Peer Review File
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Reviewer A

Comment 1: Mention side effects to watch for in jet ventilations for rigid bronchoscopy.
Reply 1: Thank you for this suggestion. We have included potential side effects of jet ventilation for rigid bronchoscopy. In reference to section 2.1 on Anesthesia and Airway Management, we note that "Barotrauma and hypercapnia can occur with prolonged use."

Comment 2: Consider mentioning about microwave ablation for MCAO as which can be used without reduction of FiO2, though its use around is very little. It's mentioned in the manuscript maybe adding this fact will be useful too.
Reply 2: We agree microwave ablation for MCAO may be a useful modality that does not require reduction in FIO2. In Table 1, specifically under the microwave ablation section, we have indicated that the fire risk is "not increased."

Comment 3: Consider mentioning a sentence or two on real world use of stenting SEMS vs Silicone use around the world. Use of fluoroscopy vs no fluoroscopy merits or demerits and real world use data from literature. Consider referencing customization of 3D stunts for airway use and its use around the world for thoracic malignancy. Some references below.

Mathew R, Hibare K, Dalar L, Roy WE. Tracheobronchial stent sizing and deployment practices airway stenting practices around the world: a survey study. J Thorac Dis. 2020 Oct;12(10):5495-5504. doi: 10.21037/jtd-20-2080. PMID: 33209383; PMCID: PMC7656364.

Hervé Dutau, David Breen, Antonio Bugalho, Levent Dalar, et.al ; Current Practice of Airway Stenting in the Adult Population in Europe: A Survey of the European Association of Bronchology and Interventional Pulmonology (EABIP). Respiration 23 January 2018; 95 (1): 44–54. https://doi.org/10.1159/000480152

Reply 3: We agree with the reviewer that stenting practices differ between different institutions and operator comfort. Changes were made based on reviewer's recommendation. Please see section 2.3 airway stents.

Comment 4: Consider mentioning or elaborating more on risk benefit analysis and quality of life from therapeutic bronchoscopy for MCAO. Recent few papers available on it. References below

Bashour, Sami I.; Lazarus, Donald R.. Therapeutic bronchoscopy for malignant central airway obstruction: impact on quality of life and risk-benefit analysis. Current Opinion in Pulmonary Medicine 28(4):p 288-293, July 2022. | DOI: 10.1097/MCP.0000000000000883
Reply 4: Edits were based on the comment. Please see the 4th paragraph under section 2. Malignant central airway obstruction

Comment 5: If space and word limits not a problem, consider mentioning bronchoscopic management of tracheoesophageal fistulas with valves, spigots or closure of any airway fistulas by bronchoscopy.
Reply 5: Thank you for your comment. We conducted a thorough consideration of incorporating the mentioned content into our review; however, we determined that delving into the discussion of TEF falls outside the purview of this particular review. We wanted to focus the majority of our review on available ablative bronchoscopic modalities for the treatment of thoracic malignancies

Reviewer B:

Thank you for allowing me to review this article on malignant central airway obstruction as well as percutaneous biopsies. The article provides a broad overview of important concepts around both methods bronchoscopic techinques, and the discussion of robotic rigid bronchoscopy was quite interesting. For a review of two such different procedures which cover such a breadth of topics, this review does a reasonable job of covering the topics. I have no suggested changes.

Reviewer C:

Comment 6: Some readers may be interested in this manuscript, however, this included several problems.

・This manuscript included redundant phrases. For instance, their abstract included as follows;

- This comprehensive review aims to explore and discuss the bronchoscopic management strategies employed in these areas.
- This review aims to provide a comprehensive overview of the current state of these bronchoscopic interventions in order to guide future advancements and optimize patient care in the field of thoracic oncology.
They should improve their manuscript.
Reply 6: Thank you for the comment. Changes were made based on the recommendation. Please see edited abstract.

Reviewer D:

This is a review article that introduce the management of malignant central airway obstruction and peripheral lung malignancies. The content is very interesting and well organized, but I think it could be improved with a little more work.

Comment 7: “Anesthesia and airway management” section, I think it seemed to be better to contain that controlled ventilation with muscle relaxants during airway stenting reduces the incidence of desaturation events (Okamoto S et al. Anesth Analg 2020; 131: 893-900.).
Reply 7: Thank you for the comment. Changes were made. Please see the 1st paragraph under section 2.1 anesthesia and airway management

Comment 8: “Airway stents” section, I think that there has little meaning that airway stents mainly play a role for connecting to the next treatment. I would like authors to describe as detailed as the sections that follow. And if you are describing the technical aspects, L142-152, I think that, about airway stenosis around primary right carina, experience and knowledge may be needed to select the type of stent. Not only Dutau Herve but also Oki Masahide wrote many papers about it (dedicated bifurcated silicon stents, double Y stents, separate I stents and so on), so if you can, please check them and I hope you can improve the contents. Last, I think the most important advantage of silicone stents is to be removed easily after chemotherapy is successful and the airway stenosis is released. Because airway stents no longer needed should be removed as soon as possible to prevent granulation and improve respiratory symptoms (e.g., coughing, difficulty of breathing) (Oki M, et al. Respiration 2022; 101 (10): 925-30.).
Reply 8: We thank the review for this detailed suggestion. We agree that stent selection is critical in successful stenting of airway obstruction. We wanted to focus our review on a broad overview of bronchoscopic treatment of both central and peripheral thoracic malignancies and did not feel like a in-depth discussion of stent selection would fit within the overall narrative. However, we have incorporated Oki et al’s paper within the manuscript and included discussion that any stent placed should be removed at the soonest possible instance to limit risk of granulation tissue formation or epithelialization.

Comment 9: In L198-200, authors wrote that the best candidates for bronchoscopic treatments are patients with lesions that are smaller than 10mm without cartilaginous invasion, it seemed to mention only about squamous cell carcinoma. So, you should change the sentence that readers can understand it (e.g., bronchial typical carcinoid with a diameter <20mm is indicated (van der Heijden E.H.F.M. Respiration 2018;95:217-9.)).
Reply 9: This is an excellent point and we have made edits to our manuscript to highlight other potential cancer types.

Comment 10: In L319, 62.$% seems to be a mistake of 62.4%.
Reply 10: Thank you for the comment. Edit was made