Thorac Res Pract. 2024; 25(5): 193-194 DOI: 10.5152/ThoracResPract.2024.24036

Letter to the Editor

Comments on: Pulmonary Function and Diffusing Capacity of Carbon Monoxide in Hypersensitivity Pneumonitis: An Observational Study of 152 Patients

Kundan Nikit Mehta, Hiral Gulab Ramnani
Department of Respiratory Medicine, Institute of Dr DY Patil Vidyapeeth, Pune, Maharashtra, India

Cite this article as: Mehta KN, Ramnani HG. Comments on: Pulmonary function and diffusing capacity of carbon monoxide in hypersensitivity pneumonitis: An observational study of 152 patients. *Thorac Res Pract.* 2024;25(5):193-194.

Received: *April 5, 2024* ***Accepted:*** *May 14, 2024* ***Publication Date:*** *August 21, 2024*

Dear Editor,

We found Spalgais et al's[1] article titled "Pulmonary Function and Diffusing Capacity of Carbon Monoxide in Hypersensitivity Pneumonitis: An Observational Study of 152 Patients" engaging and insightful. It is surprising that this study[1] stands as the only examination of pulmonary function tests (PFT) in Hypersensitivity Pneumonitis (HP), and the extensive 6-year dataset is commendable. However, we have some observations:

1. It is a well-established fact that the diagnosis of HP is done on the basis of exposure to the inciting antigen, high resolution computed tomography (HRCT) chest, bronchoalveolar lavage, and lung biopsy.[2] So, using PFT as a tool for diagnosis cannot be established. Pulmonary function tests and diffusing capacity of the lungs for carbon monoxide (DLCO) can be used only for monitoring the progression of the disease and the effectiveness of treatment on follow up.[3]
2. Aim of the study is unclear as we are not sure whether the study wants to clarify the already known relation of PFT and DLCO in HP or wants to establish PFT as criteria to diagnose HP, which is not practical.
3 American Thoracic Society/European Respiratory Society (ATS/ERS) has never used PFT as a diagnostic parameter for HP.[4]
4. The duration of 3-6 months for inciting antigen exposure is crucial in diagnosing acute HP, yet lacking a specific reference in your text is concerning. Waiting for a minimum of 3 months for diagnosis risks delaying treatment unnecessarily, given the condition's potential severity.
5. In total, 118 patients had an abnormal spirometry where all PFT parameters were reduced except Forced expiratory volume in first second/ Forced vital capacity (FEV1/FVC) and Residual volume/Total lung capacity (RV/TLC), i.e., they were either increased or normal, so if the FEV1/FVC ratio was normal, we don't look up for FEV1 to classify it as obstruction, so how could you get mixed and obstructive pattern is unclear.[5]
6. FEF25-75% is not used as a parameter to measure small airway obstruction these days; there is no relevance to calculate it.
7. Highlighting instances where reduced DLCO is observed in isolation despite normal spirometry and lung volumes in 50% of cases raises questions about the likelihood of such findings, particularly without comparative data between early and late stages of HP. Including comparative data could shed light on the evolution of pulmonary function abnormalities over time in HP patients. This approach would enhance the understanding of how DLCO reductions manifest relative to disease progression, providing valuable insights into the diagnostic and prognostic implications of isolated DLCO impairment in HP. Isolated reductions in DLCO have been observed in some cases of COPD, as supported by studies, reducing the specificity of this finding as a diagnostic marker for HP.[6]
8. Oxygen desaturation was noted highest in restrictive pattern but mean walk distance was lowest in mixed pattern, if the patient desaturated significantly, then how was it that the 6MWD was not affected. This needs clarification and referencing.
9. Respectfully acknowledging the comprehensive nature of your study and its extensive dataset, it is important to note that while PFT and DLCO measurements are useful for monitoring prognosis, they are generally not employed as diagnostic criteria for HP.

Corresponding author: Hiral Gulab Ramnani, e-mail: hiralramnani23@gmail.com

Peer-review: Externally peer-reviewed.

Author Contributions: Concept – K.N.M., H.G.R.; Design – K.N.M., H.G.R.; Supervision – K.N.M., H.G.R.; Resources – K.N.M., H.G.R.; Materials – K.N.M., H.G.R.; Data Collection and/or Processing – K.N.M., H.G.R.; Analysis and/or Interpretation – K.N.M., H.G.R.; Literature Search – K.N.M., H.G.R.; Writing – K.N.M., H.G.R.; Critical Review – K.N.M., H.G.R.

Declaration of Interests: The authors have no conflicts of interest to declare.

Funding: This study received no funding.

REFERENCES

1. Spalgais S, Mrigpuri P, Ravishankar N, Kumar R. Pulmonary function and diffusing capacity of carbon monoxide in hypersensitivity pneumonitis: An observational study of 152 patients. *Thorac Res Pract*. 2024;25(2):51-56.
2. Raghu G, Remy-Jardin M, Ryerson CJ, et al. Diagnosis of hypersensitivity pneumonitis in adults. An official ATS/JRS/ALAT clinical practice guideline. *Am J Respir Crit Care Med*. 2021; 203(1):150-151.
3. Richerson HB, Bernstein IL, Fink JN, et al. Guidelines for the clinical evaluation of hypersensitivity pneumonitis. Report of the subcommittee on hypersensitivity pneumonitis. *J Allergy Clin Immunol*. 1989;84(5 Pt 2):839-844. [CrossRef]
4. Raghu G, Remy-Jardin M, Ryerson CJ, et al. Diagnosis of hypersensitivity pneumonitis in adults. An official ATS/JRS/ALAT clinical practice guideline. *Am J Respir Crit Care Med*. 2020;202(3):e36-e69. [CrossRef]. Erratum in: *Am J Respir Crit Care Med*. 2021;203(1):150-151. Erratum in: *Am J Respir Crit Care Med*. 2022;206(4):518. [CrossRef]
5. Graham BL, Steenbruggen I, Miller MR, et al. Standardization of spirometry 2019 update. An official American Thoracic Society and European Respiratory Society technical statement. *Am J Respir Crit Care Med*. 2019;200(8):e70-e88. [CrossRef]
6. Jankowich MD, Rounds SIS. Combined pulmonary fibrosis and emphysema syndrome: a review. *Chest*. 2012;141(1):222-231. [CrossRef]