Peer Review File

Article information: https://dx.doi.org/10.21037/gs-21-176

Reviewer A

Comment 1: I'm attaching Grammar collected version of your manuscript, Hopefully, might be some help for you. My question is that the Figures included are not specific for modified Grisotti but looks like classic reduction mammoplasty. Could you explain or change specific photos that fit the theme? (See attachment "3. GS-21-176-CL-Abstract marked by Reviewer A.docx")

Reply 1: Thank you very much for the kindly modification. It's very helpful for me. As for your question which related to the first patient, I'm satisfied with your opinion that techniques are not a specific for Grisotti. However, in my opinion I think modified Grisotti is just adapt the idea that removing the nipple areola complex and using healthy tissue including the skin island to replace the defect. So no matter which part of the pedicle with reserving skin island can take place of the defect. We also can combine any technique with this idea to fill the defect. In the paper we also mentioned that for the first patient we combined the inverted T technology and modified upper pedicel technology together. As well as we reserved the skin island on the upper pedicle to restore the nipple areola complex. However, both of the patients don't want to have the nipple reconstruction even if the tattoo.

Reviewer B

Comment 1: First, the authors mention "Grissoti flap" which is a terminology that I have never heard of and needs further clarification or reference. Did you mean: Grisotti flap Grisotti flap_

Reply 1: Thanks for your reminding. There are some mistakes in this paper, I'v revised all the Grissoti to Grisotti.

Changes in the text:

Line2,21:Grissoti to Grisotti.

Comment 2: The authors claim that two "modified Grissoti flap techniques for Paget's disease or CLBC produced good cosmetic results as well as safety in Chinese women" with results only from two patients, in which one of the methods has been published recently. This should probably be presented as an "Idea" or "Viewpoint" or even a" letter to the editor " rather than a formal journal article about the oncoplastic technique that is suitable for Chinese women, but even as a technique case report, we should know the outcomes and the pitfalls of the technique.

Reply 2: This paper been presented as a case report is to describe an idea that modified Grisotti flap applying for the patients with the characters that short distance from inframammary liner to the nipple, long distance from midclavicular to the nipple, or the large breast diameter. We agree with your opinion that "this technique is suitable for Chinese women" is not very correct. Maybe in our clinical practices we see a lot of patients with this characters. So we changed the sentences "Chinese women" to" suitable patients". And we also add the outcomes and the pitfalls in the paper.

Changes in the text:
line 39: safety in suitable patients.
Line172-177: However, there are still some pitfalls of the technique. First, because of the unbalanced tension around the skin island, the new areola may not very round. Second, both of the patients received the post-operative radiation, there is a retraction of the breast tissue after the radiotherapy. This fibrosis e subsequent made a little bit higher location of the skin island which take place of the nipple areola complex. So nipple reconstruction and longer follow-up period is still needed.

Comment 3: They used these two "modified Grissoti flap techniques" on 2 patients and suggest it can be effective in the Chinese women especially the women in South China, whose characteristic of breast is different from that of the westerners. Please provide reference about the difference of breast anatomy between the Chinese and the wester women.
Reply 3: Thanks for your suggestion. We can't provide the reference about the difference of breast anatomy between Chinese and the western women.We just describe the difference according to our clinical experience. In order to make the description more accuracy, we changed these sentence to be: in our clinical practice, we meet so many patients with the smaller sizes, short distance from inframammary liner to the nipple, long distance from midclavicular to the nipple, or the large breast diameter.
Changes in the text:
Line 62-64:delect the sentence: Chinese women, especially the women in South China, whose characteristics of breast that are different from those of the westerners.
Line64-65: change the words to be:In our clinical practice, we find many women in south China have……
Line 69:add "south"
Line70:change "Chinese" to "those"
Line149-151:change the sentence to be: in our clinical practice, we meet so many patients with the smaller sizes, short distance from inframammary liner to the nipple, long distance from midclavicular to the nipple, or the large breast diameter.

