

## Peer Review File

Article information: <https://dx.doi.org/10.21037/ajo-24-19>

### Reviewer A

Thank you for your submission to AJO. This is a good review of the currently available literature for TORS laryngectomy.

**Reply: Thank you for the feedback**

**Changes in text: Nil**

### Reviewer B

There are a few spelling, grammar, and formatting issues that need to be corrected.

The tables and appendices are subpar and need revision.

The content has some obvious omissions, however the underlying approach and structure if reasonable.

Detailed feedback is as below. If these can be corrected, the article will be suitable for publication.

#### **Spelling/ Grammar/ Formatting: assumption that UK English used**

**\*\* Do these after corrections made as line numbers will change**

Page 1

- Title ('a') not required.
- Full stops to be added at end of each line in Declarations.
- Line 26: PubMed
- \*\*Create Page break so Abstract start on new page

Page 2

- Line 33, comma after “abstracts”
- Line 43 “dependant” should be “dependent”.
- Line 43 remove “and” and insert full stop and start new sentence.

Page 3

- \*\*Remove all blank lines
- Line 102 Change “has” to “have”.

Page 4

- Line 114 “also” not required.
- Line 115 Poor sentence construction, suggest: “With regards to total laryngectomy, the benefit of a TORS based approach when compared to open techniques....”

Page 5

- Line 139 insert comma after “approaches”
- Line 145/ 146 “tracheoesophageal”
- Line 146 “also” not required.

Page 6

- Line 173 insert comma after

“abstracts” Page 8

- Line 241 “dependant” should be “dependent”.
- Line 246

“tracheoesophageal”

**Reply 1: Thank you for the detailed feedback above. All the above changes have been made in text with tracked changes.**

**Changes in text: as above**

Tables:

These are poorly constructed and not suitable for publishing. The included studies have numbers in one table but are referenced by author in another. The column widths needed to be cleaned up so there is consistency with Variable at top of Column on 1 line and the measure underneath in brackets on second line ie “Hospitalisation Time” top line, (days) as the measurement underneath. Items under “Voice rehabilitation” should be one item on a single line. There are table titles but no descriptors or legends. The page breaks between tables are in the wrong place.

**Reply 2: I have changed the tables so that there is consistency between the studies being referenced by both the author and number in each table. The column widths have been adjusted to allow variable in 1 line with measurements in the line below. I have added table titles, a descriptor below with a legend included for all abbreviations used**

**Changes in text: As above**

- Appendices: again, no descriptors or legends: needs better formatting for the author names

**Reply 3: I have changed all appendixes to have titles, descriptors and legends. The column widths have been cleaned up to allow for better formatting of author names. I have changed authors to suit the AJO bibliography style with 3 authors and the remainders are acknowledged by et al.**

**Changes in text: As above**

**Content:**

The overall study design is reasonable, however not all aspects of the synthesis methods are identifiable: a comment on the presence of any heterogeneity and cause is not included (if the results are similar, a specific comment to that should be made)

**Reply 4: A comment on heterogeneity has been added.**

**Changes in text: Lines: 327-331**

*Due to the limited data, all studies chose to report data in narrative format and hence could not be pooled in a meta-analysis. The reported data was heterogenous in nature and this could be due to the differences in patient selection, procedure techniques and surgeon expertise. Larger and more robust comparative studies are required to undertake a formal meta-analysis to compare to open techniques.*

The Prism references are inaccurate i.e Reporting bias assessment is referenced as Page 7 Line 213-215, however the potential correct reference would be Page 6 lines 187- 190 and Appendix 2. Go through this more carefully and ensure it is accurate.

**Reply 5: Unfortunately, the PRISMA references are inaccurate as the journal has modified the formatting of the document and taken off the author names/institutions before sending it out for peer review. All PRISMA references have been updated following the revision of the paper.**

**Changes in text: As above**

Whilst the use of free flaps in open surgery to reduce pharyngocutaneous fistula

formation is discussed, the more common and more reliable method of using a pectoralis major (with or without skin) to reinforce the suture line or augment the reconstruction in salvage TL is missing. This is a significant omission when commenting on feasibility of TORS as an alternative approach and comparing PCF complication rates.

example reference:

Guimarães AV, Aires FT, Dedivitis RA, Kulcsar MA, Ramos DM, Cernea CR, Brandão LG. Efficacy of pectoralis major muscle flap for pharyngocutaneous fistula prevention in salvage total laryngectomy: A systematic review. *Head Neck*. 2016 Apr;38 Suppl 1:E2317-21. doi: 10.1002/hed.24248. Epub 2015 Nov 11. PMID: 26559777.

**Reply 6: A comment regarding the use of pectoralis major muscle flaps has been added when comparing PCF complication rates.**

**Changes in text: Lines: 309-314**

**Multiple authors have reviewed different techniques to reduce the incidence of PCF in total 309 laryngectomy procedures. Paleri et al (2014) (22) demonstrated a one-third reduction in PCF formation with combination use of primary closure with a vascularised pedicle or free flap. Guimaraes et al (2016) (23) specifically highlighted the feasibility in using a pectoralis major muscle flap to significantly reduce the incidence by 22% when compared to primary pharyngeal closure. The surgical techniques included in these reviews only utilised primary pharyngeal closure.**

Based on the limited evidence, the conclusion is too strong: There is emerging evidence, but more data is required. It may be the ideal cases are the more unusual malignancies ie chondrosarcomas and functional salvage rather than recurrent SCC salvage. Is there evidence that the complication rate in any of the subgroups was lower than the overall group? If so, could there be early evidence to propose TORS as first line management?

**Reply 7: The conclusion has been changed to reflect limited and emerging evidence.**

**Changes in text: Lines: 341-346**

**There is emerging evidence to support the feasibility of a TORS TL approach but more data and research is required. When compared to open total laryngectomy technique the post-operative complication rate is equivalent. This systematic review demonstrated only a small number of patients treated with this approach probably due to a reflection of the expertise required in centres to perform TORS TL and the difficulties involved in selecting suitable patients for this approach.**