

University of Iowa Health Care

Gender Affirming Genital Surgery

We offer transfeminine gender-affirming genital surgeries. They are:

- Bilateral orchiectomy
- Zero depth vaginoplasty
- Full depth vaginoplasty

Bilateral orchiectomy

This removes both testicles. It happens through 1 incision in the middle of the scrotum.

This may be done in the office while you are awake. Local genital anesthesia is given. It may also be done in the operating room. In this case, you are monitored or given general anesthesia.

- It takes about 45-minutes.
- You will go home the same day.
- Your sutures will dissolve on their own.
- You will need a driver.

Medicines:

- Pain relief, such as:
 - Tylenol
 - Non-steroidal anti-inflammatory (NSAIDs)
- No antibiotic is needed.
- You may stop spironolactone right away.

Follow-up:

- You will be seen in the Urology Clinic as needed.
- Follow-up with your hormone specialist. Some of your medicines may need to be changed.

Zero depth vaginoplasty

This is the creation of external female genitalia without the vaginal canal.

Orchiectomy can be done before or at same time of zero depth vaginoplasty.

- It takes about 6 hours.
- People often go home 3 days after surgery.
- Your sutures will dissolve on their own.

Medicines:

- Pain relief such as acetaminophen, NSAIDs
- Opioid pain medicine can be taken as needed.
- You will take an antibiotic while you have a urinary catheter in place.

Wound care:

- Put triple antibiotic ointment on the clitoris and urethra. Do this 3 times each day for at least 2 weeks after surgery.
- Put petroleum gauze or gauze with triple antibiotic ointment between the urinary catheter and clitoris. This stops the catheter from rubbing.
- After the catheter is taken out, you do not need to use gauze.

Follow-up:

- Your care team will take the urinary catheter out about 2 weeks after surgery.
- After the catheter is out, you will follow-up at: 1 month, 3 months, 1 year.

Urination:

Expect spraying of urinary stream when the catheter is taken out. This happens as the tissue heals and sutures dissolve. Spraying often gets better over time.

Sexual health:

You may have more or less sensation to the clitoris after surgery as the nerves heal. Changes in sensation can take months to improve. You may start stimulating the clitoris 1 month after surgery.

Full depth vaginoplasty

This is the same as the zero depth vaginoplasty, except with the creation of the vaginal canal. Full depth vaginoplasty (unlike zero depth) requires genital hair removal before surgery and vaginal dilation after surgery

UI Health Care offers penile inversion vaginoplasty using scrotal and penile shaft skin. Peritoneal pull-through and sigmoid vaginoplasty are not offered.

Orchiectomy can be done before or at same time of full depth vaginoplasty.

- It takes about 6 hours.
- You will be on bedrest for 5 days.
- You will go home 5 days after surgery.
- Your sutures will dissolve on their own.

Medicines:

- Pain relief such as acetaminophen, NSAIDs
- Opioid pain medicine can be taken as needed.
- You will take an antibiotic while you have a urinary catheter in place.

Wound care:

- Put triple antibiotic ointment on the clitoris and urethra. Do this 3 times each day for at least 2 weeks after surgery.
- Put petroleum gauze or gauze with triple antibiotic ointment between urinary catheter and clitoris. This stops the catheter from rubbing.
- After the catheter is taken out, you do not need to use gauze.

Follow-up:

- Your care team will take the urinary catheter out about 2 weeks after surgery.
- After catheter is taken out, you will follow-up at: 1 month, 3 months, 1 year

Urination:

Expect spraying of urinary stream when the catheter is taken out. This happens as the tissue heals and sutures dissolve. Spraying often gets better over time.

Sexual health:

You may start stimulating the clitoris 1 month after surgery. Do **not** have penetrative intercourse for at least 3 months.

Letters of support

Two letters of support from mental health providers are needed. We cannot use recommendations from primary care providers. You must have these within 12 months of planned gender affirming genital surgery. You may need to get new letters after a surgery date is planned.

Local mental health facilities who may offer letters of support:

New Leaf Counseling

910 23rd Ave Suite 100
Coralville, IA 52241
319-351-9731
newleafic.com

Ellen Hallin- Life Strategies

640 and 720 Walker Circle
Iowa City, IA 52245
319-601-0313
linkedin.com/in/ehallin

Clock, Inc

4102 46th Ave
Rock Island, IL 61201
309-558-0956
clockinc.org

Seashore Psychology Clinic

335 E. Jefferson Street
Iowa City, IA 52242
319-335-2467
psychology.uiowa.edu/seashore-clinic

The Lindquist Center

240 South Madison Street
Iowa City, IA 52240
319-335-5500
lgbtgclinic.mytherabook.com/accountLsignup to sign up

When your paperwork is done, email asking for the appointment you need. For example, an ongoing psychotherapy assessment for a letter of support for _____. Also give them your weekday availability.

