



7/9/24 Morning Report with @CPSolvers



"One life, so many dreams" Case Presenter: Maryana@maryanamribeiro Case Discussants: Ravi@rav7ks and (@)

CC: a 47 y/o F presenting with dry cough and mild SOB for 3 weeks.

HPI: patient mentions she started with a dry cough around 3 weeks ago, with no associated fever. At that time, with 5 days of sx she was prescribed Azithromycin for 5 days for presumed CAP. symptoms got slightly better after the medication, but returned after 1 week associated with progressive SOB. now she comes to the ED due to persistent cough for 3 weeks, moderate SOB on exertion, and low grade fever.

ROS: negative for n/v or diarrhea. Refers progressive fatigue.

PMH:
HER2+ breast ca stage 3. underwent chemo with Docetaxel and Carboplatin FOR 2 CYCLES. trastuzumab added for 8 cycles. last chemo finished one week before the onset of sx. Radiotherapy was performed alongside chemo, 9 sessions were completed last one performed 5 days before the onset of cough. patient has type 2 DM and htn.

Meds:
Metformin
Lisinopril

Fam Hx:

Soc Hx:
Patient from Puerto Rico. Moved to US 25 years ago

Health-Related Behaviors:

Doesn't smoke or drink alcohol

Allergies: -

Vitals: T: 38.1 HR: 88 BP: 135/78 RR: 95% on RA
Exam:
Gen: MILD ACUTE DISTRESS
HEENT: unremarkable
CV: RRR normal S1/S2
Pulm: mildly decreased breath sounds in both lungs
Abd: unremarkable
Neuro: AO*3 no focal deficit
Extremities/skin: no edema or rash

Notable Labs & Imaging:

Hematology:

WBC: 4.5 Hgb: 9 Plt: 141k

Chemistry:

BUN: 26 Cr: 0.8 AST: nl ALT: nl

Infectious workup: influenza and covid -, HIV-

Bacterial, fungal cultures were collected and are pending

Imaging:

Chest CT: bilateral perihilar peribronchial thickening and interstitial infiltrate consistent with bilateral multifocal pneumonia

Echocardiogram: nl with LVEF 60% and no valvulopathies.

Patient was treated with corticosteroids, started on empiric abx with Vancomycin, Cefepime, and Bactrim prophylaxis.

Viral pcr was + for enterovirus. Patient was clinically stable after 5 days of hospitalization with O2sat of 96% on 2L NC, discharged home with oral abx and oxygen after 5 days.

Patient returned 7 days later with worsening SOB, cough, tachypnea (RR:38), SPO2 88% on 5L NC and low grade fever.

Showing signs of respiratory failure she was intubated right away.

Chest ct: ground glass attenuation with traction bronchiectasis consistent with severe acute respiratory distress.

PJP from BAL was - but + for candida. placed on ECMO.

Dx: BAL cytology showed malignant cells, confirming breast ca with lymphangitic spread (lymphangitic carcinomatosis)

Problem Representation:

A 47 y/o F with a PMH of breast ca stage III, presenting with dry cough and SOB progressing to respiratory failure. Chest Ct showing GGOs and BAL cytology showing malignant cells.

Teaching Points (Hee):

Approach to a three-week subacute cough: Consider sinusitis post nasal drip, GERD non-asthmatic (vocal dysfunction, eosinophilic bronchitis/pneumonia, medication toxicity (e.g., ACE inhibitor within the last 2 weeks), or spring allergies/ infection Mycoplasma, atypical and typical pneumonia (consider hypoxemia) autoimmune, vasculitis, malignancy / vaping, smoking /azithromycin not perfect for CAP

Immunocompromised state (Breast cancer), organisms (Influenza, bacteria, COVID-19, PJP TB, CMV, fungal infections// hypercoagulability (PE)//side effects of treatment (pulmonary toxicity, pneumonitis, cardiomyopathy) from chemotherapy and radiation.

EXAM: listen to lung sound (dull. Cracked) / look for Interstitial/pleural effusion, B-lines/pericardial effusion, DVT.

Diffuse (not focal) diminished breath sounds -> bilateral pulmonary process, 95% spo2 (not severe) - chest x ray /CT or HRCT will be useful

CT:GGO bilateral pneumonia- vancomycin +cefepime (pseudomonas)+ bactrim (PJP+)-fungal -> BAL (PJP)

Sequence of events: antibiotics, discharge, coming back - amplifying lung damage, need mechanical ventilation - ARDS, fungal, TB, post covid pulmonary fibrosis
Malignancy, alveolar filling (diffuse hemorrhage)

BAL cytology: breast cancer with lymphangitic carcinomatosis.

Lymphangitic carcinomatosis: malignancy spread to lymphatic vessels; breast cancer mc stage 4 (chemotherapy tx -> poor prognosis)