

Peer Review File

Article information: <https://dx.doi.org/10.21037/joma-23-15>

Review Comments

Reviewer A

Comment 1: Make sure the in-text citations occur before the period instead of after the period for the corresponding sentence

Reply 1: Article has been reviewed and we have aimed to correct this where possible

Comment 2: Line 17: consider minor grammatical fix "evidence for its use in head and neck surgery..."

Reply 2: amended as suggested

Changes in the text: see line 19

Comment 3: Consider re-wording line 153 (first sentence)

Reply 3: Wording has been altered

Changes in text 3: See line 165 first sentence

Comment 4: Overall, very thorough and well written. Consider referencing the following paper by Obayemi et al. "Enhanced Recovery after Surgery (ERAS) protocols in craniomaxillofacial surgery: an evidence-based review"

Reply 4: Paper has now been included

Change in Text 4: see line 77-79

Reviewer B

This article is a welcome addition to the literature regarding the current state of evidence on ERAS in head and neck surgery. There is much of value in this narrative summary that can advance the field. My primary concerns are that some of the referencing is inadequate, and suggestions are provided. This limitation might reflect the original search strategy. There is also a need for improved clarity and precision in some areas, and specific recommendations are provided in comments below. Thank you for the opportunity to review this paper, which respects considerable thought, insight, and effort on the part of the authors.

1. The writing has various stylistic and syntax errors that should be addressed in the revision. For example, in the abstract:

Comment 1: (a) In the line, "Enhanced Recovery After Surgery (ERAS) has a large evidence base from colorectal surgery, and is associated with reduced length of stay, cost, complications and improved outcomes.":

There should be no comma following the and, since there is not a separate subject in the second part of the sentence, and this second sentence is thus not freestanding. In

addition, parallel structure is lacking. The authors presumably intended to state something along the lines of "...associated with reduced length of stay, lower cost, fewer complications, and improved outcomes." It is unacceptable to leave it to readers or editors to manage such lack of clarity and precision in writing.

Reply 1: Grammar fixed

Changes in Text 1: See lines 17-20

Comment 2: (b) In the abstract line, "Evidence for head and neck surgery is now emerging in the literature" it would be helpful for the authors to specify that "evidence for the benefit of ERAS in head and neck surgery is now emerging." In addition, the authors need to clarify whether their discussion relates to (a) full scope of otolaryngology -- head and neck surgery plus oromaxillofacial surgery vs. just one of these two disciplines vs. only head and neck surgery vs. only head and neck surgery free flap reconstruction. Head and necks surgery is a vague term as it might or might not imply specialties such as otology, rhinology, laryngology, facial plastics, etc. Does it include endocrine surgery, such as thyroidectomy?

Reply 2: Changes made to encompass full discipline of major head and neck surgery

Changes in Text 2: Title added "major", See lines 19, 82

Comment 3: (c) In the abstract line, "This article aims to give an overview of current evidence in the literature supporting the use of ERAS based interventions in head and neck surgery" the authors imply a risk of bias in their review. A review should not only look at evidence supporting use of ERAS; it should curate the evidence in an objective and dispassionate manner, report evidence both in favor of ERAS and against it. A more objective stance might reveal limitations or even negative results with the approach. The goal is to leave the reader with a balanced understanding of the current state of knowledge. Was there an effort to judge risk of bias using any validated tools. Was evidence level appraised? If evidence was not rated, either this should be done or at least the limitation acknowledged in the discussion.

Reply 3: we accept there is potential for bias and have now included some text to highlight this limitation

Change in Text 3: see lines 91-95

Comment 4:(d) In the abstract methods the authors state, "A PubMed search for 'enhanced recovery AND head and neck' and 'enhanced recovery AND maxillofacial.' This approach is acceptable, but it is a limited search strategy. As a narrative review, the review also did not have a defined PICO question, and some of the limitations should be addressed as limitations. Also, the approach to vetting papers is not well explained. For example, "Those deemed relevant selected" leaves much room for subjectivity. How were they determined to be relevant or not? Was it based on how head and neck surgery was defined for purpose of the study.

