03/17/21 Morning Report with @CPSolvers

***Case Presenter**: Priyanka Athavale (@pri_athavale) **Case Discussants**: Sherry Chao (@Shark8078Chao) and Sonia Silinsky Krupnikova*

CC: Chest pain

HPI: 62 M p/w chest pain.
Pt reports pleuritic chest pain and cough 3 weeks; CXR showed infiltrates Tx w/ levofloxacin w/ no improvement.

Pt reports 30lb weight loss over 6 mo, multiple episodes of otitis media and R facial palsy that improved w/ a 5 day course of steroids.

-

PMH:
No significant history

Meds:
-

Fam Hx:
No significant history

Soc Hx:
No significant history

Health-Related Behaviors:
-

Allergies:
No known allergies

Vitals: **T**: afebrile **HR**: 89 **BP**: 148/81 **RR**: 18 **SpO_2**: 94% RA
Exam: Appeared w/ R facial droop
Systemic
Pulm: clear to auscultation
CV: regular rate rhythm
Abdomen: no tenderness/ palpable organomegaly
Neuro: no FND
Extremities and joints: b/l MCP joints swelling R > L, no skin rash

Notable Labs & Imaging:
Hematology:
WBC: 10.6 Hb: 11.8 Plt: 262
Chemistry: WNL
Iron 24 Ferritin 865
Urinalysis: 6-8 RBC
Imaging:
CT chest: multiple b/l pulmonary lung nodules, some w/ cavitation

RF -ve, ACCP -ve ANA -ve complement WNL c-ANCA 1: 40 p-ANCA <1:40
CT sinuses: Severe opacification of mastoid air cells on R > L, partial opacification of middle air cavities
Anti-PR3 ab moderately-strongly +; anti-MPO ab -ve

Lung nodule biopsy: polymorph inflamm - neutrophils, eos, histiocytes, plasma cells and scattered giant cells

Dx: GPA

Problem Representation: Elderly male p/w subacute pleuritic chest pain, pulmonary nodules w/ chronic weight loss, multiple episodes of otitis media and u/l facial palsy

Teaching Points (Priyanka):

- **Chest pain:** 4+2+2- first rule out emergent causes: Cardiac (ACS, AD, tamponade, takusubo), Pulm (PE, PTX), esophageal rupture (rupture, impaction) → If negative- use an anatomic approach: Superficial (MSK, skin, nervous system); Visceral (GI- spasm, reflux, ulcers; cardiac- HF, AS; pulm- PNA, hernia)
- **Localizing the lesion x Time course:** subacute/ chronic- **pleuritic**, MSK, inflammatory, neoplasm, chronic infection, meds/drugs, autoimmune
- **Layering on the context clues:**
  - **Facial nerve palsy**: mononeuritis, polyneuritis, central nervous lesion → vasculitis vs lupus-related dz (variable vessel vasculitis vs primary vasculitis, RA, Sjogrens, sarcoidosis); inefctious (HSV, TB, Lyme dz); tumor/ mass effect
  - Recurrent OM: can locally involve CN7 nucleus, causing Bells Palsy
  - **MCP Joint Pain:** autoimmune inflammatory process (ie: RA, vasculitis), 2/3rd MCPs non specific- pseudogout, endocrine, trauma, secondary OA, seronegative spondyloarthropathies
- **Pulmonary Renal syndromes:** caused by GPA, EGPA, MPA
- **Syndrome of chronic joint pain, pleuritic chest pain cavitary lung lesions**→ consider atypical mycobacterial infectious (fungal, TB), malignancy (primary lung cancer, metastases), rheumatologic (vasculitis, GPA), sarcoid; r/o drug induced; septic emboli, malignancy
- **Test characteristics:** c-ANCA with PR3- Ab-> highly specific for GPA → check out 2017 EULAR/ACR classification system for diagnostic criteria