Referrals will be made by the LGBTQ clinic (lgbtg-clinic@uiowa.edu) if needed.

Resolute Therapy, LLC

1661 Boyson Square Dr. Suite 200 D

Hiawatha, IA 52233

319-210-8093

resolutetherapy.org

For children and parents

Website

psychologytoday.com

Find a mental health facility based on city you live in.

Letters of support need:

- Gender identity and history of gender dysphoria
- Meaningful close relationships and support of gender identity/transition
- Mental health history
- Substance use history
- Support in work environment
- Coping strategies
- Understanding of risks and benefits of surgery

Genital hair removal

Who needs hair removal?

People wanting full depth vaginoplasty need permanent genital hair reduction from the scrotum and penile shaft before surgery. Providers at University of Iowa Health Care Dermatology Clinic offer laser hair removal (they do not offer electrolysis). Hair laser or electrolysis can be done wherever you prefer.

Genital hair removal is **not** needed before orchiectomy or zero depth vaginoplasty.

Who should have hair laser?

Hair laser can be done safely on all skin types.

The hair laser targets pigment in the hair follicle. This means it only works for pigmented hairs. It does not work for light blonde, white, or fine hairs. People with a lot of blonde or white hairs may need electrolysis.

How long does hair laser take?

Hair laser only targets hairs in certain growth cycles. For best results, you may need hair laser every 4 to 8 weeks over 6 to 12 months.

People's timelines can differ based on their response to the laser and settings used. These vary based on a person's skin and hair type.

What should I expect as I near the end of hair laser treatment?

As you reach the end of hair laser treatment, you should not have regrowth of dark pigmented hair between sessions. If you have blonde or white hairs, you may need electrolysis. Your provider will talk with you and your surgeon.

Reach out to your surgeon near the end of hair removal. An office visit will be scheduled. Then, a surgery date can be planned.

It is best to wait 1 full hair cycle (6+ weeks) before having a full depth vaginoplasty. This is to be sure there is no hair regrowth.

There can be mild to moderate discomfort. This is often better by the end of the day. You can use ice packs, acetaminophen, and topical anesthetics. The provider will talk with you about this if needed.

Burns and blistering are rare. Call your provider right away if you notice this. Hyperpigmentation (darkening of the skin) and hypopigmentation (lightening of the skin) are also rare. If you notice this, it is often temporary. It can be permanent for some people though.

Before you start, do **not**:

- Shave or trim the hair the day of or day before each treatment. Then, only a small part of the hair shaft is above the skin.

A **vaginoplasty** uses the skin and tissue of the penis and scrotum to form a new, functional vagina.

Vaginoplasty

Bladder
Rectum
Prostate
Anus
Pelvic bone

Scrotum
Penile skin
Urethra
Corpus Cavernosum
Corpus Spongiosum and Glans
Neurovascular Bundle

1 of 4 in series

Hormone therapy

Before zero or full depth vaginoplasty, stop estrogen for 2 weeks if you have:

- Diabetes
- Heart disease, including high blood pressure and high cholesterol
- Are older than 50

Otherwise, take estrogen until you have surgery, unless your doctor tells you different.

If on progesterone, keep taking it. No need to stop before or after surgery.

After surgery, you will not take estrogen while in the hospital, until catheter is taken out. This is often about 2 weeks after surgery. You can stop spironolactone as soon as the testicles are removed.

You do not need to hold any hormones before orchiectomy.

Pelvic floor physical therapy (PT)

(For full depth vaginoplasty only)

At least 1 pelvic floor PT visit will be scheduled before surgery. This helps comfort with dilation of vagina after surgery.

Goals before surgery goals are:

- Screen for and treat pelvic floor muscle dysfunction.
- Learn pelvic floor muscle contraction and relaxation.
- Learn and do stretches to help pelvic floor muscle relaxation.
- Teach healthy pelvic floor muscle habits.
- Gain relationship with pelvic floor physical therapist.
- Get these supplies:
 - Hand-held mirror
 - Vaginal dilators
 - Lubrication
 - Washing supplies

Goals after surgery (optional) are:

- Screen for changes in pelvic floor muscle dysfunction.
- Re-learn pelvic floor muscle contraction and relaxation.
- Make sure there is successful dilation.
- Review:
 - Dilation
 - Lubrication
 - Washing
- Address other concerns, such as:
 - Constipation
 - Sitting posture

Vaginal care after surgery

(For full depth vaginoplasty only)

Buy and bring dilators, lubrication, and hand-held mirror with you to the hospital. Bring these to all follow-up urology and pelvic floor PT visits if you have concerns.

Post-vaginoplasty dilator program

Dilators are very important after surgery. You must buy them before surgery.

Your care team suggests the "Soul Source GRS Vaginal Dilators®." Get sizes P2, #1, #2, and #3. They are easily found online. Many people choose blue or green dilators as their goal size. Goal size can change as goals change.