Comment 4: Grisotti flap technique is an oncoplastic technique for centrally breast cancer. It consists of central lumpectomy with mobilization of a dermo glandular flap of the inferior part into the central defect to remodel the breast and recreate an areola. Grisotti flap technique is often limited to those patients with sufficient native nipple-inferior mammary fold (IMF) distance to accommodate for some inevitable post-operative reduction. These characteristics described above are the same as described in this manuscript as the characteristics of Chinese breast cancer patients. Recently, Miguel Johnoson et al have published a technical modification of the Grisotti flap the lateral pedicle in patients with short nipple to inferior mammary crease distance with satisfactory cosmetic outcome. In this manuscript, the authors now used almost the same technique in their second patient, but satisfactory cosmetic outcome has not been achieved, e.g., disformed areola is seen in the photograph 4 F, line 240. For instance, I would assume that most of these patients go on to have post-operative radiation. What happens to the projection of the nipple in this context?

Reply 4: The technique in the second patient is not very similar as Miguel Johnoson published. They used the lower-outer quadrant of the breast instead of the standard 6 o'clock
position. However, our technique is to use the outboard tissue to replace the central defect. In this way, we can not only repair the deficiency, but also reduce the redundant lateral tissue. Moreover, we can handle the axillary lymph nodes through the same horizontal incision without another scar under the axilla. Both of the patients have received the post-operative radiation, and they don't want to have the nipple reconstruction. Here are the pictures after the radiation. Although the skin island can't keep round, the location and the shape of the breast is acceptable, even after the radiation the symmetry is still satisfactory.

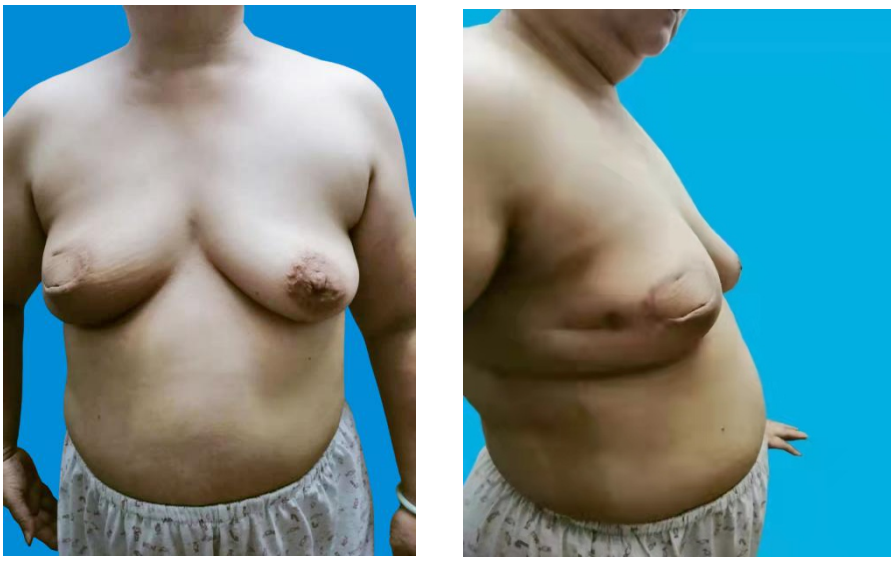

Figure. The second patients' picture half a year after the radiotherapy.

Comment 5: The first patient was a 58-year-old woman diagnosed (line 80) with Paget's disease and centrally located invasive ductal carcinoma in left breast. The left breast hade more volume and ptotic than the right breast as shows in Figure 1 A (line 218). I assume that this patient should treated by the standard Grisotti flap or the modified Hall Findlay technique with a satisfactory cosmetic result in terms of contour and projection without the contralateral breast operation. The authors used Inverted T inferior pedicle and a superiorly based dermoglandular pedicle with the skin island oncoplastic technique for reconstruction after central lumpectomy. The reserving skin is positioned and sutured into the new position of the nipple. Since the skin above the areola is used to create the new nipple areolar complex that leads to an overriding of nipple position, a contralateral NAC symmetrization would be used to improve the result.

