Peer Review File

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Reviewer's comments:

I thank the authors for completion of this narrative review. My main critique of this review is that while the field is indeed growing, the topic is not new and reviews of the literature and highlighting of techniques have already been performed; however, high quality reviews and technique articles are in demand. The article in its present form is not a comprehensive or systematic review, nor do I feel that surgeons reading the article will feel that this is a strong reference to prepare for performing feminizing top surgery.

My recommendation to the authors would be to either:

1. Convert to a systematic review/metaanalysis of feminizing top surgery, which would be a novel contribution to the literature, or

2. Provide more comprehensive details on how to prepare and perform the operation, with figures demonstrating key steps and original data from the authors regarding their outcomes. This route is probably more feasible, and I would also recommend additional citations and details to make the surgical technique discussion more robust.

The authors understand and agree with the reviewer's suggestion. We have tailored our manuscript based on recommendation #2.

Specific comments:

There are numerous instances of small grammatical errors, redundant content, and unnecessary punctuation(commas) in the manuscript. Please proof the manuscript to eliminate these errors and enhance concision of the text.

The authors have made necessary changes throughout the text.

The last sentence of the abstract is awkward, the "our" pronoun is unclear if referring to the authors' group or transgender surgeons overall.

The last sentence of the abstract has been changed.

In the introduction, please cite proof that Dr. Benjamin's work was blocked by political agendas, this is not self-apparent, especially for readers who are unfamiliar with gender affirming medical history.

That sentence in the introduction has been changed.

The statistics cited for incidence of transfeminine and transmale patients has typos, please correct.

The misspelling has been corrected.

In the third paragraph of the introduction gender dysphoria is defined, but "gender dysphoria" is used in the previous paragraph. Please define the term the first time it is used in the manuscript.

The definition of gender dysphoria has been moved.

The last paragraph of the introduction noting the narrative review checklist is confusing; this appears to be a publication requirement but is out of place to the reader. Describe "acute and chronic" postoperative care differently i.e. early and late as the current terms tend to describe a disease state rather than phases of care.

The suggested change has been made. This section is a publication requirement, so we have included it in the introduction as required, even though the authors agree that it may appear out of place to readers.

The methods section notes how articles were identified, but results are never mentioned (how many papers were identified). Inclusion criteria were also not mentioned. It is clear that the authors are not attempting an exhaustive systematic review in this iteration, but noting how many articles within the field were analyzed would lend credence to their methods.

The authors agree with the suggested change and have included clarification of how many papers were identified and included.

In the fourth paragraph of "Preoperative Guidelines…" The authors note their own transgender patients have a certain rate of street hormone use and illicit injections. There is no citation for these numbers. If these results are from unpublished data, I would encourage the authors to include data from their clinical experience in these regards. Rate of use of street hormones, illicit silicone injections, implant plane placement, size used, and number of patients would provide original data that would enhance the novelty of the manuscript. The authors make recommendations on their technique; I would be encouraged to use their techniques if the authors also provide their outcome data.

The authors agree and have included a table on patient demographics, comorbid conditions, and operative details for 37 transfeminine patients undergoing breast implantation between the years 2018 and 2020. Throughout the manuscript, edits have been made to include more information on our technique and operative experience.

I challenge the assertion that transgender specific recommendations for implant size, plane, and incision are lacking. I ask the authors please review and cite the article below, which has many discussion points relevant to this topic:

Miller TJ, Wilson SC, Massie JP, Morrison SD, Satterwhite T. Breast augmentation in male-to-female transgender patients: Technical considerations and outcomes. JPRAS Open. 2019 Apr 17;21:63-74. doi: 10.1016/j.jpra.2019.03.003. PMID: 32158888; PMCID: PMC7061686.

The authors have clarified this sentence in the surgical techniques section.

The authors mention periareolar mastopexy can be performed for nipple centralization. Do the authors propose that these procedures be performed at the time of

augmentation or staged? Developing transgender surgeons will encounter this problem and guidance may be helpful to those readers.

We agree with the reviewer's comment and have clarified our technique.

I appreciate the detail the authors report for methods of IMF lowering. The authors report both the ICE and Ranquist formulate for IMF lowering, which is their preferred method?

We routinely use the Ranquist formula for our transfeminine patients and have clarified that in the text.

The authors reference the "pinch test" multiple times for plane placement, but they do not explain how the test is performed. This concept may be apparent for experienced surgeons, but not to trainees. Please explain the methodology in the manuscript.

The pinch test methodology is now clarified in the manuscript.

As this is a surgical technique article, I feel that certain details of technique are lacking in the description. Do the authors consider using smooth vs textured/anatomic implants, especially with ALCL being recognized with textured devices? Are there disadvantages to using smooth vs the others? The authors mention medial pec fibers often require elevation, are there any other special considerations in pocket placemen or preventing downward migration with a hypertrophied pec? Do the authors use sizers? Do the authors utilize drains in their technique? The authors discuss nipple placement, and these patients often must make a choice between optimizing cleavage vs more aesthetic nipple placement. Figures illustrating this concept would be very helpful.

The authors have clarified our stance on use of textured implants, surgical technique, and various devices.

Figures 2 and 3 may be combined. Figure 2 showing implant insertion is not

particularly helpful as most plastic surgeons are likely well versed in IMF implant placement. I ask the authors to provide pre and post operative photos of patients with prepectoral and subpectoral implant insertion; this would be most demonstrative of results of techniques to readers.

The authors agree with combining current Figure 2 and 3. We have also included additional patient images to show preoperative and postoperative results.

The authors discuss fat grafting as a useful adjunct, but in the same section and others they note that revision surgeries often do not achieve insurance approval. Are fat grafting procedures common in the authors' practice, and are these patients frequently paying cash?

The authors have added a discussion of fat grafting payment and usage in our practice.

The authors mention in the postoperative care section the use of silicone and textured implants. The authors should comment on how silicone vs saline and textured vs smooth are selected, as noted above. Given the recognition of BIA ALCL in the past few years, do the authors still recommend use of textured devices?

Textured devices should not be used for breast augmentation, and we have clarified this point.

The authors note that total complications for transgender procedures is cited to be 5.8% overall. I commend the authors for their literature analysis. However, the inclusion of genital-based procedures in the phrase after this implies that complication rate is low in bottom procedures, and it certainly is not. Please rephrase this section so that readers are not misled that bottom surgeries have infrequent complications.

The authors have clarified that statement.