

OBJECTIVE

This summary provides information to facilitate discussion of transition-related surgery between primary care providers and patients. It is not exhaustive and does not replace the informed consent process between surgeon and patient.

Breast augmentation for trans women is often described as “Top Surgery”. Alberta Health has developed criteria for eligibility for funding for augmentation mammoplasty. It is found at: <https://www.albertahealthservices.ca/info/Page15676.aspx>. Criteria for having publicly funded augmentation mammoplasty are identical whether the patient is cis gender or trans gender. Augmentation mammoplasty is funded in the situation of breast aplasia or hypoplasia (i.e. near-absence of breast tissue) despite at least 12 months of appropriate hormonal therapy. Statistically, most trans females develop some breast growth with hormonal therapy, but the amount of growth or the appearance are not always satisfactory to all transwomen. In these situations, where there is some but incomplete breast growth, breast augmentation is not an insured service in Alberta.

DESCRIPTION

Breast augmentation for trans patients is generally a bilateral procedure, and typically involves either use of a silicon filled or saline filled silicone bag. The prosthesis is placed underneath existing breast tissue (“subglandular” position) or underneath the pectoralis muscle (“subpectoral” position).

INTENDED RESULTS AND BENEFITS

- Reduces gender dysphoria by aligning anatomy with gender identity
- Surgical augmentation of breasts to create a breast size acceptable to the transwoman – the goal may be to feel consistent with ciswomen, or if gender non-conforming, may be a different size breast than what has resulted from hormone therapy.
- This surgery is generally an ambulatory procedure, and patients recover over a few weeks.
- Serious complications are rare.

POTENTIAL DRAWBACKS

- If there is little glandular breast tissue growth, the shape of the prosthesis can be hard to disguise. In these situations, typically a subpectoral position is used for the prosthesis.
- Some patients may develop persistent chest pain.
- While most patients are satisfied with the surgery, some patients express dissatisfaction due to failure of expectations being met by issues such as size, shape, symmetry, rippling, scarring and capsular contracture.

SURGICAL TECHNIQUES AND OPTIONS

- Saline implants generally involve a smaller incision and therefore potentially a slightly faster recovery time compared with silicon implants.
- The implant can be placed sub glandular or sub muscular (latter can be more painful but there is often better coverage of the upper pole of the implant to hide rippling).
- The actual skin incision can be periareolar, submammary or transaxillary.
- Major surgery with general anesthetic itself holds substantial risk of complications, such as deep vein thrombosis, infection, nerve damage, chronic pain, need for surgical revision, and others.
- There is extensive experience with these techniques, and the surgery is considered safe. However, there are still risks. Complications are generally divided into acute (anesthetic complications, DVT, bleeding, infection) and long term (chronic pain, nerve damage, need for surgical revision for capsular contracture or implant failure). A rare but life-threatening long-term complication is BIA-ALCL (breast implant associated anaplastic large cell lymphoma which occurs in 1 in 30,000 patients with breast implants, and patients should be warned about this. The latter condition presents as a seroma generally one year or longer after augmentation, and requires prompt referral to the plastic surgeon to work up (serum aspiration for specific markers) and a cancer centre for adjuvant therapy after enbloc capsulectomy and implant removal.

PERIOPERATIVE CARE RECOMMENDATIONS FOR THE PRIMARY CARE PROVIDER

PRE-SURGICAL CARE

- Smoking cessation is strongly recommended both pre-op and post-op to optimize wound healing.
- Follow surgeon's advice on time periods to avoid smoking, alcohol and other substances.
- Will generally need to plan to be off work for 4-6 weeks following surgery (depending on the type of work) – may be longer for patients whose work involves high levels of physical activity. The primary care provider will need to support the patient in completing the appropriate paperwork to have prior approval from time away from work.
- Limit physical activity for six weeks.
- Full recovery may take up to three months.
- Need to reduce activities and appreciate the importance of supportive person/community/team to assist with daily activities such as self-care, grooming, meal preparation, laundry, etc., in the post-op period.

EACH SURGICAL CENTRE HAS A ROUTINE PRE-OPERATIVE PROCESS; PATIENTS SHOULD ASK THEIR SURGEON WHAT TO EXPECT.

