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**Project ECHO for Interstitial Lung Disease  
Case Form**

ECHO ID: ILDECHO-067

☒ New Case☐ Follow-up Case

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Current or suspected ILD diagnosis (if known):

How was this diagnosis made (select all that apply)?

☒ Radiology☐ Pathology☒ Multidisciplinary discussion

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**Main Question:**

By presenting this case, I hope to obtain:

☒ Help making a diagnosis☐ Help with lab/test interpretation☒ Help with clinical management☐ Other (please specify):

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**Patient Demographic Information:**☐ Male ☒ Female ☐ Transgender

Age (years): 46

State of primary residence: DC

Ethnicity: ☐ Hispanic or Latino ☒ Not Hispanic or LatinoRace (check all that apply): ☐ American Indian or Alaskan Native ☐ Asian☒ Black or African American ☐ Native Hawaiian/Pacific Islander ☐ White☐ Other ☐ Unknown

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**Case Summary:**

Initially pt presented in 2021, at the time, 42 yo with h/o tob use and asthma, here for consultation of SOB and ct abnormalities. Pt notes progressive DOE, has a chronic intermittent dry cough.

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Smoker smokes daily 1/2ppd since age 14. Dx with asthma as a child, then told chronic bronchitis. DOE progressive over the past few years.

Was in OC and did not notice any change in breathing, noted drop to 87%, never told she needed o2.

Arthritis in her back/pinched nerve

Had PNA before, 2008 or 2009, was intubated, was transported to Baltimore shock trauma, was on HD, liver wasn't working, BG was high. Was not trached. Had some swollen legs afterwards, needed a cane for a little while.

No muscle weakness.

+ dry mouth because of gabapentin. No dry eyes. No GERD. No nail problems but has noticed that they are curved for the past couple of years. No Raynaud's

+ alopecia, no arthritis in her hands

In addition to tobacco, she smokes MJ and uses PCP.

Initial workup with PFTs and 6MWT below. Follow up visits are intermittent and there have been multiple psychosocial and medical issues arise which significantly impact health.

At follow up visits, she stopped using her prescribed oxygen in August 2022, stating that she felt well without it and that it was too heavy to carry the device around.

8/23, she is no longer smoking cigarettes but uses an e-cigarette throughout the day. Stated that she would smoke a cigarette if given to her by a friend, but otherwise doesn't seek out cigarettes anymore. She denied any THC use, has not used marijuana for 2.5 years.

8/23, now almost 3 years clean, attending NA and even leading the meetings

Was doing more activity such as walking. DOE is much better, does not have to have others wait for her. Able to keep up and less DOE.

Imaging also appeared to improve slightly.

12/23: Since last visit she was admitted with hypertensive emergency and stroke. Story is a little complicated to follow.

Initially had 911 call then went to ED on her own. Released the same day from one hospital and went to another local ED the next day. Admitted with AMS. Notes of "overdose" but pt clear that she has not taken anything but prescribed meds and did not take any of her meds incorrectly.

Accused of taking too many of her pills, there was documentation of "overdose", however, tox screen was neg and she is clear that she did not take anything that was not as directed. This inpatient team stopped many of her meds cold turkey: duloxetine, doxepin, tizanidine, ambien.

Another admission 7/24 with poss pna; - low dose pred 40 x 5 days

- Empiric abx - ceftriaxone 1g IV daily, Doxycycline 100 mg bid
- Sputum cx requested

Another admission with seizures in 2024

And a final admission in 1/25, she called with cough/SOB complaints. When I returned her call, she was slurring her words and sounded confused. She declined going to the ED. Stated she was not at home so I couldn't call EMS for her. I called her Mom who is her emergency contact and she was able to call and locate her, called EMS and brought to ED. She had relapsed at this point. Went to inpatient rehab and is doing really well!

6/25: Follow up in clinic- went to recovery center and is sober 60days! She is feeling so much better overall. Strong and hopeful once again. Lost weight intentionally, feels better overall except dry cough.

