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Facial Feminization Surgery: The Forehead. Surgical Techniques and Analysis of Results

Sir:

The article "Facial Feminization Surgery: The Forehead. Surgical Techniques and Analysis of Results" by Capitán et al. was published in the Cosmetic section as a review of the authors' experience in 172 forehead feminizing operations. (They do not say whether these are consecutive cases or selected from their experience.) There are a number of errors in this article, only a few of which I am addressing. They imply that all of these cases are type III (see the fifth paragraph in their discussion), meaning that all of their patients had a frontal sinus. It is well known that only 95 percent of people have a frontal sinus. Obviously, this method would not work in those 5 percent without a sinus. It is unlikely that they did not have at least one patient without a frontal sinus. If in fact they did not, they did need to be prepared for the event. Furthermore, they criticize (1) bony contouring alone, type I in my classification,[1] as one can wrongly enter the frontal sinus when in fact this is the method indicated when there is not one, 9.3 percent of my forehead feminizations; and (2) type II, again in my classification,[1] the use of prosthetic material. The issue with type II is that the projection of the orbital rim is desired but the forehead contour is masculine, and the depression superior to the orbital rims needs to be filled. These occur in 7.5 percent of my forehead feminizations. The authors attempt to support their argument with the last article they reference, an article by me, which was not for feminization, at the time that the article was published, but for forehead augmentation, saying that prosthetic materials are contraindicated. In later years, in a few cases, I did use this method for a particular issue in forehead feminization, 1 percent of my forehead feminizations, type IV in my classification.[1] The point is that they criticize any other approach than the method they use for forehead feminization using inappropriate arguments.

Based on the articles they have referenced, they perhaps can state that their approach is based on their knowledge. But that is not true either. First of all, they were fully aware of my text, *Facial Feminization Surgery: A Guide for the Transgender Woman*, published in 2009 and available through Amazon.com, because they told me personally how much they used the book; and second, they have been to several of my lectures at the Southern Comfort Conference in Atlanta. We have had coffee together. They know fully well of the 36 articles that I have published relating to facial feminization, several of which are specifically related to the forehead. They are listed in my book. They know that I have completed well over 1300, partial or complete, facial feminizations. I have feminized somewhere around 1100 foreheads; 913 are listed in my book published in 2009.

There are many other issues in this article with which I disagree. They have had complications I have not seen. The method of bony fixation is not satisfactory in my mind. Also, their method of evaluating their success is seriously flawed.

Therefore, I have major issue with this article having been published. First of all, as a contribution to the literature, they have not only made glaring mistakes in the forehead feminization procedures but failed to recognize an appropriate and published classification system. Second, they have failed to give an adequate review of the literature, basically implying that nothing much else has been published, other than what they have referenced. In fact, there are many articles that are not referenced. In addition, there is my book reviewing the entire subject, with a discussion on my classification system, a system that seems to be generally accepted. Therefore, this article does not contribute to our knowledge of the subject, it is not innovative, and it is not academic.

I have one more issue. When this article was received by the Editorial Board of this *Journal*, it seems that they obviously passed it on for review to someone that was totally unaware of what has been previously published and with little knowledge about the subject. This information not only has been published before but has also been presented several times by me at national meetings, the last being at the 86th Annual Meeting of the American Association of Plastic Surgeons annual meeting in Coeur d'Alene, Idaho, in May of 2007. I am not an unknown in the world of facial feminization, nor am I an unknown in the world of craniomaxillofacial surgery. As my name is seen several times in their article, they could not have missed my involvement. I do not understand why I was not asked to at least see the article before it was published. Yes, my pride is a little bit dinged as I have been very responsible for developing the procedures generally used in facial feminization. There will of course be new articles in the future but I would hope that they would have value. That is not the case here. Few will read this letter even if it is published. However, sometime in the future, this misleading article will be referenced as an important article from an important journal supporting the new article. This is not the first time I have seen

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this problem in the *Journal* but it is the first time I have commented about it. The Editorial Board seems to know very little about the issues of aesthetic contouring of the craniofacial skeleton.

