Peer Review File

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Reviewer A

This is an interesting study aiming at evaluating functional outcomes and quality of life in patients who underwent conventional or endoscopic/robotic retroauricular neck dissection. Main limitations of the study are related to severe methodological problems, which are the weak study design and the small case series. It is presented as a prospective comparative study but it is not clear how patients were assigned to CG or RG group. Did Authors perform any randomization? Which measures of control were used? Maybe, it would be more adequately defined as a case-series study or case-control study. Beside this, the small number of patients significantly affects the strength of the conclusions, with high risk of an underpowered setting, In order to enhance the strength of the evidence, the number of included patients should be determined on the basis of a sample size computation, performed by choosing a primary endpoint and considering its accepted variability, In addition, statistical analysis should also address the effect of possible confounders (for instance the stage of neck disease, systemic disorders, age) which could significantly impact on the outcome. T-test is absolutely non-adequate to be used in a such small case series.

Dear reviewer, thank you for your expression of interest and considerations for improving this manuscript.

Regarding the doubts raised, explanations follow:

Comment 1: It is presented as a prospective comparative study but it is not clear how patients were assigned to CG or RG group. Did Authors perform any randomization? Which measures of control were used?

Reply 1: Patients were assigned to the Conventional or Retroauricular group according to the medical indication to perform the procedure via the conventional or endoscopic/robotic route. The surgeons, belonging to two large cancer centers, were blind to the measurements evaluated in the patients.

No randomization was performed, as the evaluations were based on the modality in which the patients would be operated.

Changes in the text: Section Methods. Lines 114-117.

Comment 2: Maybe, it would be more adequately defined as a case-series study or case-control study.

Reply 2: The study description was modified to "case-control".

Changes in the text: Title, line 3.

Comment 3: Statistical analysis should also address the effect of possible confounders (for instance the stage of neck disease, systemic disorders, age) which could significantly impact

on the outcome.

Reply 3: Given the small sample size, other forms of interaction, such as the impact of stage or dry level on the analyzed variables, were not tested.

Changes in the text: Section Discussion. Lines 315-317.

Comment 4: T-test is absolutely non-adequate to be used in a such small case series.

Reply 4: Regarding the use of the T test, it was used only on data with normal distribution, and even so, the significance was confirmed by performing the non-parametric test (Mann-Whitney).

Changes in the text: none

Reviewer B

The paper has well-designed research methods, appropriate statistical analysis and a relatively good interpretation of the results.

-Please be sure to use only keywords accordingly to medical subject headings (Mesh word) for a better indexing.

I suggest you add a table with the list of abbreviations used in the text.

I suggest you implement the abstract in order to make it more understandable to authors.

The introduction should be expanded perhaps by adding a section on temporomandibular disorders. I recommend some references:[10.3390/jcm12072652];[10.1111/joor.13496]

The conclusion is in accordance with the objectives of the research, its results and their interpretation, as well as the relevant literature.

Dear reviewer, I thank you for your interest and the points made in your review.

Comment 1: Please be sure to use only keywords accordingly to medical subject headings (Mesh word) for a better indexing.

Reply 1: Regarding the descriptors, the writer "head and neck cancer" was replaced by "head and neck neoplasms", "range of motion" by "articular range of motion", "trapezius muscle" by "muscle strength" and "robotic surgery". for "robotic surgery procedures". The rest are in accordance with Mesh terminology.

Changes in the text: Section Keywords. Lines 59-60.

Comment 2: I suggest you add a table with the list of abbreviations used in the text.

Reply 2: The mention of acronyms will follow the journal's requirements, being mentioned in the order in which they appear in the text and in the footer of tables and tables.

Changes in the text: throughout the text and below the tables

Comment 3: The introduction should be expanded perhaps by adding a section on temporomandibular disorders.

Reply 3: The impact of neck dissection surgery on the mobility and function of the temporomandibular joint is of great importance and was included in the introduction.

Reviewer C

I read with great interest the manuscript titled "Functional outcomes and quality of life in patients who underwent conventional or endoscopic/robotic retroauricular neck dissection".

