01/13/24 Morning Report with @CPSolvers

***"One life, so many dreams" Case Presenter**: Yuki(@) **Case Discussants**:Rabih (@rabihmgeha) and Jasdeep (@JasBajwa18)*

CC: Progressive SOB and R wrist pain

HPI: 82 Y M - 2 month SOB & R wrist pain. 4 months prior worsening dyspnea and inhaler was changed w/o relief. On the day of admission, he sprained his right wrist, prompting an outpatient service visit.

ROS: positive for **dry cough,** dyspnea, **anorexia**, and right wrist swelling/redness; negative for headache, sore throat, chest pain, hemoptysis, heartburn, abdominal pain, nausea/vomiting, diarrhea, hematochezia, melena, skin rash, muscle weakness, tingling sensation and edema. A detailed history including morning stiffness was difficult to take from this patient due to the dementia.

PMH: COPD, Lewy body Dementia, HTN

Meds: Lansoprazole, olmesartan, formoterol, valproic acid, risperidone

Soc Hx: Retired, nursing home, not in touch w/ family

Health-Related Behaviors: past smoker and past drinker with unknown frequency.
No pets, no house plants, no history of recent travel, recreational drug use, or occupational inhalation.

Allergies: None

Vitals: T: 97.3 **HR: BP:** 157/94 **RR:** SPO2- 96% on RA ; BMI- 20

Exam: Gen: Awake and alert ; **HEENT:** No conjunctival pallor, icterus, clear oropharynx, no jugular venous distension, supple neck ; **CV:** Regular rate and rhythm, no murmur; **Pulm:** Clear to auscultation, no wheezes/ rhonchi/ crackles ; **Abd:** wnl; **Extremities/skin:** No rashes or edema, but right wrist swelling and redness

Notable Labs & Imaging:

WBC: 13k (70% segmented neutrophils, 1% eos) Hgb: 13.5 Plt: 279,000
Na:142 K: 4.5 Cl: 99 HCO3: BUN: 15, Calcium: 9.0, Cr:0.65 glucose: 160, LFTs wnl; LDH-214, CPK - 33, CRP 5 mg/dL, Blood cultures/ sputum cultures: negative
EKG: Sinus tachycardia, without obvious ST-T changes, bundle branch block
R wrist X ray: No signs of fracture
CXR: No consolidation, no cardiomegaly, no blunting of a costophrenic angle
Chest CT: b/l emphysematous changes
PFTs: Vital capacity - 74% (>80), FEV1 - 52% (>80), Fractional exhaled NO: 41 ppb (<20);
2 months later both wrists became swollen and SOB worsened. SPO2- 92% (repeat) ; Temp- 97.8, HR- 105, BP- 109/66
Labs: WBC 13k (72% neutr, 0.3% eos), Hb 12.6, Plt 251k, LFTs nl, LDH 254, Alb 2.8, Na 138, K 4.1, Cl 100, BUN 13, Glc 146, Ca: 8,8, CRP: 4 mg/dL
ANCA, ANA, RF, anti CCP were tested: negative
CXR - Diffuse tracheal thickening
Chest CT - increased airway attenuation, diffuse tracheal collapse
Bronchoscopy- bronchial wall thickening below glottis, petechial hemorrhage and redness present in some areas, edematous changes in carina to tracheobronchial and peripheral bronchi.
Biopsy- inflammatory cell infiltrate in submucosa with no vasculitis, no atypical cells, no amyloid deposition, no acid fast bacterial infection or fungal infection
Retrospectively noticed a cauliflower deformity of ears and saddle nose in the course of investigation; **Auricular cartilage biopsy:** fibrosis and replacement sites w/ fibrous tissue, indicating degenerate cartilage tissue of the auricle of the R ear.

Dx: Relapsing Polychondritis

Problem Representation: 82M w/ a PMH of COPD p/w progressive SOB and bilateral wrist pain for 2 months. Imaging notable for diffuse tracheal thickening and collapse and bronchial wall thickening. ANCA, ANA, RF and anti-CCP negative.

Teaching Points (Maryana):

Progressive SOB & wrist redness/swelling

- **Learning space:** desiccate symptoms x **Practical thinking:** how bad/ which of them should be managed right away -> Hypoxemia?
- **SOB**: on exertion or rest? **Rest is more concerning / Subacute:** give us more time to think + **Anorexia** - secondary to COPD or HF - malignancy can't be ruled out + **Right wrist redness and swelling** - signal or noise? Observation skills help - fracture x septic arthritis
- **MSK issues:** joint pain - skin, subcutaneous, tissue, ligament, bursa, tendon -> arthropathy x arthritis
- **AECOPD:** we should not be attached to this diagnosis when taking care of a patient w/ PMHx of COPD - ddx: PE, pneumothorax, cryptogenic organizing pneumonia (COP), malignancy
- **Triggers** for AECOPD (?) Lack of wheezes/inconsistent time course
- **CXR: CAP, pneumothorax, Pulmonary Edema**
- **Monoarticular arthritis: infectious, crystalline or trauma** - Wrist: CPPD? Septic Arthritis?
- Low VC + Low FEV1 - COPD progression, aspiration, COPD exacerbation/ Elevated Fractional Exhaled NO: endogenous inflammation.
- Progressive tracheal stenosis + **bronchial wall thickening** + petechial hemorrhage // Tracheitis + bilateral wrist edema
- Tracheal issues: trauma (prior intubation/ tracheostomy) x radiation induced x idiopathic stenosis x RP

DDX: **TB**, autoimmune diseases, relapsing polychondritis, GPA, infiltrative (amyloid is less likely), sarcoidosis (less likely without granulomas), IBD