Metoidioplasty
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
A penis is created with the enlarged clitoral tissue. Ligaments around the clitoris are cut, giving the clitoris a longer shaft, which creates a penis. The urethra is extended to the tip of the penis.

INTENDED RESULTS/BENEFITS
- Reduces gender dysphoria by aligning anatomy with gender identity
- Creation of a penis, +/- scrotum and testicular implants
- To allow standing urination
- Greater chance of maintaining erogenous sensation in the penis compared to phalloplasty
- Less scarring than phalloplasty (e.g. no forearm scar)

SIDE EFFECTS
If vaginectomy and scrotoplasty are desired, hysterectomy + BSO are required-resulting in infertility
- Penis is not usually large enough for insertive penetrative sex
- Inability to have receptive vaginal sex if vaginectomy is performed

ALTERNATIVE TREATMENT OPTIONS
- Clitoral release, which lengthens the clitoris but without urethral extension
- Devices that aid voiding while standing
- Phalloplasty

SURGICAL TECHNIQUES AND OPTIONS
- An enlarged clitoris results from testosterone therapy
- Ligaments around the clitoris are cut, releasing it from the pubis, giving the shaft more length, thus creating a penis
- Sometimes labial tissue is used to add girth to the penis
- The urethra is lengthened (urethroplasty using mucous-producing tissue from the vagina or the inner cheek) to allow voiding through tip of penis
- Some surgeons may offer vaginectomy/scrotoplasty/testicular implants in labia majora depending on patient preference and hysterectomy + BSO status
  - Vaginectomy: removal of the vagina (colpectomy) or closure of vagina (colpocleisis)
  - Scrotoplasty: creation of a scrotum and insertion of testicular implants
- Surgical techniques vary by surgeon

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
- Bleeding
- 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- and Post-Operative Care

**Surgeons Risk and Complications of Metoidioplasty**

- Even with urethroplasty, some clients will not be able to void standing, due to a change in urine stream (spray, dribble) or lack of penis length.

- **Urinary complications:** fistula, stricture, stenosis, urinary tract infections

- **Urethral fistulas:** uro-cutaneous (abnormal leak between urethra and skin)

- **Urethral stenosis:** narrowing of the urethra causing difficulty urinating

- **Urethral strictures:** completely blocked urethra, inability to urinate, may require a catheter to be inserted (until surgically corrected)

- **Hair growth in urethra:** may cause UTI, stenosis, stricture, intra-urethral stones

- **Urethral complications may require surgical revision**

- **Changes in sensation of penis:** decreased sensation, tenderness or hypersensitivity

- **Testicular implant complications:** infection, extrusion, poor/uncomfortable positioning

- **Dissatisfaction with appearance and or function of genitals:** (size, shape, function of penis, scrotum)

### Pre- and Post-Operative Care

**Pre-Surgical Considerations**

- Consider referral to the Sherbourne Health Centre ARC (Acute Respite Care) if socially isolated, under-housed or homeless

- Testosterone administration is needed to enlarge clitoris (most surgeons require at least 1-2 yrs)

- If considering scrotoplasty, requires an earlier total hysterectomy + BSO, to allow for vaginectomy

- 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

- Off work for 4 or more weeks (depending on the type of work)

- Limit physical activity for 6 weeks

- Full recovery may take up to 3 months

- Consider the need for a support person in post-op period to assist with ADLs, IADLs (cleaning, laundry, groceries)

**Immediate Post-Operative Care**

- Urinary catheter is likely kept in place post-operatively for several weeks

- Suprapubic catheter may be required

**Intermediate Post-Operative Care**

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

- Off work for 4 weeks (or longer depending on the type of work)

- Icing periodically for 10 min can be helpful for swelling/pain control

**Long-Term Medical Care**

- Urinary revisions may be required to repair strictures or fistulas

- Balloon dilation may be effective for urethral stricture

- Avoid driving for 2 weeks (or until able to drive safely)

- Light activity (walking) is encouraged

- Avoid vigorous physical activity/heavy lifting for 6 weeks

- Full recovery may take up to 3 months

- Continue to avoid smoking and alcohol according to the surgeon’s instructions to optimize healing

*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*
Metoidioplasty - Summary for Primary Care Providers

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.

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