05/30/26 Simplicity in Complexity with @CPSolvers

"One life, so many dreams" ***Case Presenter****: Kirtan Patolia (@KirtanPatolia)* ***Case Discussants****: Jeffrey Shen (@)*

https://clinicalproblemsolving.com/present-a-case/

Scribing (Seeme)

Vertices Multiplex

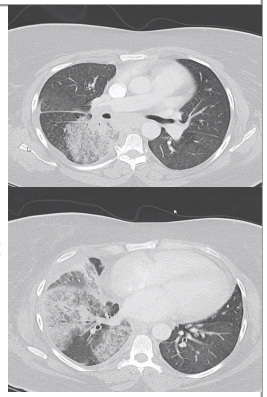
CC: 46 y/o FM dyspnea & chest pain
HPI: Cough and rhinorrhea for 1 week (flu like symptoms), visited urgent care- suspected viral infection, used home inhalers and over the counter meds, 3 days later R sided pleuritic chest pain different in character from initial dull chest pain, dyspnea that never resolved. Visited urgent care again, suspected pneumonia- given antibiotics
Day 6 on 3L nasal cannula, O2 sat improved, no fever despite no antibiotics in hospital

PMH:
Asthma- 20 yrs ago (last exacerbation 3 years ago)
Meds:
Inhalers

Fam Hx:
-
Social Hx:
Works at Day care sometimes
Health-Related Behaviors:
Smoking 1 pack per month for 5 yrs
Allergies:
-

Vitals: T: 38.1 **HR**: 98 **BP**:124/82 **RR**: 22 **Sat**: 89 **BMI**: nl
Exam: Gen: looks sick with increased work of breathing
HEENT: nl **CV**: nl **Abd**: nl **Neuro**: nl **Extremities/skin**: nl
Pulm: crackles at R lower lung base

Notable Labs & Imaging:
CBC: WBC: 27k (90 N) → 33k (92% N) Plt: 350
Hgb:9.1 (baseline 14) MCV:70 Ferritin: 1500
TSAT: 9% (low) RVP: human metapneumovirus +
Chemistry:
Electrolytes: nl ESR: 140 CRP: 156 LDH:400
AST:nl ALT:nl Alk-P: nl Bili: nl protein:7, albumin:4
UA: 1+protein, 1+RBC. P/Cr ratio: 1000 mg UACR: 400 mg
Infections workup:HIV, Hep A, B, C, syphilis: neg
Histo, blasto, coccidio: neg
Sputum Cx and gram stain: neg
Bartonella, brucella, coxiella: neg
ENA, ANA: neg, APLS: neg, PNH: neg
Imaging:
CT A/P:nl , CXR: R middle and lower lung lobe diffuse infiltrates
CT chest: R main pulmonary artery infarct with extending to R arteries, mediastinal and hilar LAD, hilar mass (3.5 into 4 cm), GGO in R middle and lower lobe
Endobronchial Biopsy: lymphohistiocytic cells in nodular aggregates
IgG4 staining: neg , Echo: nl, flow cytometry: neg
PET scan: abnormality in lungs,hilar lymph nodes enhanced
Biopsy repeated: mixed inflammatory cells, Anti PF4: neg,
SPEP: 2 monoclonal peaks, IgG lambda (1g) and kappa (0.4), ratio:2
Bone marrow biopsy:CD138 positive cells, Lambda/Kappa : 20, monoclonal cells: 30%
Dx: Extramedullary Multiple myeloma



Problem Representation: 46 y old FM with PMH of asthma presented with dyspnea and chest pain associated with mediastinal and hilar LAD. SPEP showed 2 monoclonal peaks & bone marrow showed 30% monoclonal cells.

Teaching Points (Anmolpreet)
I. URTI in asthmatics: can be complicated by asthma exacerbation or, a secondary superadded bacterial infection (so, sometimes in a visibly sick patient with viral pneumonia, more harm in not giving antibiotics)
Pleuritic chest pain: may be explained by ***viral pleurisy*** as well.
II. Hyperferritinemia: ?Anemia of chronic disease; ?MAS
III. Right hilar "mass":
1. Malignancy (symptoms of dysfunction from its spread) - Lung cancer, Lymphoma - *biopsy (definitive)*
2. Invasive infections (mostly atypicals - activates immune system in a way causing fibrosis) - Mycobacteria, endemic mycoses (Coccidioidomycosis, Blastomycosis, Actinomycosis) - and can invade tissues from there. -
Ask who the patient is - immune status/ exposures?
3. Inflammatory - eg: Sarcoidosis

IV. Histiocytic disorders : rare and tricky; **first-rule out infection in this patient;** Some of the disorders are **– Reactive histiocytosis or Langerhans cell histiocytosis** - not much mass-forming; other two more mass-forming histiocytic ds are- **Erdheim Chester disease**: long bone involvement - look for signal outside the lungs; **Rosai Dorfman disease;** another possibility **Histiocytic sarcoma**
-biopsy and special stains; To differentiate reactive from primary- look for sheets of histiocytic cells; and look for special stains.
V. Why PE without overt risk factors? - true thrombus (hypercoagulability/malignancy) vs external compression
VI. Multiple myeloma: cancer of plasma cells; measured kidney function from UA, UPCR, UACR; not just creatinine (no gamma gap/ hyperCa) - signals: ESR 140, anemia of chronic disease - ***final: extramedullary MM***