Peer Review File

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<mark>Reviewer A</mark>

In general, there is some novelty in the article, but the literature review should include the methods already used/presented to perform mastectomy in minimally invasive techniques. The language is understandable and grammar good, but the use of terminology is used in unconventional manner.

The figures presented with the article are good.

Reply: We appreciate your professional review work and comments to our paper. We will try our best to revise the manuscript to improve its quality.

Major revision:

The literature review should include much more what is already known of minimally invasive mastectomy techniques. The presented technique should be compared to them, not to the modified radical mastectomy.

Reply: Thank you very much for your suggestion. The literature review was revised according to your advice.

Multiple terms are used in manner that is difficult to understand. There are multiple phrasings for same matters and unconventional terms (mammary cancer -> breast cancer, armpit – axilla, "to free"/disconnect – dissect, hypodermic needle – probably not the term should be used for the presented device, living quality - quality of life, "shortern bleeding", to present just a few examples) The terminology of the article should be thoroughly reviewed by a native English-speaker or someone familiar with the terminology.

Reply: Thanks. The whole manuscript was checked and adjusted to be clearer (see page 2, line 25, 35, page 6, line 137; page 7, line 164).

The "Case presentation" includes way too detailed information of the patient, the Name, gender and number of children, details of multiple diagnostics etc. The readers of this article may be presumed to be professionals, and as this article is already lengthy, the length of this chapter should be reduced to approximately half, including only essential information.

Reply: Thank you. We endeavored to condense this article by including only essential information (see page 5).

Minor revision:

line 40 – This article describes technique with a single patient – the recommendation should be to compare the technique to other minimally invasive techniques, which may be superior.

Reply: Thanks. This new surgical method could solve the problems of axillary space instability and narrow space during operation, compared with other minimally invasive techniques. This was added in page 2, line 41.

line 188 – to kill two birds... -> I would suggest more formal expression as this is a scientific text.

Reply: Thank you for the detailed advice. The whole manuscript was reviewed and revised to improve its readability.

The diameter of the tumour is less than 2cm, so the given TNM-classification is erroneous.

Re: We are sorry for the wrong TNM-calssification. We have revised the TNM stage in the revised abstract section (see page 2, line 29).

The weight of the mastectomy specimen should be given.

Re: The weight of the mastrctomy specimen was added in the revised manuscript (see page 7, line 158).

Abbreviations should be explained. **Re: Thanks. The abbreviations were checked and explained.**

<mark>Reviewer B</mark>

This is a case report which describes a new surgical technique for mastectomy and reconstruction combining endoscopy with mechanical elevation of the skin and subcutaneous tissues. While the concept is interesting, I fail to see with this one case how this is improving surgical outcomes and reducing costs. Questions and comments regarding the manuscript are listed below.

Re: Thank you very much for your review and comments to our manuscript. We will try our best to revise the manuscript according to your suggestion.

1. There are multiple errors in the text. I would recommend an English language review.

Re: Thanks. The whole manuscript has been reviewed by a native English speaker and revised to improve readability.

2. There is very little information in the text regarding how the mechanical device is set up and how it helps with the dissection of the breast and axilla. Since the focus of the case report is on the technique, there need to be more detailed pictures about the device set up and intraoperative photos to show how this may improve visualization and surgical outcomes.

Re: Thanks. We are sorry for the little information about the mechanical device. The detailed picture of the device was referred from our previous study. The previous study was cited in the revised manuscript. The description of how the device was set up was described in "surgery procedure" section (page 6, line 129). The intraoperative photos were added in the revised manuscript (see Page 7, line 145).

3. The authors discuss using an approximately 5 cm incision to remove the

mammary gland once it is dissected. In most cases of nipple sparing mastectomy, an 8 cm incision may be utilized, so I am unclear how much this truly helps to reduce the surgical incisions and improve the cosmesis.

Re: Thanks. We agree that 5 cm incision may have no significant difference on cosmesis compared with 8 cm incision. Improper preoperative incision design and excessive intraoperative suture incision tension can also cause ischemic necrosis of local flap, which significantly prolongs the postoperative healing time of patients. The reduced incision could reduce post-operative pain, length of stay, and improve overall recovery.

4. I am unclear how the cost savings was achieved.

Re: Thank you. Prosthesis and mesh are commonly used for breast reconstruction after breast cancer. In the present study, the patients only need to insert silicone prosthesis without the need of combined mesh trough the non-soluble fat suspended breast endoscopy subcutaneous papillary and areolar resection combined with the suspended retracting hook. The cost saving was achieved through saving the cost of breast soft tissue enhancement mesh.

5. It would be helpful to have presurgical pictures of the patient so that these can be compared to the postoperative pictures.

Re: Thanks. We agree that presurgical pictures and postoperative pictures comparison would be helpful, especially for patients who received both sides of breast surgery. In this study, only the left breast of the patients received surgical treatment. We considered that the left breast could be compared with the right side breast. Therefore, we only added the postoperative picture of both side breast.

6. In the text it appears that mastoscopic surgery of the axilla and the breast are used interchangeably. The 2 studies referenced regarding mastoscopic surgery were comparing traditional CALND to MALND. These studies did not compare mastoscopic breast surgery to standard nipple sparing mastectomy.

Re: We appreciate your advice. The discussion was revised according to your suggestion (see page 9, line 195).

7. Since this is a single case report I disagree with the conclusion that this surgery is worth popularizing. The conclusion also states that this surgery improved the patient's quality of life, however, there is no information in the manuscript which supports this. In order to increase interest in this technique and determine if it is valuable, more than a single case would need to be performed and would need to be compared to standard operating times and outcomes to show a true benefit. **Re: Thanks. The comment provide a professional suggestion for our future research. We agree that a single case may obtain the conclusion. Thus, we revised the Discussion section and the conclusion. More than a single case**

will be collected and analyzed to show benefit in future research.