10/5/23 Virtual Morning Report with @CPSolvers

"One life, so many dreams" Case Presenter: Umbish (@UmbishD) Case Discussants: Rabih Geha(@rabihmgeha) and Amanda Barreto(@amandabarretof2)

CC: 79 yo male presenting to ED with **SOB** for 1 week

HPI: Diagnosed with RA with ILD in the past, not on home O2, increasing SOB with **productive cough** and sputum, no change in color of sputum, **fever** spikes 101, temporarily relieved by tylenol, weak & lethargic, stops to catch breath **while walking**

Review of system mostly unrevealing except for Right calf pain that goes away with rest, vascular study normal.

PMH:
Rheumatoid Arthritis, ILD
HTN, CAD, DVT

Meds:
Tylenol
Humira (Adalimumab)
Apixaban
Amlodipine

Family Hx: NA

Soc Hx: Non smoker, does not drink alcohol

Health-Related Behaviors:

Allergies:

Vitals: T:101 **HR:** 108 **BP:** 100/60 **RR:** 30 **SpO2:** 86% RA -> 3L O2 (hypoxic)
Exam:
CV: no murmurs or added sounds
Pulm: crackles all over the lung fields
Abd: normal
Neuro: Ax3,
Extremities/skin: trace b/l pitting edema

Notable Labs & Imaging:
Hematology:
WBC: 3.6 Hgb: 8.6 Plt: 84k → chronic pancytopenia
O2 requirement increased to 6L on day 2. 8L Face mask on Day 3. HFNC 80% of inspired O2;
Chemistry:
BMP (electrolytes) normal, Creatinine normal, normal LFTs
Sputum culture, Urine Legionella, MRSA nares: negative
Troponin, BNP 205, LDH 300
Empiric abx w/ Ceftriaxone, Azithromycin
→ Day 2: Cefepime+Vancomycin+Azithromycin; Day 3: Face mask 8L oxygen
Imaging:
CXR: B/l patchy opacities and interstitial infiltrates
CT chest: focal area of consolidation on RLL + b/l irregular opacities in centrilobular distribution Increase in the opacity in periphery of lung, no definite honeycombing.
Urine & serum beta-D glucan + , PCR + for PJP, urine histoplasma and serum galactomannan: negative.
Started on TMP-SMX and steroids.

Final dx: Cryptogenic organizing pneumonia (COP) & PJP pneumonia

Problem Representation: A 79yM w/ PMH of RA associated ILD who was on Adalimumab presents w/ worsening SOB, productive cough and fever for 1 week, hypoxemia and chronic pancytopenia. Imaging notable for b/l irregular patchy opacities in centrilobular pattern, reversed HALO-sign and focal RLL consolidation.

Teaching Points (Maryana):
SOB: lung x heart -> Lack of orthopnea - lung
SOB + fever: infections, inflammatory diseases
Signal x noise: complaints related to the current disease x previous
Patient using Immunosuppression: opportunistic lung infections
Common for immunocompetent: influenza, s. Aureus, entamoeba, candida
For immunocompromised patients -> Right thing to do: do not shift, but expand -> JC. virus + nocardia + toxoplasmosis, PJP
Empyric atb x Specific atb - always start empyric atb if:
1) pt too sick to wait for cultures
2) you are too confident about diagnosis
Always start atb in: **Sepsis, neutropenic fever**, **rigors** -> high risk for decompensation or severe diseases
CXR with patchy **opacification**: Fluid x blood x pus
Pancytopenia: infection causing bone marrow x bone marrow problem
Pancytopenia + RA: Felty syndrome
Organizing pneumonia: rare condition, abnormal reaction in the lungs - can be related to autoimmune diseases. **Life-threatening!** Start on steroids if suspected.
Ddx: Unusual infection x inflammation in the lungs due to RA
Disease restricted to the lungs -> think in opportunistic infections that only affect lungs: fungus
Diagnosis ended up being both of the differentials.