 Hep , Aunt : negative
ANA: 1:80 C4:31 C3: 81 dsDNA:31(Mild +), **RNP**, smith, SSB: negative, SSA: mildly elevated
pH 7.52/CO2 29
Swallow: Abnormal, Concerning for severity
Imaging:
 CT scan: Normal
 Myositis panel: Jo1,MDA-5,U1RNP: negative. **TIF-1,p155: Positive**
IVIG, Pulse steroids, Immunosuppression- Improved
Final Dx: DERMATOMYOSITIS

Problem Representation: A 20 year old male presented with debilitating whole body pain and a subacute painful rash along with dyspnea, dysphagia found to have mildly elevated liver enzymes and CK levels and TIF1, p155 positive.

Teaching Points (Anmolpreet):
I] Full body pain: generalised vs localised; Involvement of neuromuscular, skin, osteoarticular, vascular rather than specific system? Due to diffuse involvement. Subjective? **Characteristic**-sharp,stabbing,burning?; **onset, duration? Previous episode? Associated symptoms?** Young→genetics? Risky behaviour? Bad luck?
II] Dyspnea/ Dysphagia: diaphragm/ bulbar muscles involved? Sensory Neuropathy?(burning):Polyneuropathy?check for reflexes; inspection of skin to look for any rash? Seems to be acute and progressive so, demyelinating processes like GBS, toxins, heavy metals(arsenic, thallium)
Stabilise before diagnosing (tachypneic)- protect airways, VBG
 Issue with gas exchange/ problem with gas exchange centres? CO2 exchange issues(ventilatory issues?), panic attack, anemia?
III]Secretions in mouth→ excessive generation of secretions, problem clearing the secretions?
IV] Proximal muscle weakness + rash :- myopathy? Conjunctival ocular problem? Isolated or connected? Erythroderma? Scabies?
 →Knuckles, neck localisation of rash makes us think of autoimmune myopathies like Dermatomyositis; non fatigable weakness makes us drift away from MG;
V] Diaphragmatic weakness→ move away everything out for movement→ Mx
 Respiratory therapy–mean inspiratory force, how many numbers can be counted in single breath?
VI] Elevated liver enzymes and CK: inflammatory myopathies; MCTD?
 Most inflammatory myopathies which are systemic, we need to look for manifestations in lungs and vessels aside from skin and muscles
VII] Myopathy: weak muscles→ EMG → proximal mostly suggest muscle ds
 We need Myositis panel, HIV, Vitamin levels, exposure history?
VIII] Primary respiratory alkalosis: 2 Ps :- 1. pulmonary compensation because weak diaphragm and the patient is compensating? 2. Pain
IX] ds DNA mildly positive makes us think of Lupus; we need to look out for kidney involvement, cytopenias to confirm; **NXP2 (anti-nuclear matrix protein 2):-** young patients, dysphagia, underwhelming CK levels; **TIF1 antibody** :- Cancer? Paraneoplastic etiology?