Reply 4: search strategy in table 1 shows relevance from title

Change in text 4: see line 89 now clarifies this

Comment 5: (e) In the abstract conclusion, the authors write, "There is good evidence to support the use of ERAS principles in head and neck surgery. Preoperatively there is focus on good patient education and nutritional assessment and optimisation, Intraoperatively, it is important to maintain physiological norms." The sentence needs revision. First, the comma should be a period (as currently written, the authors have a run-on sentence). Second, what is "good evidence"? Please specify if this means high level evidence (e.g., from systematic reviews and randomized trial? versus a preponderance of evidence, but from lower-level studies). It is not enough for it to be good in the opinion by the authors without a standard applied.

Similarly, please specify what "good education" means? Does this mean that the literature showed that some forms of education were better than others, or did the literature show that most educational interventions were effective, regardless of measures of quality?

Readers also need clarity on whether evidence was from oncological Head and Neck surgery only or both Head and Neck and oromaxillofacial surgery? Did the literature search for "head and neck" capture a meaningful representation of all otolaryngology, or just head and neck, which focuses more on oncology, with some reconstruction and benign resections?

Reply 5: grammar has been changed, removed "good" so more objective. Have also commented on the search acknowledging limitations and potential for biases

Changes in text 5: see lines 91-95. removed "good evidence" and changed to "There is evidence to support"

Comment 6: (f) The sentence, "Patients may pose a challenging airway" is not standard language usage. It might be preferable to note that patients may possess challenging airway anatomy or that some patients have existing or acquired characteristics that result in a difficult airway. It would be helpful to specify these high-risk attributes in the text.

The current description ("pose a difficult airway), which appears a couple times in the paper is unusual since it suggests that the patient is intentionally posing the challenge rather than their anatomy or other attributes. The mention that Free flap monitoring is vital in the first 24 hours following surgery is one with which I agree, but it does not seem directly relevant to ERAS. Can the authors please clarify?

Reply 6: Wording has been altered

Changes in Text 6: See lines 165-167

Comment 7: (g) In the statement beginning with "Traditional measures" with comments on routine procedure becoming obsolete, it is unclear what patient population is referenced. Please clarify the population. Thyroidectomy is an example of head and neck surgery (and the authors cite several references relating to thyroidectomy) but tracheostomy insertion, ICU admission, etc. have never been routine measure. More

precision is needed in the writing. Even if the focus is on free flap reconstruction, a patient receiving a free flap for scalp reconstruction would not have traditionally (or currently) received routine tracheostomy.

Reply 7: It is thought the reader would have some baseline context/understanding as clearly this is not required for all patients. However for clarity we have added that this is for more "complex cases" given this is only the abstract section and will clearly be expanded on in the article

Change in text 7: see line 39-40

Comment 8: 2. In the statement, "Admission to specialist areas, avoidance of tracheostomies and early nutrition is now encouraged and has been shown to reduce LOS with no compromise in outcomes" the authors have a plural subject and therefore need plural verbs for noun-verb agreement. (e.g. "are" not "is" ; also "have" not "has"

Reply 8: Grammar fixed

Change in Text 8: as described

Comment 9: 3. The issues of lack of parallel structure appear elsewhere in the paper. For example, in the first paragraph, "This in turn will help facilitate increased bed availability, avoid cancellation, and improve patient outcomes and patient satisfaction." could be revised to, "This in turn will help facilitate increased bed availability, avoid cancellation, improved patient outcomes and patient satisfaction."

Reply 9: Grammar fixed

Change in Text 9: as described

Comment 10: 4. There are some minor syntax errors:

For example, "This is a major tenant of ERAS." It should be "tenet" not "tenant." I did not have time to identify all such issues throughout. Please take time to carefully review the language throughout the paper if revised. Similarly, in the statement "free flap monitoring, which should be actively done in the first 24 hours, where the graft is most likely to fail." The term "where" should be replaced with "when" (better wording would be "when risk of free flap failure is highest")

Reply 10: syntax error acknowledged

Change in Text 10: tenant changed to tenet, other syntax error revised line 359

Comment 11: 5. Some statements would benefit from additional clarification. For example, "Routine tracheostomy should be avoided where at all possible." What does this mean? It suffices to say that the decision for tracheostomy should consider the need for such procedure or that it should not be routinely performed. But "Do not perform tracheostomy routinely unless it is absolutely necessary" is nonsensical since performing only when needed implies non-routine use.