Reply 5: As for this patient, she is not only have the Paget's disease but also the DCIS according to the core biopsy before the operation. The tumor diameter is about 6.5cm ,so we need remove large part of tissue to make sure the margin clear, and the patient also want the breast reduction. After the MDT, our team consider the standard Grisotti flap and the modified Hall Findlay technique is not very suitable for this patient.

Comment 6: Did the authors see any distortion from their use of inferior pedicle in the lumpectomy cavity?
Reply 6: There is really some distortion in the first patient. However we don't think this distortion is related to the use of inferior pedicle in the lumpectomy cavity. Because the inferior pedicle technique has been used in the breast reduction for a long time(Plastic Surgery Third Edition: Breast (volume five), page165, ELSEVIER).We will modify this technique in the future and make a series of report.

Comment 7: The description of technique is OK, even though it is not a Grisotti flap related technique with mobilization of a dermo glandular flap with skin island into the central defect after central lumpectomy, whereas the Result section is insufficient: the outcome is reported only as " both of the patients are satisfied with the outcome"; I believe that these too generic ways of reporting outcomes and a more precise way of reporting the overall and aesthetic result should be performed. They used this technique successfully on 1 patient and suggest it can be effective in the Chinese women especially the women in South China. I feel also that the pictures of at least four another patient with long-term outcomes would be necessary.
Reply 7: We used the breast surface beautiful score (BSBs) and Breast-Q to evaluate the satisfactory of these two patients. Because both of them don't want to have the nipple reconstruction so the item of BSBs which related to the nipple is not very suitable for them. As to the Breast -Q, both of them chose very satisfied with the breast shape and quality life after the surgery.
We have applied this technique on 3patients, and we will collect more suitable cases to make a long follow up to conclude the Long-term follow-up results in the future.
And we also change the sentence to limit the range of women who is suitable fore the technique.
Changes in the text:
Line169-170: Through the evaluation of breast surface beautiful score(BSBs) and Breast-Q, both of the patients were satisfied with the outcomes.
Line 179-180: add: So nipple reconstruction, more suitable cases and longer follow-up period is still needed.
Line188-189: change the sentence to be: The modified Grisotti flap technique is more suitable for women in South China with special characters mentioned before.

Comment 8: Finally, I think they might benefit from working to revise a lot of the wording and phrasing. Such as She also didn't receive preoperative systemic therapy and finished all the examination as the previous patient (line 124-125).
Reply 8: Thanks for your kindly advice. I'v corrected the misspelts in this manuscript, and invited the specialized company to revise this manuscript. We correct the sentence as follow.
Changes in the text:
Line111-112: She didn't receive preoperative systemic therapy and finished all the examinations as the first patient did.

Reviewer C

Comment 1: Minor revision suggested, other modifications of the Grisotti Flap has been described in the literature to address patients with a short nipple to inframmary fold so this distance is not distorted.

Please see paper by: Miguel Johnson, Lorna Cook, Fabio I Rapisarda, Dibendu Betal, Riccardo Bonomi, Oncoplastic breast surgery technique for retroareolar breast cancer: a technical modification of the Grisotti flap in patients with short nipple to inferior mammary crease distance, Journal of Surgical Case Reports, Volume 2020, Issue 9, September 2020, rjaa285, https://doi.org/10.1093/jscr/rjaa285

See attachment "4. GS-21-176-CL-Paper recommended by Reviewer C.docx"

Reply 1: The technique we described is not very similar as Miguel Johnoson published. They used the lower-outer quadrant of the breast instead of the standard 6 o'clock position . However, our technique is to use the outboard tissue to replace the central defect. In this way, we can not only repair the deficiency, but also reduce the redundant lateral tissue. Moreover, because of the shorter distance between the incision and the axilla, we can also handle the axillary lymph nodes through the same horizontal incision without another scar under the axilla.

Reviewer D

Comment 1: The authors present a nice case series of modifications to the Grisotti flap which are useful additions to the oncoplastic armamentarium. The name 'Grisotti' is misspelt in several places including in the title, please correct. There are error in syntax throughout, the manuscript would benefit from being revised by a native english speaker.

Reply 1: Thanks for your kindly advice. I'v corrected the misspelts in this manuscript, and invited the specialized company to revise this manuscript.