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Peer Review File

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Reviewer A:

This is a case series of 11 patients with a suspicion of airway stenosis undergoing office-based transnasal tracheo-bronchoscopy. Instrumentation, technique and local anesthesia together with patients demographic data were presented. The retrospective nature of the study and its limitation has been acknowledged by the authors. However this article can be improved after providing more information.

1. The diagnostic criteria of EDAC is >50% dynamic expiratory collapse of the posterior membrane. This is subjective. To conclude that office-based transnasal tracheo-bronchoscopy is effective, interrater reliability and/ or agreement can be performed. Please let two blinded assessors assessed those 11 video recordings. Findings assessed by unblinded physicians without comparison should be inconclusive.

This has been actioned, details are included in the methods section

2. Local anesthesia is essential so that office-based transnasal tracheo-bronchoscopy is well tolerated. Please review various kinds of nasal sprays, pharyngeal sprays, intratracheal medications that can be used and discuss about the effects and harm.

This has been reflected in the discussion

3. During a two-year period, were there any other referred cases with suspected EDAC? Were there any other investigations did other referred cases receive? How did the authors decide which case would undergo transnasal bronchoscopy?

There were 2 additional patients in the 2 year period in whom EDAC was suspected – however they were excluded due to incomplete data / absence of recording etc.

Most referred cases had been referred from Respiratory physicians or cardiologists, and so had already undergone combinations of: HRCT, Spirometry, Bronchoprovocation / Bronchodilation challenge testing, Cardio-pulmonary exercise testing. In one case, a dynamic 3D CT was performed specifically looking to diagnose Vocal Cord Dysfunction / Inducible laryngeal obstruction.

Essentially, Trans-nasal bronchoscopy was offered to all patients in whom a lower respiratory tract cause had not been found (on referral), and in whom a standard flexible nasendoscopy/stroboscopy excluded any upper airway obstruction, or vocal cord dysfunction; the rationale being that fixed or dynamic

middle airway obstruction needed to exclude (e.g. Subglottic stenosis / Tracheal Stenosis / Tracheomalacia / Mass / EDAC.

4. Patients key information is required for a case series. Please give more information about therapeutic breathing techniques. What happened to three patients later received CPAP? Were they not improved by therapeutic breathing techniques? How long did the authors follow these patients? What are their long term outcomes? I know the authors aimed to report how the underutilized transnasal bronchoscopy is practical but Material and Methods says 'Patients' history, examination, investigations, management and follow up were extracted.'

Thank you for the comment. In light of this comment, we have decided to focus this study as a diagnostic study, and not an outcome-based study. As such, we have removed the section on further outcomes and instead focused on the diagnosis of EDAC.

5. Did the authors find any cases of tracheomalacia diagnosed by using transanasal bronchoscopy?

Tracheomalacia was not identified in any of the cases.

Reviewer B:

This is a well written retrospective study evaulating an authors experience in diagnosing excessive dynamic airway collapse in 11 patients. The technique itself is well worthwhile and may well be the best method of assessing for EDAC, however, given it is still a relatively novel form of assessment the paper should really make it clear that this is a retrospective assessment describing the technique. In addition there should be some more details regarding the type of office setting, monitoring, safety evaluation and the conclusion is a little broad given the retrospective nature of this paper.

A few suggestions for the revision

Retrospective review - this should be highlighted at the start of the methods section

Thank you for your response. This has been reflected both in the introduction and in the methods section.

Description of the clinic setting - ie in hospital or in a private non hospital based clinic would be helpful to know

This has also been reflected in the methods section

If this was a non hospital clinic - what safety equipment did the clinic have for bronchcoscopic procedures eg - oxygen, bag/mask, Adrenalin, intubation facilities

Description of the patient parameters measured (or not measured) eg HR, temp,

BP, Sa02 pre, intra, post procedure would be helpful. What was measured in the 15min post procedure "monitoring"

Minimal reported discomfort - how was this measured?

Absence of any cardiac or respiratory complications - how was this measured?

This has been reflected in the methods section

Conclusion states that it is a safe and well tolerated technique - however, tolerance was not specifically measured simply implied and safety is difficult to gauge given the small sample size as well as lack of monitoring

The conclusion has been adjusted accordingly.