Is it Worth It? What Trans Healthcare Providers Should Know about Phalloplasty

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Inspiring Minds

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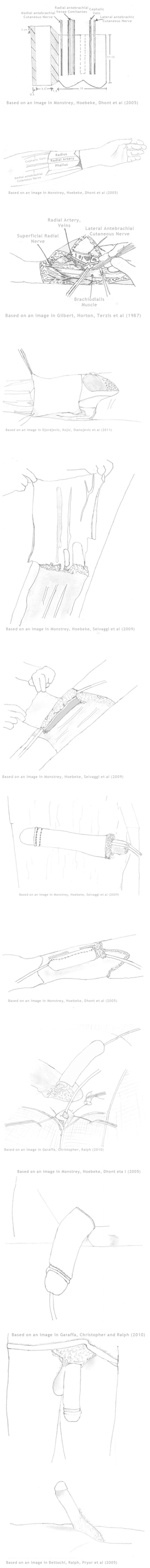


Introduction

Dr Harold Gillies performed the first female-to-male transsexual phalloplasty in 1946 (Nair & Sriprasad, 2010, p. e437)[21]. Since then, FTM phalloplasty has been continuously refined and improved upon, leading to the microsurgical and free-flap techniques used today.

Unfortunately, some trans health care providers appear to be ignorant and/or sceptical of the current state of Phalloplasty. In fact, It has been our observation that many trans health care providers perceive phalloplasty to result in poor functional, aesthetic and therapeutic benefits.

Fortunately, a great deal of research has been completed on this surgery. Our ongoing review compiles this data in an attempt to weigh the actual outcome of phalloplasty against the stereotypes and perceptions of this surgery. We hope that this review will better inform trans health care providers as to the actual impact of this surgery on FTM transsexuals.

Methods:

Identifying Articles:

We identified articles by searching the online WorldCat catalogue, through Google Search and by mining the reference lists of previously identified articles. In the latter case, the reference tables in Sutcliffe, Dixon & Akehurst et al (2009)[32] were particularly helpful, as were the additional references provided by Selvaggi & Monstrey, in their Commentary on this article.

In searching the WorldCat catalogue and Google we used combinations of the following keywords; trans, transgender, transsexual, FTM, female to male, female-to-male, phallo, phalloplasty, SRS, sexual reassignment surgery, GRS, genital reassignment surgery, study, report, review and abstract.

Criteria for Inclusion

29 articles have, to date, been identified for inclusion in this ongoing review. Inclusion was restricted to articles, which met all of the following criteria;

1. Published between 1980 and the present day
2. Report on the outcome of phalloplasty among a patient group, or individual (i.e. cohort studies, case studies, case series).
3. Identify the method/s of phalloplasty performed
4. Report on phalloplasty among female-to-male (FTM) transsexuals, or allow the data on FTM transsexuals to be extracted from that of non-transsexual men*.
5. Published in English

* With one exception. Monstrey, Hoebeke & Selvaggi et al. (2009)[20] report on 287 patients, 7 of whom are non-transsexual men. Unfortunately, these 7 cannot be extracted from the overall report. We felt that this data was too valuable to exclude, due to it's size, the length of time over which it was collected and it's recent publication.

Recording:

Those articles, which met the above 5 inclusion criteria, were recorded in Statistical Program for the Social Sciences (SPSS) software. We also grouped similar types of phalloplasty, scrotoplasty and urethroplasty into like groups (i.e. pubic flap phalloplasty, Forearm Flap Phalloplasty).

Finally, there were a few cases in which we identified multiple articles reporting on the same population, or its subgroups. In these cases, we attempted to amalgamate the information from the different studies. Where this was not possible, only one study was recorded, with one exception; Selvaggi, Monstrey, & Ceulemans et al. (2007)[31] appear to report on a subgroup of Monstrey, Hoebeke & Selvaggi et al. (2009)[20]. In this case we included both studies, as the former reports on individual measurements of genital sensitivity, in an unidentified subgroup of the latter. This has been taken into account when analyzing the data and presenting its results.

Analysis:

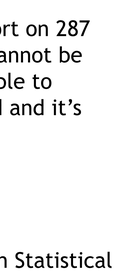
We have recorded the data in SPSS and will be using this statistical analysis software to analyse the functional, aesthetic and therapeutic outcomes of phalloplasty, as recorded in the academic literature.

Of note, functional, aesthetic and therapeutic outcome is presented through the following measures; ability to stand to void, total number of phalloplasties performed, complications, patient satisfaction and the presence of an erectile device.

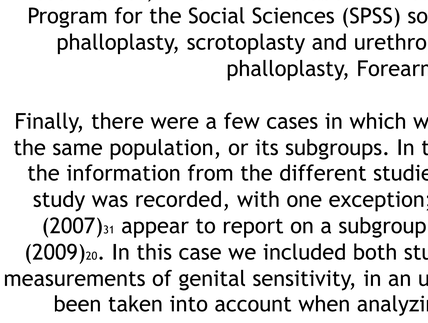
Results

Erectile Devices Among men with Phalloplasty

21 studies included data on erectile devices (both bone and prosthetic implants) [18, 26, 28, 16, 6, 15, 22, 19, 12, 1, 2, 3, 9, 10, 11, 13, 14, 27, 4, 20]. 692 patients were included in these studies, 333 of whom currently had erectile devices that had not been explanted without being replaced.



