

## Rural Health Outreach Committee Virtual MDD Template

### Header

MDD Virtual Conference

PFF CC organizing the conference:

Presenting centers:

Date of Discussion:

Number of Cases:

In attendance:

- Presenting pulmonologist
- ILD clinical team members
- Thoracic radiologist
- Pathologist (depending on case)
- +/- Rheumatologist (depending on case)
- Pulmonary clinic research coordinators (to screen for possible study eligibility)
- Residents/Students
- Allied Health Professionals such as NPs
- PFF staff? For coordinating and bookkeeping

**Purpose:** To facilitate multidisciplinary discussion regarding complex patients with interstitial lung disease to provide recommendations for further evaluation, develop treatment plans, and establish a timely diagnosis. We aim to provide a framework for physicians without local access to an ILD MDD to review cases with a virtual ILD MDD.

Patients will benefit from timely review of cases, ability to stay with local providers who they trust, and will not need to travel long distances for care that can be done locally.

Recommendations for the virtual ILD MDD are given with the caveat that we have not seen the patient, and, thus, recommendations apply in general and may not be appropriate for a specific patient. Referring providers will make their treatment decisions through shared decision-making with their patients.

**Frequency of MDD:** Determined by number of cases that need to be discussed.

## **Presentation. What is the Specific Question?**

- Brief History
  - Patient age and gender
  - Duration of symptoms, prior evaluation, prior treatments
  - Autoimmune symptoms (synovitis, joint pain, joint stiffness, dry eyes, dry mouth, dysphagia, GERD, Raynaud's, skin rashes, uveitis, weakness, muscle pain, etc).
  - Exposures at home or work (birds, down blankets/pillows, chemicals, water damage in the home, mold in the home, grain/hay, humidifiers, hot tubs, hobbies etc)
- Medical history: Known autoimmune disease, COPD, bronchiectasis, h/o BMT, blood dyscrasias, cirrhosis, OSA, PAH/PH
  - Personal history of early graying of the hair, blood dyscrasias, or liver problems
  - Prior medications (nitrofurantoin, amiodarone, methotrexate, chemotherapy, etc)
  - Prior radiation
  - Family history (ILD, early graying of the hair, blood dyscrasias, liver problems, or autoimmune disease)
  - Social history (smoke/vape, place and type of work, hobbies)
- Labs
  - ANA w/ titer and pattern, RF, CCP, SSA/SSB, SCL70, MPO/PR3, ANCA, JO-1, ESR, CRP, CK, Aldolase, Myositis panel, anti-centromere, RNP, dsDNA, IgG4, HP panels
- PFTs Review
  - Most recent FVC, TLC, DLCO
  - Has FVC declined by  $\geq 10\%$  in preceding 24 months?
  - Has FVC declined by 5-10% with an increase in symptoms or worsening fibrosis on HRCT?
- HRCT Imaging Review
  - obtain both inspiratory and expiratory imaging. Prone imaging is helpful if the disease is early and subtle.
  - Please send the CT images at least 1 week prior to the conference (instructions attached).
- Biopsy (if already performed)
  - type of biopsy, location
  - results
- Pertinent physical exam findings (e.g. dry bibasilar inspiratory rales; inspiratory squeaks; clubbing; skin thickening/MRSS; Raynaud)
- Echocardiogram findings

- RHC if applicable
- PFT trend (rather than most recent)
- Discussion (before consensus), preferably divided into clinically, radiology, pathology
- Diagnosis Consensus (by informal vote)
- Next Diagnostic Steps \*\*\*these are general guidelines, and referring providers should make specific decisions through shared decision-making for their patients
  - Need for biopsy
    - + do not recommend obtaining surgical or cryobiopsy prior to review in ILD MDD
  - Additional Testing
  - Medications and Treatment
  - Qualification for Research Study
  - Referral
  - Transplant
  - Note if patient to be re-presented pending additional steps

**ILD Exposure/Risks Questions:**

Occupation:

Asbestos:

Silica:

Mold/History of Water Damage in the Home:

Bird (pet, chickens, geese, ducks)

Hot tub:

Portable humidifier:

Brass or woodwind instruments:

Smoking tobacco or marijuana, vaping:

Oily nose drops, mineral oil (laxative) use

Feather pillow/blanket/any bird feather or down exposure/any bird exposure

Gardening:

Hobbies:

Chemotherapy or radiation therapy:

Fam hx of ILD:

Other (please refer to [ATS paper](#) and [CHEST questionnaire](#))

For additional exposures/risks, please see Appendix B

## Appendix A

### HRCT/ILD CT Without Contrast Protocol

(performed by local radiology to meet ATS protocol recommendations)

- All acquisitions should utilize automated exposure control and/or adjustment of the mA according to patient size and/or iterative reconstruction technique(s)
- Acquisition 1: supine/inspiratory volumetric acquisition from the base of the neck to the upper abdomen
  - Axial reconstructions at 1mm with lung/edge enhancing kernel algorithm
  - Axial reconstructions at 2-3 mm with soft tissue/smooth kernel algorithm
  - Coronal and sagittal reconstructions at 2-3 mm with lung/edge enhancing kernel algorithm
- Acquisition 2: supine/expiratory volumetric acquisition from the base of the neck to the upper abdomen
  - Axial reconstructions at 1mm with lung/edge enhancing kernel algorithm
  - Coronal and sagittal reconstructions at 2-3mm with lung/edge enhancing kernel algorithm
- Acquisition 3: prone/inspiratory volumetric acquisition from the base of the neck to the upper abdomen
  - Axial reconstructions at 1mm with lung/edge enhancing kernel algorithm

De-identified DICOM files of pertinent CTs should be uploaded to approved cloud-based storage, and a secure link should be provided to the participating thoracic radiologist(s) 7 days before the scheduled MDD.

## Appendix B

### Additional ILD Exposures/Risks

- A. Humidifier
- B. Air cleaner/purifier
- C. Steam sauna/steam shower
- D. Indoor hot tub
- E. Swamp cooler
- F. Water damage or mold/mildew in the home
- G. Asbestos
- H. Down pillows or comforters
- I. Pigeons, parakeets or other birds
- J. Dogs, cats, rabbits, gerbils, hamsters or guinea pigs in house
- K. Does the house or office smell musty?
- L. Has there been a history of flooding?
- M. Is there water damage on the walls or ceilings?

- N. Do you have a lot of plants in the house or office?
- O. Do you have fish tanks?
- P. Are there any appliances or sinks that leak water or have a water pan to change?
- Q. Does your dishwasher leak/overflow?
- R. Do you own a Sleep-Number (or equivalent) bed?
- S. Do any leather clothes or shoes stored in the closets have a fine layer of white or black covering them?
- T. Are the walls of the closets discolored or do they have a film of black or white covering them?
- U. Do you have carpeting? If so, how old is it? \_\_\_\_  
Do you get it steam-cleaned regularly?
- V. Do you work with potting soils or compost on a regular basis?
- W. Do you hunt in duck blinds or have exposure to moist soil?

- A. Pottery worker
- B. Cotton mill worker
- C. Pipe worker/plumber
- D. Insulation worker
- E. Farmer
- F. Sandblaster
- G. Rock miner
- H. Talc worker
- I. Beryllium worker
- J. Aluminum worker
- K. Carpenter/woodwork
- L. Plastic worker
- M. Mica worker
- N. Railroad worker

- O. Painter/spray painting
- P. Longshoreman
- Q. Housecleaner
- R. Smelter/Foundry work
- S. Welder
- T. Textile worker
- U. Paper product worker
- V. Cement/  
cement product worker
- W. Road builder/tunnel  
construction work
- X. Automotive product  
worker (brake linings,  
gaskets, clutch plates, etc)
- Y. Insulation worker  
(pipe/boiler, bulkhead  
linings, filler, grouting)