She has recently received her 3 year chip for sobriety

Family history:

Mom: COPD, quit smoking, uses e-cig

Father: Died 10/21; ESRD for 22 years, DM, amputee, CAD, CVA

No h/o sarcoid or other rheum dz

Social history:

One son, temporary custody of her young son to his aunt

Grew up in DC, has been in 12 unit building for 2 years

Same property site for 22 years before this

One cat

No birds

No hot tubs.

No down comforters

+ mold exposure in apartment until 2019

No carpeting

No other known exposures

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### Exposure History:

- ☐ Previous or current bird ownership   ☐ Down products in the home
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- ☐ Woodworking   ☐ Well water   ☐ Hay exposure   ☐ Hot tub/jacuzzi/sauna  
☐ Humidifiers   ☐ Dusty environments   ☒ Water damage or mold at work or home  
☐ Farmland/barns   ☐ Amiodarone   ☐ Chemotherapy past/present  
☐ Chest radiation past/present   ☐ Asbestos
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## Past Medical History:

Obesity  
 ADD  
 Seizure disorder  
 Neuropathy  
 Depression  
 Schizophrenia

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## Medications:

Duloxetine, doxepin, tizanidine, ambien, trazadone, seroquel

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## Focused ROS:

- ☐ Rashes   ☐ Skin thickening   ☐ Arthralgias   ☐ Myalgias   ☐ Muscle weakness  
☒ Dry mouth   ☐ Dry eyes   ☐ Red or painful eyes   ☐ Raynaud's   ☐ Oral ulcers  
☒ Alopecia   ☐ Dysphagia   ☐ Heartburn/reflux   ☐ Fevers   ☐ Night sweats  
☐ Palpitations   ☐ Weight loss
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## Smoking History:

- ☐ Never smoker  
☐ Current smoker (          packs per day)  
 Pack years: 15          Quit date (if applicable): 2024  
☐ Cocaine use (route)  
☒ Vaping/e-cigarettes (frequency)  
☒ Inhaled marijuana (quantity)
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**Occupations, current and previous (if industrial or factory work, please provide specific details):**

N/A

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**Travel and Residential History:**

One trip to CA

Lived in apt building in DC

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**Family History:**

☐ Pulmonary fibrosis or interstitial lung disease

☐ RA, Lupus, or other autoimmune diseases"

☐ Premature gray hair   ☐ Cirrhosis of the liver   ☐ Bone marrow disorders

☐ Leukemias

*Comments:*

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**Physical Exam:**

*Vital signs:*

BP: 06/2025: HR 83, RR 18, BP 157/89

Height: 63 cm (5 ft 4 in) Wt: 75.2 kg (165 lbs 13 oz) BMI: 28.3 kg/m2

Oxygen saturation: 93% Ambulatory saturation: 87%

*HEENT:*

☐ Scleral injection   ☐ Dry mucous membranes   ☐ Poor dentition   ☐ Ptosis

*Pulmonary:*

☐ Wheezes   ☐ Rhonchi   ☐ Crackles

☐ Squeaks   ☐ Stridor   ☐ Dullness to percussion   ☐ Pleural Rub

☐ Bronchial breath sounds

☐ Other:

*Cardiac:*

☐ Murmur   ☐ Gallop

☐ RV heave   ☐ Pulmonary tap   ☐ JVD   ☐ Irregular

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☐ Edema      ☐ Other:

*Abdomen:*

☐ Distended   ☐ Tender   ☐ Tympanitic   ☐ Pulsatile liver   ☐ Fluid wave

☐ Other:

*Skin/Nails:*

☐ Rash (location, description)

☐ Clubbing   ☐ Ragged cuticles   ☐ Telangiectasias

☐ Abnormal nailfold capillaroscopy

☐ Digital swelling / Sclerodactyly   ☐ Ulcerations

☐ Mechanics hands

*Joints:*

☐ Synovitis              ☐ Deformity   ☐ Tenderness   ☐ Erythema

*Neuro:*

☐ Proximal muscle weakness

☐ Other:

*Other pertinent findings:*

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## Relevant Studies (please list key findings):

☒ PFTs:

	<b>12/2021</b>	<b>03/2022</b>	<b>11/2022</b>	<b>12/2023</b>
FVC	75%	76%	71%	53%
FEV1	75%	81%	74%	53%
FEV1/FVC	98	104	103	97%
DsbHb	unable to do	59%	32%	22
TLC	55	61%	55%	44%
VA	unable to do	71%	80%	57%

