

PUBLISHED ABSTRACT

Complications after Breast Implant Augmentation in a Transgender Population

Hope Xu, Aki Kozato, Stefani Fontana, John Pang, Jess Ting and Frank Fang

Icahn School of Medicine at Mount Sinai, US

Corresponding author: Hope Xu (hope.xu@icahn.mssm.edu)

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Background

Breast augmentation is one of the most commonly performed procedures in plastic surgery, and it is a particularly significant intervention in the transition process for male-to-female transgender patients. In cisgender patients, surgical and aesthetic outcomes after primary and secondary breast augmentation with implants have been extremely well documented, with complication rates reported between 10–30%. In transgender patients, however, there is little to no literature that describes comparative outcomes after breast augmentation. The present study seeks to address this gap in the literature by examining rates of complications and revisions associated with male-to-female reassignment breast augmentation with implants.

Methods

A retrospective review was conducted of male-to-female transgender patients who underwent breast implant augmentation for gender affirmation at a single institution from 2017–2019. Preoperative clinical parameters, procedural details, and postoperative surgical outcomes were recorded and compared. Additional complications were also recorded, including reoperations.

Results

A total of 96 patients underwent augmentation and had a mean age of 37.9 years (range, 21 to 60 years). Primary augmentation was performed in 81% of patients, and 19% of patients presented at consultation for secondary augmentation to revise a prior augmentation performed by an outside provider. Mean follow-up was 5.5 months (range,

Table 1: Patient Characteristics in Male-to-Female Transgender Cohort Undergoing Breast Implant Augmentation.

Variable	N (%)
Mean Age (yrs)	37.9 ± 11.5
Race/Ethnicity	
White	23 (24.0)
Black	40 (41.7)
Hispanic	15 (15.6)
Asian	3 (3.1)
Other	15 (10.6)
Smoking status	
Cigarette	18 (18.8)
Marijuana	40 (41.7)
Diabetes mellitus	4 (4.2)
HIV/AIDS	43 (44.8)
On hormone therapy	94 (97.9)
Primary Augmentation	78 (81.2)

Table 2: Complications Following Male-to-Female Breast Augmentation with Subglandular, Smooth Silicone Implants.

Complication	N (%)	Required re-operation
Capsular contracture	17 (18.5)	13 (14.1)
Wound dehiscence	4 (4.3)	3 (3.3)
Seromas	2 (2.2)	2 (2.2)
Hematoma	1 (1.1)	1 (1.1)
Synmastia	2 (2.2)	1 (1.1)
SSI	1 (1.1)	0
Implant infection	1 (1.1)	1 (1.1)
Implant migration	2 (2.2)	2 (2.2)
Implant extrusion	1 (1.1)	1 (1.1)

4 days to 27.4 months). Of the 92 patients that received follow-up, 24 developed postoperative complications, 19 of which required revision. Complications included 17 cases of capsular contracture, 4 wound dehiscence, 2 seromas, 2 synmastias, 2 implant migrations, 1 hematoma, 1 SSI, 1 implant infection, and 1 implant extrusion/exposure. The overall complication rate was 20.5% in primary augmentation patients and 44.4% in secondary. The rate of Baker grade III/IV capsular contracture was 7.7% in primary augmentation patients and 33% in secondary. Of the 5 patients with recurring capsular contracture, only one patient had undergone primary augmentation.

Discussion

In this study, all patients received smooth, round silicone implants placed in the subglandular space. All patients with HIV had undetectable titers at time of consultation and operation. Not surprisingly, the rates of complications and capsular contracture in patients receiving secondary augmentation or revision top surgery were significantly greater than those undergoing implant augmentation for the first time, confirming a population of more complex surgical candidates with recurrent wound healing difficulty. Of the 17 cases of capsular contracture observed in our cohort, 12 cases were a Baker Grade III or IV, and 7 cases of capsular contracture occurred in patients with HIV or AIDS. Additionally, 2 of the 4 cases of wound dehiscence occurred in patients with HIV, suggesting a link between poor wound healing outcomes and HIV even at undetectable titers. Future research should include more direct comparison to previously published outcomes using z-tests, especially those of cisgender populations who underwent implant augmentation in the subglandular plane. Furthermore, an investigation of both hormone exposure and HIV/AIDS status as predictive factors for capsular contracture may shed light on the role of estrogen in the inflammatory response.

Conclusions

Complication rates after breast augmentation with implants in transgender patients are comparable to reported rates for cisgender populations, and secondary augmentation patients are more likely to have new and recurrent complications. As both breast augmentation and gender affirming surgery continue to become more common, a knowledge of such rates and surgical outcomes in this unique patient population is crucial for optimal management of transitioning male-to-female individuals.

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