02/19/21 Morning Report with @CPSolvers

Case Presenter: *Riddhi Ramanlal, Gizem Reyhanoglu, Travis Smith (@RosenelliEM)* ***Case Discussants***: *Rabih Geha(@rabihmgeha) and Prof Rez (@DxRxEdu)*

CC: lightheadedness and arm pain

HPI: 33 year old female presented 2 hours after pre-syncopal episode and 1 day onset of tingling in R elbow and arm. 2 hours ago, felt lightheaded before eating, felt bowel movement. No head trauma, fall, or LOC. Symptoms resolved after going to bathroom.
Endorses cough, pleuritic chest pain, nausea, fluctuation in BP, left sternal border tenderness, 26 lb weight loss (recent change with gluten free diet)

ROS: Positive for COVID twice 10&20 days ago, rapid testing. PCP and UC started on flonase, dexamethasone, levofloxacin
No wheezing, vomiting

PMH:
Childhood asthma

Meds
Dexamethasone, flonase, Levofloxacin, Tessalon Pearls

Fam Hx:
3mm aorta widening in father

Soc Hx: No alcohol, drug use, or recent travel

Health-Related Behaviors:

Allergies: None

Vitals: **T**: 36.6 **HR**: 83 **BP**:106/67 **RR**: 18 **SpO_2**: 100%
BMI 25.7
Exam:
Gen: alert, no acute distress
HEENT: PERRLA, extraocular movements intact, neck supple
CV: RRR, no murmurs, no tenderness on chest wall
Pulm: CTAB, symmetric breathing
Neuro: CN II-XII intact, no focal deficits, normal speech and sensation
Extremities/Skin: warm, intact
Psych: normal

Notable Labs & Imaging:
Hematology: B-HCG negative, COVID positive; WBC: 8.6 (71% N, 14% Lymph, 13% mono, 1% eo); Hgb: 12, HCT 39, MCV 71.2 Plt: 364
Chemistry: Na: 138 K: 3.4 Cl: 97 CO2: 31 BUN: 11 Cr: 0.8 glucose: 78 Ca: 8.9 AG: 10; D-dimer not tested, LDH 180
Imaging:
EKG: normal sinus rhythm, no ST changes
CXR: Abnormal contour of upper mediastinum
CT: bulky mediastinal lymphadenopathy with central areas of low attenuation, possibly necrosis
MRI brain - normal; MRI cervical spine - disc protrusion C6 level, R subarticular and foraminal zone, severe neural foraminal narrowing
Biopsy: lymphoid tissue - diffuse large lymphocytes, high mitotic activity. **Immuno:** Pos CD30, CD20, PAX5, BCL-6, MUM-1, CD45, Neg CD3, CD10, ALK, SOX10
Diagnosis: Diffuse large B cell lymphoma, mediastinal-type

Problem Representation: 33 year old F with recent COVID presented with pleuritic chest pain and significant weight loss, found to have mediastinal lymphadenopathy

Teaching Points (Gabi F Pucci):

- **Pre-syncope:** diagnosis. Blood pressure transiently drops to the point you feel it, and then spontaneously go back to normal, without complete loss of consciousness. **Transient** nature. Other transient events (DDx): Hypoglycemia, seizure, intracranial hypertension, vertigo
- **Tingling sensation in the arm** -> neuropathic cause? Associated with decreased perfusion in the brain: vascular abnormality associated? In a young female: multiple sclerosis?
- **Arm pain (or limb pain):** anatomical approach. Skin, muscle, vasculature, nerves, joints.
- **How to link decreased blood in the brain and in the arm?** Subclavian steal syndrome (usually associated with atherosclerosis), or thoracic outlet syndrome leading to the subclavian steal. Other possibility: large-vessel vasculitis (e.g. Takayasu)
- **Weight loss:** inflammatory (infection, malignancy and autoimmune) or noninflammatory causes (absorption, lack of eating, liver/heart/lung diseases, thyrotoxicosis)
- **Pleuritic chest pain**: 4 P's: pulmonary embolism, pneumothorax, pleuritis, pericarditis. Pleuritis secondary to inflammatory disease?
- **Aortic widening** of 3 mm may or may not be pathologic in the father. Aortitis: vasculitis of the aorta / coarctation of aorta / inflammatory or infectious causes. Important to know the age of development. Eg: age: atherosclerosis. Young: Marfan, Ehlers-Danlos, Congenital bicuspid aortic valve, Loeys-Dietz.
- **Levofloxacin use**: linked to aortic disease
- **Chest pain evaluation:** look for CT and EKG to a better approach
- **Inflammatory chest pain:** weight loss + no reduce in intake -> usually in the lungs and pleura, rarilly in the heart and mediastinum (aortopathy or heart disease). Aortitis and mediastinal lymph node disease are common cause
- **Approach to lymphadenopathy**: look for recent travel history, animal exposition and characteristics of the lymph node.
- Important to check for HIV, HBV, EBV, Syphilis
- Isolated mediastinal lymphadenopathy: lymphoma, germ cell tumor (dosage of BetaHCG)
- **Microcytic anemia**: menstruation, Hodgkin lymphoma (acquired thalassemic state), alcohol intolerance