

Peer Review File

Article information: <https://dx.doi.org/10.21037/jovs-21-6>

Reviewer A

The authors reviewed important topics about the evaluation of patients with Excessive Central Airway Collapse (ECAC) clearly and systematically. I think this paper could be very interesting and helpful for people involved in the management of patients with ECAC.

Therefore, the article should be acceptable to the journal.

Thank you

Reviewer B

The "Physiology and Anatomy" section explains a very important topic in respiratory physiology. Being essential for the understanding of ECAC / TBM.

Most studies with dynamic CT were performed with the aid of spirometry, that is, at the maximum expiration. This evaluation method is totally different from the evaluation by bronchoscopy (gold standard for the diagnosis of ECAC / TBM). See recently published article: <http://dx.doi.org/10.21037/jtd-20-2395>

The article is a literature review.

However in the sections "Investigations and Tests: in the first flat paragraph how it is done by you. Although it is important, it is not in agreement with the rest of the article.

I edited this section based on your comments.

Bronchoscopy is the gold standard test for the diagnosis of ECAC / TBM.

However, this topic was rarely discussed in the pediatric section.

We have removed this section.

Furthermore the bronchoscopy section it is only reported how an assessment is made by authors' service. This section should be reevaluated and rewritten.

This section has been partially rewritten to the satisfaction of the editors.

Reviewer C

I very much enjoyed reading this review which is well written and easy reading with some difficult pathology very well explained for someone unfamiliar with this condition and eager to understand more. There are a few points that the authors may wish to consider for their manuscript.

In the abstract line 19+20. The authors may wish to review the wording as this is a poorly recognised condition "the forgotten zone" that receives little clinical attention in training and often overlooked

as a cause of symptoms for years. The suggestion of a “unique condition” and also a “multidisciplinary evaluation by those familiar with the condition” sounds difficult to achieve without much greater respiratory education about the condition if most people do not even think of it, it will be hard to find the “EXPERTS” as suggested.

Thank you for your comments we edited the section.

Line 176-179. It may be helpful to give further information on the spirometry in ECAC and mention that bronchodilators often make symptoms worse by relaxing smooth muscle in the airway compounding the problem and yet are commonly prescribed for a presumed COPD like symptoms or for cough and sputum and breathlessness without the true condition recognized.

This is a reasonable point but we have avoided too much discussion of management at this point.

The FEV-1 is shown to remain >90% of predicted until the tracheal orifice is reduced to 6mm and as the authors say spirometry is therefore not sensitive.

A flow/volume loop will often show a “saw-toothed” expiratory loop that could be a clue to the presence of this condition” but usually once the airway is <8mm, this but may help those who are not suspecting the condition to be alerted by this interesting pattern on the expiratory loop.

We have added flow volume loops.

When the trachea is reduced to 5mm there is breathlessness at rest.

Line 185- most descriptions in the literature describes the crescent shape trachea as also known as a scabbard shape?

Do the author think a summarizing table of most of the known causes of this condition may add to the educational benefit of this manuscript?

Thank you for the suggestion, the editors wished us to remain concise.

Reviewer D

See attached annotations.