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☒ CXR Uploaded to Ambra: ☐ Yes ☐ No

☒ CT chest Uploaded to Ambra: ☒ Yes ☐ No

☐ Echocardiogram Uploaded to Ambra: ☐ Yes ☐ No

☐ Right heart catheterization:

☒ Other relevant testing:

Bronch 8/22

6MWT:

2021: Desat to 86%, 289M

4/23: Desat to 88%, 327M

7/25: desat to 87%; 359M

Chest CTs 9/2021, 3/2024, 7/2025

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### Relevant Labs:

Has the patient been evaluated by a Rheumatologist? ☐ Yes ☒ No

Date of last labs (month/year): 12/2023

CBC/differential: 8/13/289; 8/24

ANA: ☒ Neg ☐ Titer 3/2022 neg Pattern

ANA #2: ☒ Titer neg Pattern

ANA #3: ☒ Titer 1:160; 6/2021 Pattern

Smith: ☐ Neg ☐ Titer

SSA/Ro60: ☒ Neg ☐ Titer

SSB/La: ☒ Neg ☐ Titer

dsDNA: ☒ Neg ☐ Titer

Scl-70: ☒ Neg ☐ Titer

Centromere: ☒ Neg ☐ Titer

RNA polymerase III: ☐ Neg ☐ Titer

RNP: ☐ Neg ☐ Titer

RF: ☐ Neg ☐ Titer

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CCP: ☐ Neg ☐ Titer

ANCA: ☐ Neg ☐ Titer ☐ Pattern

MPO: ☐ Neg ☐ Titer

PR3: ☐ Neg ☐ Titer

PM1-Scl: ☐ Neg ☐ Titer

Ro52: ☐ Neg ☐ Titer

Jo-1: ☐ Neg ☐ Titer

EJ: ☐ Neg ☐ Titer

OJ: ☐ Neg ☐ Titer

PL-7: ☐ Neg ☐ Titer

PL-12: ☐ Neg ☐ Titer

MDA5: ☐ Neg ☐ Titer

KU: ☐ Neg ☐ Titer

MI-2: ☐ Neg ☐ Titer

P155/140 (TIF1y): ☐ Neg ☐ Titer

NXP-2: ☐ Neg ☐ Titer

SRP: ☐ Neg ☐ Titer

SAE-1: ☐ Neg ☐ Titer

HP panel: ☐ Neg ☐ Pos

C3/C4: ☐ WNL ☐ Low

ESR: 62 (2022)

CRP:

CK:

Aldolase:

ACE:

Urinalysis:

*Additional Comments:*

ECHO 4/24



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**Interpretation Summary:**

- The exam was of adequate technical quality.
- The left ventricle is normal size. There is mild concentric left ventricular hypertrophy. Left ventricular systolic function is mildly reduced. Indeterminate diastolic function due to merged E and A waves. Ejection Fraction 45-50%. Regional wall motion abnormalities cannot be excluded due to limited visualization.
- The right ventricle is grossly normal in size. The right ventricular systolic function is grossly normal.
- There are no hemodynamically significant valvular abnormalities.
- Compared to prior study from 11/2023 the LVEF has improved.

Path:9/22

Lung, left upper lobe, bronchoalveolar lavage:

- Satisfactory sample with no evidence of granulomas or malignancy.
- Oil Red O special stain is positive for rare lipid-laden macrophages.

**Final Diagnosis (Verified)**

Lung, left, transbronchial biopsy:

- Fragments of benign bronchiolar respiratory mucosa.
- No evidence of carcinoma or granulomas (see, "Note").

Note: This sample may not be representative of targeted lesion. Clinicopathologic correlation is recommended.

- Control stain is adequate.

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**Questions:**

- 1) Initial diagnostic consideration was smoking related ILD, is there a more definitive diagnostic step at this point?
  - 2) Symptoms were present for several years prior to initial visit in 2022, what is the expected clinical trajectory?
  - 3) Is there a specific treatment we should consider at this point? Chronic progressive DOE, dry cough, removed possible environmental mold exposure (prior apartment exposure), no drugs/tobacco.
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