Author’s reply to concern on excessive dynamic airway collapse and wheeze

Sir,

We highly appreciate the keen interest you have shown in our study.[1] Your point about the definition (by ATS) and theory of origin of wheeze technically appear correct.[2] However, let me explain how the idea of this study came to our mind. This started with the finding of persistent wheeze in some patients of chronic obstructive pulmonary disease who were on treatment for exacerbation and had been treated optimally by medical therapy. Of course, the most suitable explanation for such patients remains chronic severe disease with airway remodeling and hence poor response to therapy. We investigated such patients by bronchoscopy and found tracheo/tracheobronchomalacia in some patients. Based on this, we designed this study. Hence, technically speaking, the definition of wheeze might not fit-in, but the observation too holds some value in science. One possible way to explain could be the monophonic nature of wheeze observed in these patients rather than the classical polyphonic one originating from lower airways.

Yes, in 60% of patients in whom tracheobronchomalacia/excessive dynamic airway collapse (TBM/EDAC) was not found, lower airway obstruction can only explain the persistence of wheeze, but the attempt was not made to confirm the same as this was not the prime objective of the study when it was planned.

We had not used any complex methods to confirm TBM/EDAC. Truly, this is a big limitation of the study. It was just an eyeball guess, which was used to confirm presence of TBM/EDAC rather than using any formula. About continuous positive airways pressure (CPAP) as the therapeutic option in these patients with TBM/EDAC, the point in comments is well taken. Actually, CPAP was used in these patients to test whether wheeze disappears or not and in most cases it did. CPAP option as therapy was given to only those with severe symptoms and those willing after tasting some clinical benefit with it. Obviously, it was not used to just stop the wheeze. Hence, the therapy, no wonders, was not adopted by
most of these patients. Pulmonary rehabilitation with airway clearance techniques and breath training, of course, remain the standard of care.

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**Conflicts of interest**
There are no conflicts of interest.

Girish Sindhwani, Rakhee Sodhi
Department of Pulmonary Medicine, Himalayan Institute of Medical Sciences, Dehradun, Uttarakhand, India
E-mail: rakhee.sodhi@gmail.com

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