Gender Affirming Surgery

Breast Augmentation

A summary for health care providers

rainbow health ontario
santé arc-en-ciel ontario
SHERBOURNE HEALTH

Gender Affirming Surgery

Breast Augmentation

A summary for health care providers

This summary provides information to facilitate the discussion of gender affirming surgery between Ontario health care providers and patients. It is not exhaustive and does not replace the informed consent process between surgeon and patient.

DESCRIPTION

Breast Augmentation
Implants inserted beneath existing tissue on the chest to create or enlarge one's breasts.

SURGICAL TECHNIQUES AND OPTIONS

- Implants are placed under the pectoralis chest muscles (submuscular) or just under existing breast tissue (subglandular/subfascial)
- Silicone implants are the most common type of implant. Size, shape, smooth texture and filling (silicone vs. saline) of the implant will be discussed and decided upon with the surgeon
- Inframammary (under breasts) is the most common incision site for implant insertion but periareolar (around areola) and transaxillary (in armpit area) are sometimes possible
- Very rarely, a surgery for tissue expansion may be needed before implant surgery can be completed
- The nipple and areola may be reconstructed
- For patients preferring to use their own tissue, fat grafting (relocating fat from another area of the body to the chest) may be possible. This is not an OHIP insured service.

INTENDED RESULTS

- Align anatomy with gender identity
- Reduction in gender dysphoria and/or gender incongruence
- Improve mental health and well being
- Decreased need for padded bra, removable inserts/breast prosthesis
- Larger breasts

ALTERNATIVE TREATMENT OPTIONS

- External padding, padded or push up bra, removable inserts/breast prosthesis
- Hormone therapy to stimulate breast growth

SURGICAL RISKS AND COMPLICATIONS OF BREAST AUGMENTATION

- I**rreversible:** any of the breast, tissue and skin changes that occur as a result of implant surgery will be permanent and cannot be undone. If implants are removed, the skin may be permanently wrinkled or stretched
- **Breast implants are not lifetime devices**. The need for repeat surgery in the future is likely (to replace implant, or to change size, shape, location of implant, or to remove scarring). The average lifespan of breast implants is thought to be approximately 10-15 years. Some will fail earlier (within 5 years), and some will fail later (10-30 years). It is hard to predict when an individual's implants will fail and need removal or replacement. Over the long-term, the need for removal or replacement is likely. Some of these surgeries may not be covered by OHIP funding; and may cost in the range of $10,000-15,000 CAD.
- **Scarring:** located to be as inconspicuous as possible, but can sometimes be visible
- **Changes in nipple and breast sensation**; numbness and loss of sensation possible
- **Capsular contracture** (scar tissue formation around implant becomes misshaped/firm/painful). Surgical removal of the capsular scar tissue and implant removal or replacement is commonly required.
- I**mplant failure** (i.e. breakage, leaks, deflation; less likely with 5th generation silicone gel implants)
- **Symmastia** (breasts are too close medially), implant malposition or migration
- **Asymmetry:** the breasts, nipples or areolas could be asymmetrical in size, shape or position. Some asymmetry is common.
- **Contour irregularities** (i.e. skin wrinkling/rippling)
- **Wound infection**. Small infections can be treated with antibiotics. Infection of the breast implant pocket requires implant removal and replacement at another time.
- **Hematoma/Seroma:** when blood and fluid collect in the surgical site causing swelling, pain and redness. These may resolve on their own, or if large or persistent, may need to be aspirated (sucked out) once or more.
- **Skin necrosis** (skin dies) or implant extrusion (skin breaks down and implant appears through the skin)
- **Dissatisfaction** with appearance, size, asymmetry, contour irregularity
- **Calcifications in the breast** can develop which can be misinterpreted as suspicious lesions for breast cancer on mammography
- **Anaplastic Large Cell Lymphom**a ALCL (a rare non-Hodgkin lymphoma, not a type of breast cancer). There is a very low but increased risk for this type of cancer in the tissue next to the textured implant. This type of cancer has only been associated with textured implants which are no longer used.
- **Mondor disease** (<1%), a benign and self-limiting complication of superficial thrombophlebitis (inflammation of vessels) in epigastric veins below inframammary scars

