



# 6/11/20 Morning Report with @CPSolvers



Case Presenter: Kaitlyn Rogers (@kaitlyn\_Rogers9) Case Discussants: Iman Shifa and Rachel Anderson (@medrachel)

**CC:** 74M w/myelofibrosis admitted from Pulm clinic with **shortness of breath** and R- sided **pulmonary infiltrate**

**HPI:** **Increasing SOB** over 1-2 weeks, acutely worsening 4 days prior associated with **exertional chest tightness**, better with rest. Had GERD-like symptoms 6 days prior to pulm clinic visit. Wife had fever/nausea/diarrhea 4 days prior. Came into Pulm Clinic for lung nodule screening -->found to have **fever** and **NEW right sided pulmonary infiltrate, with resolution of L sided infiltrate noted prior.**

**Other history:**

Seen in rural NC prior to COVID

L sided infiltrate - treated with Levofloxacin (Nov-Feb)

**Hospital Course:**

Improved O2 requirement, felt much better subjectively. Pt reported that he had more severe GERD symptoms prior to admission

**PMH:**

Myelofibrosis in 2015  
CAD (CCTA dx, neg stress test)

Recurrent hemoptysis (s/p BAL - unrevealing)

**Meds:**

Ruxolitinib - stopped b/c pt preference  
s/p Levofloxacin for "PNA"  
Nexium  
Losartan  
Amlodipine  
Statin

**Fam Hx:**

Noncontributory

**Soc Hx:**

Plumber - doing a lot of work under houses recently

**Health-Related Behaviors:**

1-3 shots of whiskey, a few times a week  
Former smoker

**Allergies:**

Lisinopril

**Vitals:** T: **101.1, resolved on admission** HR: **77** BP: 131/58 RR: 16  
SpO<sub>2</sub>: 96% on 2L NC

**Exam:**

**Gen:** well appearing, NAD

**HEENT:**

**CV:** RRR, no MRGs, no JVD, no edema

**Pulm:** **crackles at R base**, normal WOB, left fields clear

**Abd:** NTND, **enlarged liver, spleen tip 10 cm below costal margin**

**Neuro:** AOx3

**Extremities/Skin:** **1 cm bruise under right thumbnail, nonpainful**

**Notable Labs & Imaging:**

**Hematology:**

WBC: 4 Hgb: 10.4 Plt: 96 (increased from prior 2 weeks ago)

**48 segmented neutrophils**, 16 lymphs, eos 1, baso 1, monos 4 . (+) schistos, teardrop cells, nucleated cells

**Chemistry:**

Na: 138 K: 3.8 Cl: 105 CO2: 23 BUN: 24 Cr: 0.92 glucose: Ca: Phos: RF<10, ESR 44, ANCA neg, UA without hematuria, neg ANA, neg CCP ab (?)

**Imaging:**

CT chest: lung nodules unchanged, full resolution of L sided PNA, **large heterogeneous infiltrate of the posterior/lower middle lobes of R lung**

Bronchoscopy: **R upper lobe post segment showed blood.** Additional oozing from the post-segment, felt due to scope trauma. No other bleeding from any segment.

Quant: neg, KOH neg, 1+ normal flora, BCx NGTD, BAL insufficient sample

**Problem Representation:**

A 74 y/o M with PMHx of myelofibrosis not currently on therapy p/w subacute dyspnea, fevers, and GERD-like symptoms, found to have posterior RLL infiltrate with bronchial bleeding on BAL, thought to have recurrent aspiration w/ pneumonitis-related bleeding.

**Teaching Points (Alex Horne):**

-**Myelofibrosis:** myeloproliferative neoplasm w/ proliferation of mature myeloid cells -> fibrotic obliteration of BM, notable features include hepatosplenomegaly (extramedullary hematopoiesis) + constitutional symptoms + anemia + increased risk thrombosis/hemorrhage/infection!

- **Ruxolitinib:** JAK2 inhibitor, increased risk of infection d/t suppressive effect on natural killer and dendritic cells - must screen for TB; can see a withdrawal syndrome (ruxolitinib discontinuation syndrome) when stopped w/ full relapse of disease +/- ARDS, DIC

-**Lung nodules** -> Classify by imaging as **centrilobular** (many infections; also aspiration, HSP, endobronchial tumor), **random** (hematogenous infection - miliary TB, disseminated fungal, septic PE vs hematogenous malignancy - solid tumor mets), **perilymphatic** (sarcoid, pneumoconiosis, lymphangitis carcinomatosa, leukemia/lymphoma)

-**Ddx hemoptysis:** infections (TB, aspergillus, abscess/cavities, many others), autoimmune (vasculitis, SLE), bronchiectasis (CF), malignancy, PE, foreign body or trauma, mitral stenosis, bleeding disorders/abnormalities

- **Faget sign = increased temperature with paradoxical decreased pulse** (normally, for every 1 degree temp increase HR also increases by ~8): associated with BB but also intracellular organisms (legionella, mycoplasma, coxiella, brucella)