Breast Augmentation
A summary for primary care providers

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.

DESCRIPTION
Implants inserted beneath existing breast tissue to enlarge one’s breasts.

SURGICAL TECHNIQUES AND OPTIONS
- Implants placed under the pectoralis chest muscles (submuscular) or just under existing breast tissue (subglandular)
- Size, shape, texture and filling (silicone vs. saline) of the implant will be discussed/decided upon with the surgeon
- Different incision sites are possible: periareolar (around areola), inframammary (under breasts), transaxillary (in armpit area)
- Occasionally, a surgery for tissue expansion may be needed before implant surgery can be completed (ie. if there is limited breast tissue/growth after hormones)
- The nipple and areola may be reconstructed
- Rarely, some surgeons are able to use autologous implants (transplant fat from another part of the body to the breast area)

ALTERNATIVE TREATMENT OPTIONS
- External padding, padded or push up bra, breast prosthesis
- Hormone therapy to stimulate breast growth

INTENDED RESULTS
- Reduces gender dysphoria by aligning anatomy with gender identity
- Larger breasts, however implants cannot perfectly imitate adult breasts
- Decreased need for padded bra/breast prosthesis

SIDE EFFECTS
- Irreversible: any of the breast/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
- Implants have a finite lifespan – the need for repeat surgery in future is likely (to replace implant, or to change size, shape, location of implant, or to remove scarring)
- Implants make mammography for breast cancer screening more difficult and less sensitive; mammography will require more views than routine screening mammography. Other modalities may be required
- Scarring, usually located to be as inconspicuous as possible, but can sometimes be visible under the breasts with inframammary incision

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SURGICAL RISKS AND COMPLICATIONS OF BREAST AUGMENTATION

- **Dissatisfaction with appearance**: asymmetry of breasts/nipples, skin wrinkling/rippling
- **Capsular contracture** (scar tissue formation around implant becomes tight/firm/painful). The breast shape may change and require surgical removal of the capsular scar tissue and implant removal or replacement. It is less likely with submuscular implants.
- **Breast implants are not lifetime devices**. 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 (20-30 years). It is hard to predict when an individual’s implants will fail and need removal or replacement. It is important for patients to understand that breast implants are not lifetime devices and over the long-term, the need for removal or replacement is likely.
- **Implant failure** (e.g. breakage, leaks, deflation; less likely with 5th generation silicone gel implants)
- **Implant migration/dislocation, skin necrosis** (skin dies), **extrusion** (skin breaks down and implant appears through the skin)
- **Calcifications** in the breast can develop which can be misinterpreted as suspicious lesions for breast cancer on mammography.
- **Numbness/loss of sensation** around the operation site, often temporary
- **Anaplastic Large Cell Lymphoma**, ALCL (a rare non-Hodgkin lymphoma, not a breast cancer). A very low but increased risk for this type of cancer in the tissue next to the implant (reported by the FDA at 60 per 5-10 million and by Health Canada at 3 per 100 million). It is currently not possible to confirm increased risk with statistical certainty, research is ongoing by the FDA.
- **Mondor disease** (0.63%) – superficial thrombophlebitis (inflammation of vessels) in epigastric veins below inframammary scars; often temporary.

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
- DVT, PE (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-SURGICAL CONSIDERATIONS**

- Consider referral to the Sherbourne Health Centre ARC (Acute Respite Care) if socially isolated, under-housed or homeless
- Smoking cessation is strongly recommended 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
- In order to qualify for funding, MOHLTC requires 12 months of estrogen therapy (unless contraindicated) with no breast enlargement (defined as Tanner stage 1, which should be documented on the Prior Approval Form)
- Contraindications: untreated breast cancer, premalignant breast disease
- Breast augmentation can be done concurrently with vaginoplasty (requires general anesthetic)

**IMMEDIATE PRE-OPERATIVE CARE**

- Some 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

**IMMEDIATE POST-OPERATIVE CARE**

- Pain management (combination of light activity encouraged, such as walking)
- Bruising, swelling, numbness and/or shooting/burning pain can occur
- Icepacks may reduce swelling
- Follow surgeon’s post-op instructions for drains, dressings, sutures and steri-strips
- Follow surgeon’s instructions regarding type of bra/supportive clothing

**INTERMEDIATE POST-OPERATIVE CARE**

- Follow surgeon’s recommendations on restrictions to activities
- 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 2 weeks or longer, until safely able to move arms to drive
- Time off work – 3 weeks or longer (depending on type of work)
- Avoid straining, lifting heavy objects (max 10 lbs), and exercise for 4 weeks
- No strenuous activity for 6 weeks; light activity encouraged
- Do not lie or sleep on stomach/breasts for 3 months

**LONG-TERM MEDICAL CARE**

- Inform providers/mammogram techs about breast implants, in order 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 via completion of the Prior Approval for Funding of Sex Reassignment Surgery form
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REFERENCES


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 transition-related surgeries changes.

ACKNOWLEDGEMENT
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