PRE-OPERATIVE PROCESSES OFTEN INCLUDE:

- Confirmation of FP/GP involvement and completed pre-op examination/form
- Pre-admission visit to review health history and provide teaching (pre/post-op care)
- Anesthesia and/or medicine consult may be required, depending on health history.
 - Anesthesia will discuss:
 - Which medications to stop and when
 - Anesthetic approach and risks
 - Pain control measures

POST-OPERATIVE CARE (SKIN AND WOUND CARE)

- Follow surgeon’s instructions for suture removal/dressings. Be aware this is extensive surgery, and suture removal can take a long time.
- If there is a drain, anticipate it will remain in place for a week or two following surgery, depending on the surgeon’s advice, and generally until the output is less than 30 cc in 24 h.
- Hematoma typically presents within 1-2 weeks of surgery. The patient may report unilateral pain or swelling, and there may be bruising evident in the operative area. The risk of hematoma is less with strict adherence to avoid strenuous activity or any trauma. Most surgeons do allow NSAIDS for post op pain. Small hematomas can occasionally be managed conservatively, by waiting until the collection liquefies and can be aspirated by the surgeon. Larger hematomas may need to be drained or explored surgically.
- Seroma is a sterile fluid collection in the region of surgery and occurs early in the postoperative period. Generally it is managed conservatively, by aspiration, occasionally repeatedly, by the surgeon until it fails to re-collect. A late onset seroma is more serious and should be referred to the surgeon.
- Infections in the perioperative period are uncommon. Typically they occur in the first few weeks following surgery. Fortunately, most infections respond to oral antibiotics, but recurrent infections may necessitate removal of the prosthesis. The commonest pathogens are normal skin flora.

POST-OPERATIVE CARE (INTERMEDIATE)

Follow surgeon’s recommendations on restriction of activities. Some general guidelines include:

- Off work for 4-6 weeks (or longer depending on the type of work)
- Icing periodically for 10 min can be helpful for swelling/pain control.
- Avoid driving for two weeks (or until able to drive safely).

- Light activity (walking) is encouraged.
- Avoid vigorous physical activity/heavy lifting for six weeks.
- Full recovery may take up to three months.
- Continue to avoid smoking and alcohol according to the surgeon’s instructions to optimize healing.

LONG TERM POST-OPERATIVE CARE AND PREVENTATIVE CARE

- Late complications: incisional scarring; implant rupture; implant malposition; capsular contracture, aesthetic changes; breast masses
- BIA-ALCL (breast implant associated anaplastic large cell lymphoma) occurs in 1 in 30,000 patients with breast implants.
- Trans women have a very low risk of breast cancer¹ however should undergo breast cancer screening using the same algorithms as cis women.

ADDITIONAL READING AND RESOURCES

1. An Alberta research team has undertaken a systematic review of the risk of breast cancer in patients who have undergone chest feminizing surgery. Such patients have a lower risk of cancer than the general population of cis-women but breast cancer can still occur. See: <https://www.ncbi.nlm.nih.gov/pubmed/30087072>
2. World Professional Association for Transgender Health (WPATH). Standards of care for the health of transsexual, transgender, and gender nonconforming people. 7th Version. WPATH; 2012. Available at: <https://www.wpath.org/publications/soc>.
3. Center of Excellence for Transgender Health, Department of Family and Community Medicine, University of California San Francisco. Guidelines for the Primary and Gender-Affirming Care of Transgender and Gender Nonbinary People; 2nd edition. Deutsch MB, ed. June 2016. Available at www.transhealth.ucsf.edu/guidelines (accessed November 12, 2018).
4. <https://www.healthline.com/health/transgender/top-surgery#recovery> (accessed November 12, 2018).
5. Alberta Health eligibility criteria for mastectomy funding, including Bulletins 110 (billing codes requiring prior approval) and 111 (Update to Breast Augmentation and Mastectomy Billing Procedure): <https://www.albertahealthservices.ca/info/Page15676.aspx>

COMPANION TRANSGENDER HEALTH CARE TOOLS

The following practice tools also developed for the Alberta environment are available on the TOP [website](#):

- Transgender Health in Primary Care: Initial Assessment

- Masculinizing Chest Surgery
- Metoidioplasty
- Phalloplasty
- Vaginoplasty

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