Review Comments

<mark>Reviewer A</mark>

Comment 1: Congratulations for a well-done review on revisional surgery after Linx and Tif procedures.

Reply 1: Thank for the comment. We appreciate your review of our manuscript.

<mark>Reviewer B</mark>

Comment 1: It was a pleasure to read this excellent manuscript by Ward et al titled "Post-operative Gastroesophageal Reflux Disease After Magnetic Sphincter Augmentation and Transoral Incisionless Fundoplication".

This is a very relevant topic not only for surgeons but also for gastroenterologists in today's time. I have no additional revisions to suggest however I will take this opportunity to make some reviewer comments for the authors.

Reply1: Thank you for the comments and reviewing our manuscript.

Comment 2: It was interesting to see the hiatal hernia repair photograph, and there was no mesh placed and the suture appears to be an absorbable suture. What views do the authors hold regarding mesh placement (of course biologic) after hiatal hernia repair? Currently, most of us are moving away from a mesh in anticipation to go back again to fix a recurrence and having a hard time dissecting the space as a result of mesh reaction.

Reply 2: Thank you for the comment. We do not often use mesh in repairs using MSA for the aforementioned reasons; however, we have been using bioabsorable meshes (Phasix ST) in hiatal hernias overall with good outcomes. It will be interesting to see the long-term results of this mesh in future studies.

Comment 3: I still think there is a place for TIF in our practice. We don't recommend a hybrid TIF if the hernia is >5cm. We have seen some bad recurrences in those cases. The statement (line 149) should be corrected. The reason we do a hybrid approach is that the GI interventionalist cannot do a TIF with a HH>2cm. So HH repair is always a must during TIF.

Reply 3: We appreciate the comment. We have added information to indicate that a concomitant hiatal hernia repair with TIF should only be performed for hiatal hernias greater than 2 cm.

Comment 4: The most important advantage of a hybrid TIF or even stand-alone TIF is the symmetry of tacks and avoiding vagal nerve injury during surgical fundoplication.

Reply 4: Agreed.

Comment 5: Authors should mention some absolute contraindications for MSA and TIF with regards to Barrett's, and degree of Esophagitis.

Reply 5: We appreciate the comment. Contraindications for both procedures has been added to the manuscript.

Comment 6: In conclusion, this manuscript comes from a team of very experienced and well-rounded surgeons and serves as reference material for those who are exploring non-traditional approaches to treating GERD.

Reply 6: We appreciate the kind review of our manuscript and the suggested changes to enhance its quality.

<mark>Reviewer C</mark>

Comment 1: This review on post-operative outcomes after TIF and MSA is outstanding because these two procedures have been introduced recently in the clinical practice. However, at least for TIF, several prospective studies have been published in the last years, including follow-up results up to 5 - 9 years, and these results should be considered by the Authors, who reported mainly studies published between 2010 - 2015 that included also techniques already abandoned since more than 15 years (TIF 1.0 and ELF). The meta-analysis by Huang et al. (2017), cited by the Authors, included also procedures carried out using the TIF 1.0 or ELF technique.

In order to give a correct and objective information to the readers on post-TIF outcomes, Authors should consider results reported recently in the review by Haseeb and Coll. (2023), or those published in previous meta-analyses in 2018 (MC Carthy et al.) and 2021 (Chandan et al.), that excluded the preliminary studies on TIF 1.0 and ELF. The percentage of technical failure of TIF reported in the more recent meta-analyses appears to be much lower than the 7-8% reported by Huang et al.

Reply 1: Thank you for the comment. Information from the review by Haseeb is included in the manuscript. Please see paragraph 3 under the section "Transoral incisionless fundoplication". We also added information from the Chandan et al review. Please see paragraph 3 under section "transoral incisionless fundoplication" and paragraph 4 under section "evaluation and management following failed MSA or TIF".

Comment 2: As it regards the long-term outcomes, follow-up reports up to 9 years are available (Bell et al., 2021, Chimukangara et al., 2019, Testoni et al. 2019) and confirmed that the symptomatic improvement achieved in the 2-3 years after TIF was maintained over time.

Reply 2: We appreciate the comment. We have included data from the most recent

review of TIF by Bell et al that reports improvement for up to 9 years. Please see paragraph 3 under the section "transoral incisionless fundoplication.

Comment 3: Again, to give a correct information, Authors should also compare the long-term outcomes after TIF and MSA with those of surgical fundoplication, that are comparable or even worse in terms of PPI consumption. A nationwide register-based follow-up study on the use of PPI after anti-reflux surgery and a Cochrane meta-analysis on Nissen fundoplication showed that 57.5% and 41.2% of patients, respectively, still took PPIs 5 years after surgery (Loedrup et al, 2014; Garg et al., 2015).

Reply 3: There have been more recent studies comparing MSA/TIF to Nissen fundoplication. Data has been added for comparing outcomes between MSA/TIF and Nissen fundoplication. Please see paragraph 2 under section "Magnetic Sphincter augmentation" and paragraph 7 under "Transoral incisionless fundoplication.

Comment 4: As it regards the reintervention, Authors reported data on surgical repair of TIF and MSA failures, but omitted data on TIF repair after surgery.

Reply 4: Data was added on TIF repair after surgery. Please see paragraph 3 under section "re-operative management".

Comment 5: In conclusion, Authors should focus the review on more recent published data and provide a discussion on the basis of these results.

Reply 5: We appreciate the comments and review to enhance the quality of our manuscript.