The manuscript investigates the functional outcomes and quality of life in patients who underwent either conventional or endoscopic/robotic retroauricular neck dissection for head and neck cancer. The study includes a total of 35 patients, with 25 in the Conventional Group (CG) and 10 in the Retroauricular Group (RG). The authors assessed various parameters, including range of motion (ROM) of the cervical spine and shoulder, trapezius muscle strength, and quality of life. The results suggest that patients undergoing retroauricular neck dissection experienced lower postoperative morbidity, better cervical spine ROM, trapezius muscle strength, and superior quality of life compared to those undergoing conventional neck dissection.

The strengths of the present study are the clear research question, with well defined methodology and analysis of findings.

Some points that can be improved are:

- 1. While complications are briefly mentioned, further discussion on the clinical relevance and potential impact on outcomes would enhance the manuscript. Additionally, statistical analysis of complications, even if not significant, may be included. Local wound specific complications, like scarring, should be noted.
- 2. The manuscript reports pain scores at various time points, but it would be beneficial to discuss the clinical significance of these scores and how they may impact patients' daily lives.
- 3. Discuss the clinical significance of the observed differences in quality-of-life scores, particularly in the "Chewing" and "Shoulder" domains.
- 4. Clarify the subgroup of patients with oral/oropharyngeal cancer, if they had any specific reconstruction that may have impacted the results.
- 5. How about the long-term effects? Would you suggest a repetition of the measurements in 6 months, or a year?

Based on the strengths and suggestions outlined above, I recommend the manuscript for publication with minor revisions. The study contributes valuable insights into the functional outcomes and quality of life in patients undergoing different neck dissection approaches.

Dear reviewer, I thank you for your comments and we have included your suggestions in this manuscript.

As for suggestions, here are the replies:

Comment 1: While complications are briefly mentioned, further discussion on the clinical relevance and potential impact on outcomes would enhance the manuscript. Additionally, statistical analysis of complications, even if not significant, may be included. Local wound specific complications, like scarring, should be noted.

Reply 1: Regarding postoperative complications, in fact, they are an extremely important factor

that impacts the evolution of patients. We compared the groups regarding their incidence, for which we found no statistically significant difference. We address in more detail the impact of this variable on the results obtained in the discussion.

Changes in the text: Section Discussion. Lines 227-239

Comment 2: The manuscript reports pain scores at various time points, but it would be beneficial to discuss the clinical significance of these scores and how they may impact patients' daily lives.

Reply 2: The presence of pain, in the same way, also affects the variables analyzed. We tried to make the relationship between pain and the outcomes evaluated in our series clearer.

Changes in the text: Section Discussion. Lines 243-251.

Comment 3: Discuss the clinical significance of the observed differences in quality-of-life scores, particularly in the "Chewing" and "Shoulder" domains.

Reply 3: The "Chewing" and "Shoulder" domains are particularly important in assessing the quality of life of these patients, and were better addressed in the discussion.

Changes in the text: Section Discussion. Lines 292-306.

Comment 4: Clarify the subgroup of patients with oral/oropharyngeal cancer, if they had any specific reconstruction that may have impacted the results.

Reply 1: Considering our small sample size, this variable was not analyzed. This suggestion will be considered when we increase our sample size.

Changes in the text: none

Comment 5: How about the long-term effects? Would you suggest a repetition of the measurements in 6 months, or a year?

Reply 1: This study continues with data collection over a period of 6 months and 1 year. We will publish the results of this follow-up period in the future.

Changes in the text: none

Reviewer D

This study reviewed the difference in functional outcome by means of range of movement of cervical spine and shoulder, and also score of quality of life comprehensively. I agreed reviewing neck dissection of different levels and extents as a subgroup analysis should be done if a larger sample size could be obtained as it is a major factors which determined the different types of potential post-op complications. However, it is a good start of the series of case review.

Comment 1: I agreed reviewing neck dissection of different levels and extents as a subgroup analysis should be done if a larger sample size could be obtained as it is a major factors which determined the different types of potential post-op complications.

Reply 1: Dear reviewer, I thank you for your comments and inform you that we continue with this research with the intention of obtaining a more robust sample size as well as a longer follow-up period, this way we will be able to carry out other sub-analyses that were not possible at this time.

Changes in the text: none.