Techniques and Popularity

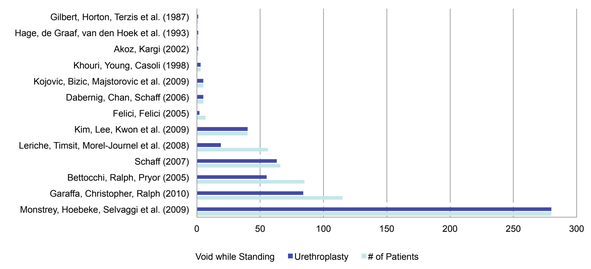


To date, the data collected demonstrates that between 1986[11] and 2007[20] 1221 Phalloplasties were performed[18, 26, 29, 30, 5, 16, 8, 7, 6, 15, 34, 23, 19, 12, 17, 1, 2, 3, 9, 10, 11, 13, 14, 28, 27, 4, 25, 20]*.

As can be seen in this chart, Forearm Flap Phalloplasty (including free, radial, osteocutaneous etc.), was, by far, the most common method used

*These are rough dates, as not all researchers provided the dates of their data collection.

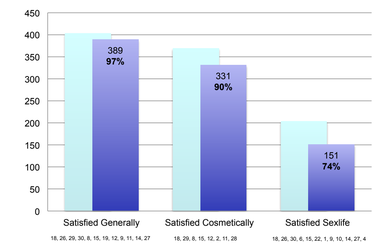
Standing to Void



13 studies contained sufficient information to analyze the success of Phalloplasty in allowing transsexual men to stand-to-void[18, 26, 29, 16, 8, 7, 15, 1, 2, 9, 11, 14, 4, 20].

Overall, of the 559 men who had completed urethroplasty, 531, or 95%, were able to stand-to-void.

Satisfaction

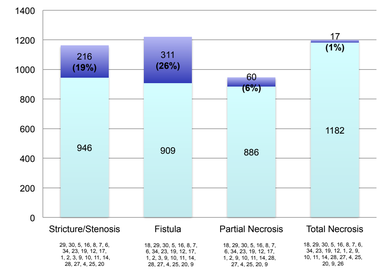


Please note that not all studies assessed patient satisfaction and those that did, did not always address the same measures. Additionally, studies used different definitions of 'satisfaction'. For example, some chose to limit assessment of sexual satisfaction to those patients who were sexually active, while others relied on patient self reports. Nevertheless, it was possible to extract enough data to report on patient satisfaction with their sex life post-phalloplasty, with the cosmetic result of the phalloplasty and 'in-general' regarding the Phalloplasty.

Complications

The most common complications, associated with phalloplasty, are strictures/stenosis and fistulae. As you can see, this analysis shows low to moderate rates for both, across differing methods of phalloplasty and almost 30 years.

The possibility of necrosis also causes some anecdotal concern among transsexual men. As can be seen, however, the rate of either partial, or total necrosis is increasingly low.



Discussion and Future Directions

There are many popular misconceptions about phalloplasty; for example, that it is largely unsuccessful from cosmetic and functional standpoints. Our review, however, shows that 95% of transsexual men are able to stand-to-void following phalloplasty with urethroplasty (95%). It also shows a remarkably high rate of satisfaction cosmetically and generally. Other results were unsurprising; for example, the fact that Forearm Flaps are used in 76% of all phalloplasties. This is consistent with the long held dictum that (free) Forearm Phalloplasty is, although not ideal, the 'gold standard' of phalloplasty surgery[32, 12, 28, 34, 19, 1].

This review did, of course, have limitations. For example, not all studies identified were able to be included, as a number of them were no longer available through conventional academic journal services. Although we were ultimately able to locate and order some of these studies, we have not yet received them. Additionally, not all researchers recorded the same items (i.e. categories of satisfaction, sensation) and methods of determining measures, such as 'sensation', varied widely, from clinical tests of tactile sensitivity, to patient self-reports.

Perhaps most problematically, however, the criteria we used to measure phalloplasty was of our own devising, when the following five pre-existing criteria are generally regarded as the standard for an ideal phalloplasty;

"1. A one-stage procedure that can be predictably reproduced
2. Creation of a competent neo-urethra to allow for voiding while standing
3. Return of both tactile and erogenous sensibility
4. Enough bulk to tolerate the insertion of a prosthetic stiffener
5. A result that is aesthetically acceptable to the patient"
(Hage, Winters & Lieshout, 1996, p. 258)

Beyond correcting for the above noted concerns, we hope to use this information to develop a questionnaire on the needs, wants and expectations of transsexual men, regarding phalloplasty, which may help to reduce misconceptions about this procedure.

The information presented here demonstrates that, while it remains a highly complicated and difficult surgery, in the right hands phalloplasty can result in a functionally and aesthetically acceptable phallus. It is, perhaps, understandable for health care professionals to be somewhat hesitant to recommend, or provide information on, a surgery with which they are unfamiliar. However, it is reasonable to recommend that health care professionals, providing services to transsexual men, add an informational knowledge of this surgery to their professional repertoire.

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