

WHEN PULMONARY FIBROSIS IS SUSPECTED, WHAT'S NEXT FOR SANDRA?



MEDICAL HISTORY:

- 64-year-old African American female¹
- Presented with dyspnea on exertion, worsening cough, and fatigue²⁻⁴
- PFTs revealed restriction with reduced FVC and DL_{co}^{2,3}
- Presence of bilateral hilar lymphadenopathy with reticulation seen on HRCT and sarcoidosis confirmed by lung biopsy
- Sarcoidosis diagnosis confirmed^{3,4}
- Medications: corticosteroid and immunosuppressant to inhibit inflammatory pathways^{1,2}

FOLLOW-UP AT 1 YEAR:

- Respiratory symptoms continue to worsen³
- Serial PFTs reveal decline from diagnosis³

6% decrease in FVC % predicted³

4% decrease in DL_{co} % predicted³

Worsening symptoms and lung function indicate progressive pulmonary fibrosis⁵

FOLLOW-UP RADIOLOGIC FINDINGS:

- Fibrotic changes consistent with advanced stage sarcoidosis²:
 –Honeycombing –Reticulation –Traction bronchiectasis –Ground glass opacity

Patients with sarcoidosis who have progressive pulmonary fibrosis face a worse prognosis^{2,6}

DL_{co}, diffusing capacity of the lungs for carbon monoxide; FVC, forced vital capacity; HRCT, high-resolution computed tomography; ILD, interstitial lung disease; PFTs, pulmonary function tests.

Despite treatment with a corticosteroid and an immunosuppressant, lung function has declined and fibrotic ILD is detected.

WHAT IS THE NEXT STEP IN SANDRA'S DISEASE MANAGEMENT PLAN?

~1 IN 4 PATIENTS WITH ILD MAY DEVELOP A PROGRESSIVE PHENOTYPE^{7*}

THE INSIDIOUS THREAT OF PULMONARY FIBROSIS CROSSES DIVERSE ILDs^{6,8,9}

- Idiopathic pulmonary fibrosis (IPF)
- Systemic sclerosis-associated ILD
- Rheumatoid arthritis-associated ILD
- Other connective tissue disease-associated ILDs
- Hypersensitivity pneumonitis
- Occupational exposure-related ILDs
- Idiopathic nonspecific interstitial pneumonia
- Unclassifiable ILD
- Sarcoidosis

SIMILAR TO IPF, SOME ILDs CAN DEVELOP A PROGRESSIVE FIBROSING PHENOTYPE CHARACTERIZED BY^{6,9}:



Worsening respiratory symptoms



Accelerated decline in lung function



Worsening quality of life



Early mortality

EARLY IDENTIFICATION OF ILD IS CRITICAL

Observe for respiratory symptoms¹⁰:

Listen for^{11,12}:

Order baseline PFTs and monitor regularly¹⁰:

Order HRCT if ILD is suspected^{10,13}:



Cough



Dry inspiratory crackles, typically at the lung bases



Restrictive PFT



Presence of fibrotic ILD



Dyspnea



Reduced DL_{co}

EARLY IDENTIFICATION OF PROGRESSIVE PULMONARY FIBROSIS CAN HELP ENSURE PATIENTS RECEIVE APPROPRIATE INTERVENTION⁶

*Data from a global, online survey of physicians (N=486).⁷

IPF, idiopathic pulmonary fibrosis.

References: 1. Baughman RP et al. *Ann Am Thorac Soc.* 2016;13(8):1244-1252. 2. Patterson KC, Strek ME. *Ann Am Thorac Soc.* 2013;10(4):362-370. 3. Hunninghake GW et al; on behalf of the ATS/ERS/WASOG. *Am J Respir Crit Care Med.* 1999;160(2):736-755. 4. Kim G. *Proceedings of UCLA Healthcare.* 2011;15. proceedings.med.ucla.edu/wp-content/uploads/2017/01/Sarcoidosis-A-Case-Study.pdf. Submitted March 31, 2011. Accessed February 7, 2020. 5. Bonham CA et al. *Curr Opin Pulm Med.* 2016;22(5):484-491. 6. Cottin V et al. *Eur Respir Rev.* 2018;27(150). doi:10.1183/16000617.0076-2018. 7. Wijsenbeek M et al. *Curr Med Res Opin.* 2019;35(11):2015-2024. 8. Demedts M et al. *Eur Respir J.* 2001;18(suppl 32):2s-16s. 9. Wells AU et al. *Eur Respir J.* 2018;51(5). doi:10.1183/13993003.00692-2018. 10. Ryu JH et al. *Mayo Clin Proc.* 2007;82(8):976-986. 11. Silver KC, Silver RM. *Rheum Dis Clin North Am.* 2015;41(3):439-457. 12. Zibrak JD, Price D. *NPJ Prim Care Respir Med.* 2014;24:14054. 13. Walsh SLF et al. *Eur Respir Rev.* 2018;27(150):976-986.