12/25/25 Morning Report with @CPSolvers

"One life, so many dreams" ***Case Presenter****: Hee Mun (@)* ***Case Discussants****: Rabih (@) & Kuchal (@)*

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

Scribing (Magnus)

CC: 45F with cough and intermittent hemoptysis for 8 weeks

HPI:

Productive cough for 3 months with intermittent blood-streaked sputum, low-grade fever and unintentional weight loss. Unilateral leg pain and swelling.

ROS: No CP, SOB, night sweats, TB or occupational exposures, reflux, allergic rhinitis, hematuria, oral ulcers, joint pain, rash, recent immobilization, surgery or oral contraceptive use.

PMH:
None

Meds:
None

Fam Hx:
No lung cancer

Social Hx:
From south-east Asia

Health-Related Behaviors:
No smoking

Allergies:
None

Vitals: T: 37.8 **HR**: 90 **BP**: 120/80 **RR**: 18 **Sat**: 94

Exam: HEENT: No LAD **CV**: No murmur

Pulm: Decreased breath sounds over left lower lung

Extremities/skin: Unilateral leg swelling, warmth, tenderness

Notable Labs & Imaging:

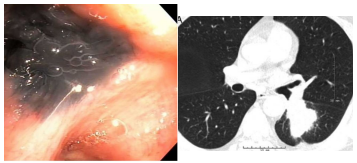
Hematology:

WBC: nl Hgb: nl Plt: nl MCV: nl

ESR and CRP mildly elevated

HIV negative, Sputum TB negative

UA normal



Imaging:

LE US: DVT, CT-PE: No PE

CXR: Non-homogenous opacity in left lower lung

Bronch: Black mucosal pigmentation and black mucus plug obstructing left lower lung bronchus with airway narrowing. Plug was removed. Right bronchus normal. Interpreted as bronchial anthracofibrosis.

CT-chest: Left lower lung 4 cm consolidation and tree-in-bud micronodules. Ipsilateral hilar/mediastinal LAD.

Denied exposure to mining, soot, biomass fuels, wood smoke.

Workup: CBNAAT/GX, AFB smear negative. EBB: pigmented macrophages, no granulomas/malignancy detected. EBUS-FNA negative for malignancy. BAL MTB positive.

TB treatment was initiated and cough/hemoptysis resolved. Repeat CT showed marked regression of consolidation and LAD.

Dx: Endobronchial TB with bronchial anthracofibrosis

Problem Representation:

45 year old previously healthy woman presented with cough and hemoptysis for 8 weeks. Found to have a black mucosal pigmentation on bronchoscopy, left lower lung consolidation and tree-in-bud micronodules on CT, and ultimately diagnosed with endobronchial TB with bronchial anthracofibrosis.

Teaching Points (Saketh)

1) **Framework for approaching Hemoptysis**: 4Ds: Duration, Dyspnea, Drugs, Distant Symptoms

If one reframes hemoptysis as part of a systemic disease: evaluate all other symptoms (fever, weight loss, etc) independently to make progress.

- Proceed to CT Chest with contrast (unless concern for severe Heart Failure or Pulmonary Renal syndrome)

2) **Hemoptysis and Imaging (Parenchymal vs Vascular)**- Most Parenchymal Disorders are focal (like lung masses) - Vascular Disorders (Capillary and venous disorders usually present in a diffuse manner, Arterial involvement presents focally)

-Small distal PE: Can have a negative CTPE and stable hemodynamics.

3) Hemoptysis Equivocal GGOs: Endobronchial Lesions vs Migratory Helminths

- Endobronchial Lesion: Base Rate - Infections, Malignancy (Respiratory: SCC, Carcinoid, Adenoid vs Metastatic Lesions)

4) Chest CT: Look for whether it is related to the vessels or airways

-Diffuse Tree in bud opacities: rule out Atypical Mycobacterial Infections, Fungal Infections

5)Sputum AFB: Low sensitivity for endobronchial TB. Move to GeneXpert