POTENTIAL RISKS/COMPLICATIONS COMMON TO MOST SURGERIES

Risks are increased with smoking, immunosuppressant drugs, clotting disorders, conditions that impair healing, BMI <18.5 or >30

General Surgical Risks

- Bleeding, if excessive may require blood transfusion
- Deep Vein Thrombosis, Pulmonary Embolism (blood clots in legs, lungs)
- Injury to surrounding anatomical structures (organs, nerves, blood vessels)
- Hematoma (collection of blood)/seroma (collection of fluid)
- Infection/abscess (collection of pus)
- Wound dehiscence (wound opening), delayed healing
- Nerve damage, loss of sensation, hypersensitivity, neuropathic (nerve) pain
- Chronic pain
- Scarring (can be prominent especially if history of keloid)
- Dissatisfaction with appearance/function
- Need for revision(s)
- Post-operative regret

General Anesthetic Risks

- Respiratory failure
- Cardiac failure/arrest
- Death
- Damaged teeth
- Aspiration pneumonia
- Nausea/vomiting

PRE-OPERATIVE CARE

PRE-SURGICAL CONSIDERATIONS

- To qualify for funding, the Ontario Ministry of Health (MOHLTC) requires there to be no breast enlargement after 12 months of estrogen therapy (unless contraindicated)
- A minimum of one year of hormone therapy is recommended to allow for maximum growth of tissue and allow skin expansion

IMPORTANT STEPS TO AMELIORATE OUTCOMES

- Consider referral to the Sherbourne Health's Acute Respite Care (ARC) Program for post-operative support if socially isolated, under-housed or homeless
- **Smoking cessation** is strongly recommended at least one month both pre-op and post-op to optimize wound healing and decrease risk of complications
- Follow surgeon's advice on time periods to avoid smoking, alcohol and other substances
- History of keloid scars can increase risk of this type of scarring occurring after surgery
- Contraindications: untreated breast cancer, premalignant breast disease

ANESTHESIA WILL DISCUSS:

- Which medications to stop and when
- Anesthetic approach and risks
- Pain control measures

IMMEDIATE PRE-OPERATIVE CARE

- Surgeons may make surgical skin markings with patients standing, sitting or lying down
- IV antibiotics may be given pre-operatively to reduce the risk of infection

Hospitals tend to have standard pre-operative processes which may include:

- 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

POST-OPERATIVE CARE

IMMEDIATE POST-OPERATIVE CARE

- Upper body stiffness and soreness is expected in the first week after surgery
- Breasts will feel tight and sensitive to touch
- Feelings of numbness and/or sharp shooting or burning pain can occur
- Ice application may reduce swelling and help with pain
- Pain management involves pain medication, ice and rest for the first few weeks
- The skin around the incisions (the surrounding 1-2cm) may be red or hyperpigmented
- There may be a stich at the end of the incision that is typically removed 2 weeks later by the surgical team
- Bruising and swelling is common and should mostly resolve in the first 4 weeks
- Follow surgeon's post-op instructions for drains, dressings, sutures and steri-strips
- Antibiotics for the first week
- Light activity is encouraged, such as walking
- Most surgeons recommend wearing a comfortable cotton sports bra for one month after surgery. Follow the specific surgeon's instructions regarding type of bra/supportive clothing.