Reply 11: phrasing has been changed to reflect this comment

Change in Text 11: line 165-168

Comment 12: 6. It would be wonderful for the authors to provide more specificity around when tracheostomy is needed and provide citation around best practices in tracheostomy care, including how these patients are best cared for. This point is critical. There are instances when tracheostomy is still required for a safe reconstruction and the readers have little guidance on this critical point. In the past 10 years there has been a tremendous amount of work around defining the role for when tracheostomy is needed and what care is required afterwards. Below are two landmark publications to which readers can be referred for contemporary guidance on improving quality around tracheostomy care. Although these references are not specific to ERAS in Head and neck, these resources provide the evidence base on which clinicians should base best practices related to date-driven improvement in tracheostomy care. An extensive discussion is not needed, but please direct readers to such information as part of the effort of improving the prevailing standard of care. Suggestions:

Global Tracheostomy Collaborative: data-driven improvements in patient safety through multidisciplinary teamwork, standardisation, education, and patient partnership.

Brenner MJ, Pandian V, Milliren CE, Graham DA, Zaga C, Morris LL, Bedwell JR, Das P, Zhu H, Lee Y, Allen J, Peltz A, Chin K, Schiff BA, Randall DM, Swords C, French D, Ward E, Sweeney JM, Warrillow SJ, Arora A, Narula A, McGrath BA, Cameron TS, Roberson DW. *Br J Anaesth.* 2020 Jul;125(1):e104-e118. doi: 10.1016/j.bja.2020.04.054. Epub 2020 May 23. PMID: 32456776 Free article. Review.

Improving tracheostomy care in the United Kingdom: results of a guided quality improvement programme in 20 diverse hospitals.

McGrath BA, Wallace S, Lynch J, Bonvento B, Coe B, Owen A, Firn M, Brenner MJ, Edwards E, Finch TL, Cameron T, Narula A, Roberson DW. *Br J Anaesth.* 2020 Jul;125(1):e119-e129. doi: 10.1016/j.bja.2020.04.064. Epub 2020 May 31. PMID: 32493580

AARC Clinical Practice Guideline: Management of Pediatric Patients With Tracheostomy in the Acute Care Setting.

Volsko TA, Parker SW, Deakins K, Walsh BK, Fedor KL, Valika T, Ginier E, Strickland SL.

Respir Care. 2021 Jan;66(1):144-155. doi: 10.4187/respcare.08137. PMID: 33380501

Reply 12: Such articles would not be identified as part of our methods given there is no mention of enhanced recovery. However, we acknowledge the importance of such articles so have included them for reader reference

Change in Text 12: see line 322-325

Comment 13: 7. The conclusion, "There is a lot of good evidence to support the use of ERAS principles in head and neck surgery." fails to address the rigor/design of studies, their heterogeneity, and risk of bias.

Reply 13: comments now made to that effect acknowledging potential flaws/biases

Change in Text 13: lines 91-95

Comment 14: 8. The authors omit some other key literature around thromboembolic risk, which is a significant concern in free flap patients, especially those with lower extremity surgery (e.g. fibula free flap). A critical citation is this one:

Antithrombotic Therapy for Venous Thromboembolism and Prevention of Thrombosis in Otolaryngology-Head and Neck Surgery: State of the Art Review.

Cramer JD, Shuman AG, Brenner MJ. Otolaryngol Head Neck Surg. 2018 Apr;158(4):627-636. doi: 10.1177/0194599818756599. Epub 2018 Feb 27. PMID: 29484922 Review.

Reply 14: reference now added to text

Change in Text 14: lines 266

Comment 15: 9. In addition, I'd love to see the authors recognize some of the literature and comments in JOMA that have been critical to advancing clinical practice around multimodal anesthesia and opioid stewardship in head and neck anesthesia, which is linked to the concept of ERAS. Such citations are also valuable for the journal as it establishes itself as a leading resource in this field. Below are some suggested citations to consider, including acknowledging some of the wide variation globally in these practices, especially around opioids:

Opioid prescribing and consumption after head and neck free flap reconstruction: what is the evidence for multimodal analgesia?

Cramer JD, Brummett CM, Brenner MJ.

J Oral Maxillofac Anesth. 2022 Jun;1:17. doi: 10.21037/joma-21-19. Epub 2022 Jun 30.

