MASCULINIZING CHEST SURGERY

Summary for Primary Care Providers | April 2019

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.

Mastectomy is an insured service in Alberta, whether the patient is cis gender or trans gender.

DESCRIPTION

Bilateral mastectomy and chest contouring is often described as "Top Surgery". It removes breast tissue and sculpts remaining tissue into a shape typically considered more masculine. This surgery is irreversible. Note also that masculinizing chest surgery has challenges that the family physician needs to be particularly attune to: risk of seroma, patient anxiety around nipple grafts, differing post-operative advice from the surgical community about when to remove dressings and binders, as well as other concerns.

INTENDED RESULTS AND BENEFITS

- Reduces gender dysphoria by aligning anatomy with gender identity
- Results in a flatter chest profile
- Eliminates the need for chest binding
- Serious complications are rare.

POTENTIAL DRAWBACKS

- Usually results in inability to lactate and provide breast milk.
- Changes breast cancer screening from mammography to physical examination.[1]
- Permanent scars are usually present.

SURGICAL TECHNIQUES AND OPTIONS

There are several surgical techniques, and selection depends on factors such as preoperative cup size, skin elasticity, and the current nipple location. Three common techniques are:

- Keyhole: recommended for people with an A cup-size and lots of chest skin elasticity.

- Periareolar incision: recommended for people with a B or C cup-size and moderate chest skin elasticity.
- Double incision/bilateral mastectomy: recommended for people with a C cup-size and reduced skin elasticity or a D cup size.

Perioperative Care Recommendations for the Primary Care Provider

Pre-Surgical Care

- Smoking and alcohol cessation are strongly recommended for four weeks preoperatively pre-op and post-op to optimize wound healing and decrease risk of nipple necrosis.
- Follow surgeon's advice on time periods to avoid smoking, alcohol and other substances.
- Document any history of keloid scars.
- Warn the patient they may need to limit physical activity for at least four weeks post op.
- Will need to plan to be off work for 4-6 weeks following surgery (depending on the type of work) – will 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.
- 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)

- Surgical drains (Jackson Pratt or Blake drain) will be 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 hours.
- Follow surgeon's post-op instructions for dressings, sutures and steri-strips. Note that taking sutures out can take quite a while – you will need to schedule sufficient time.
- Follow surgeon's recommendations about wearing a compression band in the post-operative period.
- 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. The commonest pathogens are normal skin flora.

Post-Operative Care (Intermediate)

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

- Limit arm movements to small, below the shoulder movements for 4-6 weeks (i.e., avoid large movements to avoid tension on sutures and stretching of scars).
- Drains should be out before resumption of driving, and until safely able to move arms to drive.
- Avoid straining, lifting heavy objects (max 10 lbs), and exercise for 3-4 weeks.
- Reduce activities and take time off work for 4-6 weeks or longer (depending on type of work).
- Gradual return to daily activities over 4-6 weeks.
- Continue to avoid smoking and alcohol according to the surgeon's instructions to optimize healing.

Long Term Post-Operative Care and Preventative Care

- Swelling is normal for 4-6 months and will resolve over time.
- Avoid exposing scars to sunlight for at least one year post-op - this will minimize colour changes in the scar.
- In all three techniques, some original breast tissue will remain, so ongoing monitoring for breast cancer is recommended; the best method is not known, but physical exam (palpation of chest, and nipple areola and axilla annually at physical exam) is appropriate.[1]

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 masculinizing 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/30037639.
2. Standards of care for the health of transsexual, transgender, and gender nonconforming people. 7th Version. WPATH; 2012. Found at: https://www.wpath.org/publications/soc.
3. https://www.rainbowhealthontario.ca/wp-content/uploads//woocommerce_uploads/2017/09/FINAL-Chest-Reconstruction.pdf (accessed November 26, 2018).
4. 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).
5. http://transhealth.ucsf.edu/trans?page=guidelines-chest-surgery-masculinizing (accessed November 26, 2018).
6. GRS Montreal has developed a patient handout for perioperative care following chest masculinizing surgery: https://www.grsmontreal.com/en/surgeries/female-to-male/14-masculinization-of-the-torso-or-mastectomy.html.
7. Alberta Health eligibility criteria for breast augmentation 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
- Feminizing Chest Surgery
- Metoidioplasty

- Phalloplasty
- Vaginoplasty

ACKNOWLEDGMENTS

Toward Optimized Practice gratefully acknowledges the support from Transcare BC and Rainbow Health Ontario in providing permission to adopt material from their existing resources for primary care providers. Much of this source material is located on the Transcare BC website found at http://www.phsa.ca/transcarebc/health-professionals/education/primary-care and from the Rainbow Health Ontario website found at https://www.rainbowhealthontario.ca/.