INTERMEDIATE POST-OPERATIVE CARE

- Follow surgeon's recommendations on restrictions to activity restrictions
- Follow surgeon's instructions for breast massage initiation, frequency, and technique
- **Some general guidelines include:**
  - Avoid large sweeping movements with your arms for several weeks
  - Avoid driving for two weeks or longer, until safely able to move arms to drive
  - Time off work – three weeks or longer (depending on type of work)
  - Avoid straining, lifting heavy objects (max 10 lbs), and exercise for four weeks
  - No soaking in hot tub, pool or bath until incisions have completely healed, usually around week four
  - No strenuous activity for six weeks; light activity encouraged
  - **Do not lie or sleep on stomach/breasts for three months**
  - **No underwire bra for six weeks**

LONG-TERM MEDICAL CARE

- Standard mammography screening is still required with implants as per local breast cancer screening guidelines
- Inform providers/mammogram techs about breast implants to obtain the appropriate mammographic views and to decrease risk of rupture
- With silicone implants: follow surgeon's instructions regarding need for periodic imaging to monitor for silent rupture
- In Ontario, funding for revisions can be applied for through the Ministry of Health by completing the Prior Approval for Funding of Sex Reassignment Surgery form. Implant removal or exchange are not covered for aesthetic revisions and typically costs $10-15,000 dollars CAD.

REFERENCES

Breast Construction [Internet]. Transgender Health Information Program. 2024 [cited 2024Feb21]. Available from: http://www.phsa.ca/transcarebc/surgery/gen-affirming/upper-body-surgeries/breast-construction

Bekeny JC, Zolper EG, Fan KL, Del Corral G. Breast augmentation for transfeminine patients: methods, complications, and outcomes. Gland Surg. 2020 Jun;9(3):788-796. doi: 10.21037/gs.2020.03.18. PMID: 32775269; PMCID: PMC7347817.

Cordeiro PG, Ghione P, Ni A, Hu Q, Ganesan N, Galasso N, Dogan A, Horwitz SM. (2020) Risk of breast implant associated anaplastic large cell lymphoma (BIA-ALCL) in a cohort of 3546 women prospectively followed long term after reconstruction with textured breast implants. Journal of Plastics and Reconstructive Aesthetic Surgery. 73(5):841-846. https://doi.org/10.1016/j.bjps.2019.11.064. Epub 2020 Jan 20. PMID: 32008941; PMCID: PMC7247945.

Cuccolo, N. G., Kang, C. O., Boskey, E. R., Ibrahim, A. M. S., Blankensteijn, L. L., Taghinia, A., Lee, B. T., Lin, S. J., & Ganor, O. (2019). Epidemiologic Characteristics and Postoperative Complications following Augmentation Mammaplasty: Comparison of Transgender and Cisgender Females. Plastic and Reconstructive Surgery. Global Open, 7(10), e2461–e2461. https://doi.org/10.1097/GOX.0000000000002461

Government of Canada, Health. Breast Implants [Internet]. [updated 2024 Jan 12; cited 2024 Feb 13]. Available from https://www.canada.ca/en/health-canada/services/drugs-medical-devices/breast-implants.html

U.S. Food and Drug Administration, Medical Devices. Risks and Complications of Breast Implants [Internet]. Silver Spring (MD): U.S. Food and Drug Administration; 2023 [cited 2024Feb21]. Available from: https://www.fda.gov/medical-devices/breast-implants/risks-and-complications-breast-implants

Weigert R, Frison E, Sessiecq Q, Al Mutairi K, Casoli V. (2013) Patient Satisfaction with Breasts and Psychosocial, Sexual, and Physical Well-Being after Breast Augmentation in Male-to-Female Transsexuals. Plastic and Reconstructive Surgery. 132(6):1421-1429

DISCLAIMER

The information provided here is generalized and is not medical advice. It is recommended that all patients have a pre-operative consultation with their surgeon to receive individualized information including the specific surgeon's technique, complication rates and recommendations. This is a dynamic document that is subject to change, as the knowledge of gender affirming surgeries changes.

ACKNOWLEDGEMENT

This document was created by clinicians at Sherbourne Health and Women's College Hospital, using up to date literature as well as information adapted from the Transgender Health Information Program of British Columbia, the GRS Montreal Clinic, and the Gender Identity Clinic at the Centre for Addiction and Mental Health

Published September 20 2024

WCHRI
WOMEN'S COLLEGE HOSPITAL
Healthcare | REVOLUTIONIZED

rainbow health ontario
SHERBOURNE HEALTH