8/21/23 Morning Report with @CPSolvers

"One life, so many dreams" Case Presenter: Alex Smith @AlexTSmithNY) ***Case Discussants****: Ilana Krumm (@IlanaKrumm) & Lekshmi Santhosh (@LekhsmiMD)*

CC: 56 yo man , at clinic f/up Chronic cough over a year duration.

HPI: Patient with chronic cough who is f/up for HTN, HLD, Seasonal Allergies managed well with loratadine, RGE managed with omeprazol inconsistently. Cough has been persistent over the past year, and productive. Worse at morning and at night. Persistent at all seasons. No SOB, No cardiac disease or asthma. Denied any other systemic symptoms, no N/V/Diarrhea, No weight loss or weight gain.

PMH:
HTN
HLD
RGE, DM,
Seasonal Allergies.

Meds:
Loratadine 10mg
Metformin
Pantoprazol
Atorvastatin
Fluticasone
Losartan

Fam Hx:
Oropharyngeal cancer Mom.

Soc Hx:
No secondhand smoke exp.
Home alone in Queens, born and raised.

Health-Related Behaviors:
Manual Labor for Air conditioning company.

Allergies:
Seasonal allergies

Vitals: T: 98 HR: 75 BP:123/75 RR: SpO2 99% RA
Exam: BMI 29 (35 pounds of weight loss over past 2 y)
Gen: Breathing comfortably in no acute distress
HEENT: No erythema on back of throat,
CV: normal S1+S2; **Pulm:** clear to auscultation;
Abd: non-tender, no distension
Neuro: Intact; **Extremities/skin:** Warm and well perfused, no rash

Notable Labs & Imaging:
Hematology:
WBC: 9,19 (Eos 13.2% Eos 1.200) Hgb:14.4 Plt: 253
Chemistry:
Na: 137 K:4.7 Cl: CO2: 25 BUN:17 Cr: glucose: 102 Ca: 9.9
AST:26 ALT: 21 Alk-P: 66 T. Bili: 0.2 Albumin: 4.7
HIV neg, Strongy ab neg,
ANCA neg, Serum IF: **total IgE within normal limits**
Stool O and P negative
Imaging:
CXR: Neg, CT: Right nodule 3mm
Spirometry: **FVC 4.39 L (68%) FEV1 3.38 (64%) FEV1/FVC 76% DLCO 28 (69%)**
TLC 6.38 VC 4.39 IC 3.14 ERV 1.25 **RV 1.99 (130%)**
Sputum eosinophil count: pending
Blood smear and screening for expression of PDGF pending

Suspected Diagnosis: Chronic eosinophilic leukemia

Problem Representation:
56 year old man with chronic cough and eosinophilia, no obstructive pattern on spirometry, and evidence of trapping of air, with suspected diagnosis of chronic eosinophilic leukemia.

Teaching Points (Ximena):
-Common causes of chronic cough: GERD, cough variant asthma, upper airway syndrome
-Ask about exposure, occupational history, immunocompetent state and other associated symptoms (Remember aspiration, uncommon in young patients)
Exposure History Thoughts
-Oropharyngeal cancers are associated with tobacco, so remember to ask about exposure to secondhand smoking.
-Ask about gas and vapor exposure, pets exposure, medications associated to lung disease.
-Tobacco and asbestos exposure increase the risk of lung cancer individually, but together potentiate the risk.
-The exposure impact can be assessed by asking the patient the pattern of the cough (more at work, during the entire day ,etc)
-Eosinophilia can be associated to many things: asthma, cardiovascular disease, parasitic infections, ABPA, malignancy. Pneumoconiosis can have mild eosinophilia.
-**Bronchoscopy**: We can use the approach of "can we do it?" and "should we do it?"
*Can we do it?: Assess the patient for any contraindication like hemodynamic instability.
*Should we do it?: Think about the diagnosis, which test would be the best for what I'm looking for, pretest probability
-Causes of LOW DLCO: pulmonary fibrosis, emphysema changes or ILD
-Nodule <6mm in low risk individuals has a low probability of being malignant.
-Remember that inhaled corticosteroid rarely have systemic effects, if concerned about eosinophilia the steroids need to be systemic.
-PFTs have to be interpreted with a grain of salt because in some pathologies like asthma, the PFTs depend on the symptom control because it's a very variable disease within itself. PFTs are just a snapshot in time.

Framework for PFTs interpretation (ATS Guide) shared by Dr. Lekshmi in the chat:
https://www.atsjournals.org/doi/full/10.34197/ats-scholar.2022-0062HT
https://www.thoracic.org/statements/pulmonary-function.php