

#### **REVIEWER #1: SPECIFIC COMMENTS TO AUTHORS**

This is a well written paper, and I do not think it requires any modification. Well done. I enjoyed reading this, and agree with the conclusions

#### **REVIEWER #2: SPECIFIC COMMENTS TO AUTHORS**

This review disclosed a neglected fact that innovation is not free. The learning associated morbidity cannot be avoided but can be decreased via safe implementation during developing a new intervention of MIE, I agree the author's opinion, but I suppose this article will be better if elaborating more detailed.

**1. The MIE can be performed via various approaches, including McKeown, Ivor Lewis and transhiatal approach. The complexity of each procedure is different, and might associate with a unique learning curve. I don't know if any study comparing each of these learning associated comorbidities?**

*Author response: Thank you for this suggestion. We feel it is indeed plausible that techniques with different complexity are associated with unique learning curves. Although learning curves of different MIE procedures have not been compared directly in any study, review or meta-analysis, it would be interesting to have data on this, as it can help clinicians decide which procedure they should implement. This consideration has been added to the manuscript on page 5.*

**2. Surgeons in high-volume hospitals may be more experienced in coping with operative accidents. Can this be helpful to decrease the learning associated comorbidities?**

*Author response: We agree, surgeon volume is a possible factor that could influence surgical learning curves. A couple of weeks ago, we published on this subject and we showed that lower surgeon age and higher case volume were associated with shorter learning curves in patients undergoing open esophagectomy. This has been added to the manuscript on page 6.*

**3. Totally MIE is technically demanding. As an intermediate or transition from open esophagectomy**

**to totally MIE, hybrid MIE (one stage of the procedure was open and the other stage laparoscopic or thoracoscopic) is widely used in some center. Does hybrid MIE is beneficial to shorten learning curve for implementation of totally MIE?**

*Author response: This may indeed be the true, but unfortunately, there is again no data to support this hypothesis at present. This consideration has been added to the manuscript on page 5, together with the suggestion 1.*

**4. As for complex surgery like MIE, skills simulator or surgery in the organ of experiment animal can be implemented for training. Do these methods affect outcome parameters during the early phase of experience? If so, are there any evidences?**

*Author response: We think this may very well be the case and several studies have shown that surgeons can learn from simulator or animal model training. However, there is currently no data that links these improvements in surgical skills to actual improvements in patient outcome for MIE. In our opinion, establishing the effectiveness of training programs on clinically relevant patient outcome parameters is essential in convincing surgeons of doing proper training before implementation of technically challenging procedures and this will be one of the focuses of our future research.*