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DISCLOSURE

The author has no financial interest to declare in relation to the content of this communication.

REFERENCE

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Reply: Facial Feminization Surgery: The Forehead. Surgical Techniques and Analysis of Results

Sir:

First, our surgical group would like to express our gratitude for having the opportunity to respond to Dr. Ousterhout, whom we greatly admire for his professional activity and scientific work. We would also like to clarify that the aim of this letter is to respond to the technical and scientific points made by Dr. Ousterhout; it does not delve into unverified personal considerations that have little value for the scientific community.

Facial feminization surgery, which has its origins in plastic and craniofacial surgery and began to advance after Dr. Ousterhout's article was published in 1987,[1] is, contrary to Dr. Ousterhout's assertions, a relatively recent discipline, with little scientific basis, as evidenced by the scarcely 20 bibliographic citations indexed in PubMed using the keyword phrase "facial feminization surgery," most of which provide level IV or V evidence. However, this should not be interpreted as a negative assessment, but should serve as an incentive to further develop the discipline and build solid foundations in this exciting field.

In an attempt to explain the underdevelopment of facial feminization surgery in recent years, we need to examine the population most likely to receive this treatment, a group that faces, at best, limited social acceptance, and, at worst, misunderstanding and rejection. Fortunately, the transgender community is constantly breaking new ground for visibility in society and, as a result, the medical disciplines that cater to it are quickly evolving, gaining recognition and consolidation from medical and social points of view, and taking their rightful place.

Returning to the subject at issue, the 172 cases included in our article are consecutive,[2] noting that we have performed 423 consecutive forehead reconstructions to date (January of 2008 to April of 2015), all following the protocol defined in our article (forehead recontouring with osteotomy of the anterior wall of the frontal sinus). Dr. Ousterhout, in his letter, is assuming that every specialist follows his classification system and method, which we do not, because it is based on applying his particular surgical techniques in each specific anatomical case. We agree with the author regarding the existence of patients without a frontal sinus, a situation that must be evaluated through presurgical imaging tests, whether teleradiography or computed tomography. Even in patients with complete or partial agenesis of the frontal sinus (the literature varies somewhat on this point, but generally speaking, the average for the two phenomena is between 5 and 8 percent),[3] we recommend using the same technique described in our article for the following reasons: (1) to maintain the anatomical integrity of the anterior frontal region, because excessive burring could weaken the external bony cortex or cause it to disappear, excessively exposing the bone marrow; (2) insufficient control with isolated burring over the internal cortex; and (3) the possibility of obtaining poor results at the level of the frontonasal transition. To date, we have had the opportunity to work with only four patients with complete agenesis of the frontal sinus (1 percent) and five with unilateral agenesis (1.2 percent), all of whom were treated using the same reconstruction dynamic (Fig. 1).

With regard to filling materials in facial feminization surgery, in our experience, regardless of the bony anatomy, optimal results can be obtained by directly reconstructing and sculpting the patient's frontal region, with no need to add volume. We can confidently say that, as of today, rigid fixation osteosynthesis with titanium is the most substantiated fixation mechanism in adult craniofacial bone surgery.[4,5] This mechanism guarantees stability and prevents micromovements that could result in bad bone healing, with all the potential associated problems and complications. With 100 percent of the patients we have operated on to date needing some type of rigid bone fixation, high-quality medical titanium osteosynthesis is used in many of the versions made available today by modern osteosynthesis (mesh, plates, and monocortical and bicortical screws).

Finally, and with regard to evaluating patient satisfaction, we used a questionnaire that attempted to create this index on an individual basis. Of course, the parameters in this method are subjective and possibly disputable, but unfortunately, at this time, the question of the objective measurement of postsurgical satisfaction in the field of craniofacial cosmetic surgery has yet to be resolved.

In conclusion, we would once again like to express our appreciation for Dr. Ousterhout's criticism of our work and thank the *Journal* for giving us the opportunity to respond to it. We fully believe in applying a multidisciplinary approach to facial feminization surgery and invite anyone interested in learning about our

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