# 01/18/24 Morning Report with @CPSolvers

***"One life, so many dreams" Case Presenter**: Vijay Balaji (@vijaybramhan) **Case Discussants**: Rabih (@rabihmgeha) and Umbish (@umbish91)*

**CC**: 24 y/o F college student w/ progressive SOB for 1 year

**HPI**: Progressive SOB, able to walk 2 flight stairs initially, now SOB on 15 mins walk, + dry cough, bothersome fatigue, no hx of wheezing, hemoptysis chest tightness. Grade 3 Clubbing.

ROS: No chest pain, syncope, no joint pain fever, weight loss, skin thickening. Lingering cough from Tb in 2020, R-upper lobe consolidation on CT.

**PMH**: Pulmonary Tb: dx'd in 2020. Treated with a 6 month-long regimen. Atopic dermatitis for 6 years

**Fam Hx**:

**Soc Hx**: Has birds as pet, pigeon feeding.

**Health-Related Behaviors**:

**Meds**:

**Allergies**:

**Vitals: T:** nl **HR:** 87 **BP:** 110/70 (no orthostatic change) **RR:** 97% on RA → 84 % on walking

**Exam:**

**Gen:** Disproportionate fatigue.

**HEENT:**

**CV:** Regular rate rhythm, no murmurs or gallops

**Pulm:** Fine crackles infra scapular areas bilaterally

**Abd:** wnl **Neuro:** wnl

**Extremities/skin:** Grade 3 Clubbing present.

**Notable Labs & Imaging**:

**Hematology**:

WBC: 10.79 Hgb: 13.8 Plt: 356k

**Chemistry**:

Na: 131 K: 4 Cl: HCO3: BUN: Cr: glucose: Ca: Mag:

AST: nl ALT: nl Albumin: TFTs: nl Total Igs: 15.7 (nl) CPK: 78 (nl)

HIV, HCV: non reactive. ANA, RF, CCP: (-)

**Imaging**:

TTE: Mild tricuspid regurgitation, mild pulmonary HTN, LV function normal.

HRCT: Ill defined GGOs in the R-lower lobe mosaic pattern.

CT 1: In Feb. when pt had TB-

CT 2: at the presentation- diffuse mosaic attenuation diffuse GGOs, reticulations, R-upper lobe cavity, traction bronchiectasis, no apicobasal gradient. Occasional consolidation in fissures around the airway, organizing pneumonia pattern, fibrotic.

CTPE: chronic thromboembolic P-HTN.

Bubble echo: No extra or intra cardiac shunt.

Anti-PL-12 Ab (+)

**Dx: Myositis NSIP/OP overlap pattern**

**Problem Representation**:

24 yrs old F with progressive SOB for 1 year, with dry Cough, fatigue. On examination she was disproportionately fatigued, had grade 3 Clubbing, fine crackles. Her CT was positive: Diffuse Mosaic pattern, occasional consolidation in fissures around the airway. Anti-PL-12 Ab(+), Dx: Myositis NSIP/OP Pattern

**Teaching Points (Kuchal/Anmolpreet)**:

1. **Age** is critical in this scenario. SOB: PE/ ACS/ Aortic dissection/ pneumothorax
 # Young & SOB patient: r/o Drug-induced. Co2 retention: Anxiety, Acidosis, Anemia.
 #The base rate of SOB in young is rare compared to that in older.
2. **In Women**: also consider anemia due to Menstrual blood loss.
3. Consider if it **Acute vs Chronic s**ymptomatology, **Acute :**think of Aspiration. Anaphylaxis. if its progressive or static. **Airway causes**: Asthma, COPD. **Parenchymal:** ILD. **vascular causes: PE**
4. Is SOB associated with other symptoms like wheeze, cough, sputum expectoration consider Pulmonary origin(Asthma/ bronchiectasis) . Is not associated with other symptoms: r/o Cardiac, or blood cause (Pulm HTN/PE). Positional change: Orthodeoxia: Hepatopulmonary syndrome.
5. The past history of the patient informs about what they are at risk for, eg. tuberculous patients are at risk for bronchiectasis., non reversible structural damage. Differentiate between if it progression of the past history, independent of it, or a complication due it. (associated hepatic condition: r/o alpha 1 antitrypsin).
6. Clubbing: tightly linked with chronic thoracic (lung and heart) problems, also associated with abdominal(cirrhosis) and thyroid issues.
 Bronchiectasis, Lung cancer, Idiopathic Pulmonary fibrosis
7. Some lung problem→Pulm vasculature constricted→Pulm artery hypertension→ Dilation of tricuspid annulus→ Tricuspid regurgitation
8. **Mosaic pattern**- (i) airway trapping because of distal airway disease/ bronchiolitis (ii) pulmonary vascular disease (iii) infiltrative disease affecting the lungs
 Important to do dynamic CT (inspiration/expiration) →
 affected : distal airway problem ; not affected—> vascular/ infiltrative problem
9. NSIP: Non specific interstitial pneumonitis: autoimmune ds until proven otherwise: (i) primary and (ii) secondary to autoimmune conditions
10. Look for extrapulmonary signs or purely restricted to lungs
11. ANA positivity reliable for SLE, MCTD, Scleroderma mostly; Autoimmune myositis can cause isolated pulm ds and ANA is not reliable as a screening test.
12. NSIP-OP overlap pattern: inflammatory myositis until proven otherwise.