

“Study on factors associated with post bronchodilator reversibility among patients presenting with dyspnea”

Sir,

I have read with interest, the article by Mehta *et al.* titled “Study on factors associated with post bronchodilator reversibility among patients presenting with dyspnea”.^[1] I would like to offer the following comments:

1. The authors have not mentioned, in methods, about preprocedural precautions for spirometry such as stoppage of bronchodilator drugs—oral or inhaled form, as this might significantly affect the reversibility in spirometry testing. Also, in smoking individuals, it should be advised to not smoke within one hour before spirometry.^[2]
2. The definition of chronic obstructive pulmonary disease (COPD) and asthma were not clearly defined in the study population: “The definition of asthma was based on self-reported diagnosis, attacks and medication, and the definition of COPD in this study excluded all subjects with a history of asthma and participants with nonsmoke-related COPD”.
3. Authors have not addressed the distinctive subset of asthma-COPD overlap in which they have features of both diseases. The prevalence of asthma-COPD overlap as per Global INitiative for Asthma (GINA) had been in the range of 9%-55%^[3] and in a study of north Indian population it was noted to be around 22.6%.^[4]
4. Although smoking was noted to be a significant factor affecting the bronchodilator reversibility, quantification of smoking and stringent nonsmoker definition protocols would have added more strength to the study.^[5]
5. Finally, the authors have not mentioned what type of spirometers had been used for the study and what prediction equations were used for baseline reference values, as these factors affect the test quality and values.^[6,7]

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

Vinod VG

Department of Pulmonary Medicine, Sri Ramachandra Institute of Higher Education and Research, Chennai, Tamil Nadu, India
E-mail: v.g.vinod14@gmail.com

Submitted: 23-Jul-2022

Accepted: 22-Sep-2022

Published: 29-Dec-2022

REFERENCES

1. Mehta AA, Surendran D, Sudhakar N, George R, Paul T, Ashok A. Study on factors associated with post bronchodilator reversibility among patients presenting with dyspnea: An experience at a tertiary care academic hospital in Kerala. *Lung India* 2022;39:348.
2. Graham BL, Steenbruggen I, Miller MR, Barjaktarevic IZ, Cooper BG, Hall GL, *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:e70-88.
3. Available from: <https://ginasthma.org/wp-content/uploads/2022/07/GINA-Main-Report-2022-FINAL-22-07-01-WMS.pdf>.
4. Renthlei L, Wangkheimayum A, Kshetrimayum S. Prevalence and characteristics of asthma-chronic obstructive pulmonary disease overlap among asthma and chronic obstructive pulmonary disease patients in a tertiary care center in Northeast India. *J Med Soc* 2022;33:122-7.
5. Hanania N, Sharafkhaneh A, Celli B, Decramer M, Lystig T, Kesten S, *et al.* Acute bronchodilator responsiveness and health outcomes in COPD patients in the UPLIFT trial. *Respir Res* 2011;12:doi: 10.1186/1465-9921-12-6.
6. Milanzi EB, Koppelman GH, Oldenwening M, Augustijn S, Aalders-de Ruijter B, Farenhorst M, *et al.* Considerations in the use of different spirometers in epidemiological studies. *Environ Health* 2019;18:39. doi: 10.1186/s12940-019-0478-2.
7. Aggarwal AN, Gupta D, Jindal SK. Comparison of Indian reference equations for spirometry interpretation. *Respirology* 2007;12:763-8.

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

Access this article online

Quick Response Code:



Website:

www.lungindia.com

DOI:

10.4103/lungindia.lungindia_372_22

How to cite this article: Vinod VG. Correspondence to the article by Mehta *et al.* “Study on factors associated with post bronchodilator reversibility among patients presenting with dyspnea”. *Lung India* 2023;40:97.

© 2022 Indian Chest Society | Published by Wolters Kluwer - Medknow