7/22/24 Morning Report with @CPSolvers

"One life, so many dreams" Case Presenter: John Black*(@)* ***Case Discussants:*** Dr. Meredith Greer*(@) and Dr. Luke. Hedrick(@)*

CC: Cough and shortness of breath

HPI: 50 F p/w progressive worsening of cough and dyspnea for 4 months. Now dyspneic with minimal exertion, Intermittent fevers and chills. Was treated with a course of amoxicillin, course of levaquin, medrol dose pack as outpatient, w/o meaningful improvement.
ROS: No chest pain; sputum; hemoptysis; weight loss; sweats; bladder/bowel disturbance.

PMH:
Chronic LBP, Seronegative rheumatoid arthritis
Endometriosis

Meds:
Amoxicillin clavulanic acid , Levaquin,
Medrol pack
Methotrexate
Tylenol
Rituximab

Fam Hx:
Father HTN
No known AI

Soc Hx:
Rare alcohol in social occasions;
never smoker;
no drug

Health-Related Behaviors:
No pets,

Allergies

Vitals: T: 39.5 HR: 99 **BP:**139/89 **RR:** 20 SpO2: 97 on 5L nasal cannula BMI: 40

Exam:
Gen: ill appearing , **HEENT:** mucous membrane moist
CV: tachycardia, no pitting edema no JVD
Pulm: WOB,, scattered rales diffusely
Neuro: AOx4 no focal deficits
Extremities/skin: no obvious rash synovitis

Notable Labs & Imaging:
Hematology: WBC: 14.50(91 PmN) Hgb: 10.6 Plt: 581
Chemistry:
Na: nl K: Cl: HCO3: BUN: Cr: glucose: Ca: Mag:
ESR 72, CRP:90+, lacticA: 2.3
procal 2.5
Covid RSV: neg; strep legionella: neg , sputum moderate candida albicans
Imaging:
CT scan: Multilobar, pneumonia, small, bilateral pleural effusions; multifocal PNA
Transfer → repeat lab , blood culture : neg
intermittent fevers, despite vanco , fluconazole and doxy,
Hiv , mrsa :neg ; Histo , serum CRAG neg
ANA, DsDNA, CCP,SSA,: neg , Atypical pANCA + at 1: 640
undetectable CD 19/20 B Cells
Echo: normal, no vegetation
Bronchoscopy : cell count 82% N, CMV PCR : neg
PJP : neg
Aspergillus galactomannan ag 1.56 (upper normal 0.5)

Dx: Pulmonary Aspergillosis

Problem Representation: 50 F p/w progressive worsening cough and SOB, fever chills, h/o RA on MTX, , unresponsiveness to ABx, found to have elevated ESR, CRP, WBC and halo sing on imaging.

Teaching Points (Parisa):
Narrowing down differentials: Timeline; Progressive nature; history (social/occupational/travel/pet) Response to Abx (never response; slight improvement)
Categories: Infectious(fungal, atypical bacteria), non infectious(organizing pneumonia); auto inflammatory(vasculitis, sarcoidosis); non auto inflammatory; cancerous; non cancerous
Productive cough in middle age women: bronchiectasis is no miss diagnosis
RA: lung nodules; CTD;ILD (UIP pattern);risk factor bronchiectasis(traction); empyema;
Most ILDs are presenting with NSIP vs RA UIP.
MTX: drug pneumonitis + pancytopenia
Dyspnea on exertion we need to include cardiac causes.
Endometriosis could have extension to lung and sx p/w cycles.
Imaging patterns: UIP(Usual interstitial pneumonia)eg, IPF vs NSIP (nonspecific interstitial pneumonia)eg, inflammatory disorders → different treatment modalities.
Pertinent negatives: systemic vasculitis (ulceration; rash; edema), neuro weakness (myositis, lung crackles plus high oxygen demands), heart (no edema, no JVD)
Not using distilled water in CPAP: increase risk of fungal infection; pseudomonas, legionella, acanthamoeba.
Candida in respiratory culture always contamination; rarely disseminated candida inf.
GGO(alveoli partially filled) vs consolidation (alveoli are filled)
→ Pus(PJP; high oxygen requirement/CMV); blood(DAH); water(pulmonary edema); protein(PAP), cells
AFB Test: TB and atypical consolidation pattern
Atypical pANCA: Goodpasture; IBD;CF; CTDs;burger;preeclampsia;malaria; leprosy
Halo sign(a nodule of IFD surrounded by GGO): angioinvasive aspergillosis
→ discrete nodule of angioinvasive aspergillosis w/ infarction d coagulative necrosis surrounded by alveolar hemorrhage.
Culture sensitivity for aspergillosis 35%-63% in sputum or BAL
Sensitivity of serum galactomannan in Immunosuppressed patient is not high.