PMID: 35859689

Multimodal analgesia following microvascular free flap reconstruction of the oral cavity—the safety and benefits of supplemental regional anesthesia

John M. Le, Yedeh P. Ying, Alex Afshar, Anthony B. Morlandt

Journal of Oral and Maxillofacial Anesthesia 2022;1:37 (30 December 2022)

Global variation in opioid prescribing after head and neck reconstruction: understanding the United States' outlier status.

Cramer JD, Pandian V, Brenner MJ.

J Oral Maxillofac Anesth. 2022 Dec 30;1:39. doi: 10.21037/joma-22-44.

PMID: 37034113 Free PMC article. No abstract available.

Reply 15: some of these references now added to text

Change in Text 15: see section on multimodal analgesia

Reviewer C

Thank you for the opportunity to review this article. Please find my comments below which I hope will be of benefit.

Abstract: clearly written abstract with all key points covered.

Comment 16: Introduction: Some of the recent ERAS literature has been discussed well. However, it would be helpful to discuss this further to provide more depth to the background and rationale for your paper e.g., what patient outcomes improve? Why does it improve patient experience? It would also be helpful to specify which aspect of head and neck surgery you are examining due to the differences in major oral vs. laryngectomy surgery. From reading your methods section I think your focus is on max-facs but it would help focus your paper if this was explored in the introduction.

Methods: This is a very short section and more detail needs to be provided so that your study methods are replicable. The table (1) is helpful in providing some of this context but more could be given in the main body of the paper. Could you give an example of what you deemed relevant in your literature and reference searches? How did you critically review the papers?

Results: No results section in your paper – you have put this in your discussion. This needs to be amended so that the results from your search are clearly presented.

Discussion: See results section comment. Please review this and re-write so results and discussion are separate. No limitations have been discussed

Conclusion: Strong opening statement which may need reviewed. Conclusion may need re-writing after results and discussion have been reviewed. Some general comments: Is there a standard protocol that could be used throughout the UK? How would staff training needs be met? What future research needs to be done in the area?

Reply 16: Given this is a narrative rather than systematic review, the search strategy was not overly extensive. We believe methods are sufficiently detailed to determine how we identified literature used. Similarly, the narrative checklist used to write the article does not include a results section hence this was omitted. Given the article encompasses all of head and neck there is not going to be one protocol fits all, but the article mainly refers to major head and neck surgery as opposed to minor procedures. Throughout the paper under individual sections of discussion there is some mention of areas where evidence is not as strong so there is reference to potential areas for further research

Changes in text 16: Comment has been added at end of methods section acknowledging potential limitations of search strategy. Have added additional summary of potential areas for further work in the conclusion lines 362-364. Have changed title to “major” head and neck surgery

Reviewer D

Thank you for providing me an opportunity to review and comment on this paper reviewing the literature on the implementation of ERAS in patients undergoing head and neck surgery. The authors should be commended for tackling an important issue; understanding the effectiveness of ERAS for head and neck surgery is clinically important.

I have some comments for the authors to consider.

Comment 17. Rational. The authors nicely review some key papers in the area in the introduction; however, this approach to reviewing the included studies makes the reader wonder what is the need for this study. Consider removing the review of included studies in the introduction and rather critically synthesize the evidence that supports the rationale and significance for this study. For example, is there conflicting reports of the effectiveness of ERAS for head and neck surgery? The authors note that there is, to their knowledge, a paucity of RCTs, but there are observational studies - are there critical concerns with the quality of the evidence on the effectiveness of ERAS for head and neck surgery?

Reply 17: We believe there is enough evidence from observational studies to suggest extrapolating ERAS is both safe and effective, hence highlighting some of the available literature and their findings. We have not found any negative evidence against ERAS in head and neck

Changes in Text: included reference to systematic review of ERAS randomized trials across other surgical specialties see lines 58-60

Comment 18. Approach. I appreciate that this is a narrative review and not a systematic review, which requires considerably more information about the methods, but could the authors provide a bit more information about what criteria justified inclusion?

Reply 18: please see reply 16

Changes in Text 18:

Comment 19. Significance of this work. Could the authors comment on the novel information that this study provides and how it could be used in clinical practice? I wonder what this review adds, in addition to the ERAS guideline for head and neck surgery.

Reply 19: comment added in objective section highlighting aims of article

Changes in Text 19: see line 82-83