Dilation should start as soon as vaginal packing is taken out. This is 5 days after surgery. Start in the hospital before going home. There may be some discomfort, stretch, or tenderness. Do **not** push past resistance or into pain.

Time	Protocol	Notes
Through Post-Op Visit (10-14 days)	15 minutes, 4 times each day	Progress size as tolerated.
Until 1 Month Post-Op	30 minutes, 3 times each day	
Until 2 Months Post-Op		
Until 3 Months Post-Op	30 minutes, 2 times each day	If not at goal size and depth, keeping doing 3 times each day until goal is met.
Until 4 Months Post-Op		
Until 5 Months Post-Op		
Until 6 Months Post-Op	30 minutes, 1 time each day	If size or depth get smaller or shorter, return to previous frequency on chart.
Until 7 Months Post-Op		
Until 8 Months Post-Op		
Until 9 Months Post-Op	30 minutes, 5 times each week	
Until 10 Months Post-Op	30 minutes, 3 times each week	
Until 11 Months Post-Op	30 minutes, 2 times each week	
1 Year+ Post-Op	30 minutes, 1 time each week	

Dilation session difficulty and progression

Easy: Insert to target depth. Takes less than 1 minute. There is little resistance or discomfort.

Medium: Insert to target depth. Takes less than 5 minutes. There is some resistance.

Difficult: Inserting takes more than 5 minutes. There is pain during or after insertion.

Try the next size after 3 **easy** sessions in a row. Split the session into 2 sizes for a total of 30 minutes. This can ease the change between sizes. Keep the same number of dots (depth) with all sizes.

Do **not** push past moderate resistance or into pain. Mild discomfort or stretching is normal.

Tips and tricks

Position and set-up

- Lie on your back with knees slightly open and supported.
- Use large amounts of medical grade, water-based lubrication, such as:
 - Surgilube®
 - McKesson®
 - Medline E-Z®
- After 3 months, switch to thinner, water-based lubricants, such as:
 - Sliquid®
 - Astroglide®
 - Slippery Stuff®
- A hand mirror can help lead you.
- Put the dilator in at a 45° angle with the dots facing you. This lets the dilator move under the pubic bone. When it is under, straighten the dilator to a flat angle.

During dilation

- Expect a small amount of resistance and tenderness with insertion. Stop when you feel moderate resistance and pressure.
- See how many dots are on the outside. Keep the same depth for the session.
- If you have trouble moving up sizes or feel tightness, slightly and gently tilt the dilator for pelvic muscle release.

After dilation

- Wash with gentle soap and water.
- Wipe from front to back to avoid infection.
- You may have some bleeding. It should slow and stop on its own. Call your care team if you bleed a lot.
- Call your care team if you think you have an issue or infection. Keep dilating unless told otherwise.

Lubrication:

- Put a large amount on the dilator.
- Use water-based lubrication.
- Do **not** use silicone-based lubrication, oils, and thin water-based lubrication for at least 3 months after surgery.
- Lubrication will drain out from vagina after insertion. This is normal.

Cleansing

You can shower when you go home. Do not get into a bathtub or pool until all incisions are healed. This often takes 2 to 3 months.

Use mild soap externally 2 times each day to prevent infection.

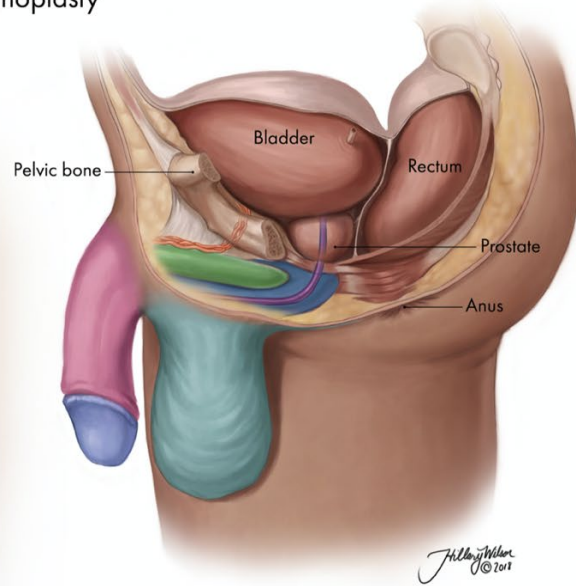
Drainage is common. Use maxi pads or gauze.

You may douche. Your care team suggests homemade saline:

- 1/2 teaspoon table salt for each 8-ounce cup of water.
- Use for the 6 weeks to 3 months after surgery.
 - After 3 months, use tap water.
- Use a reusable douche bottle.
- You do not need to boil water to sterilize it.

Vaginoplasty

A **vaginoplasty** uses the skin and tissue of the penis and scrotum to form a new, functional vagina.

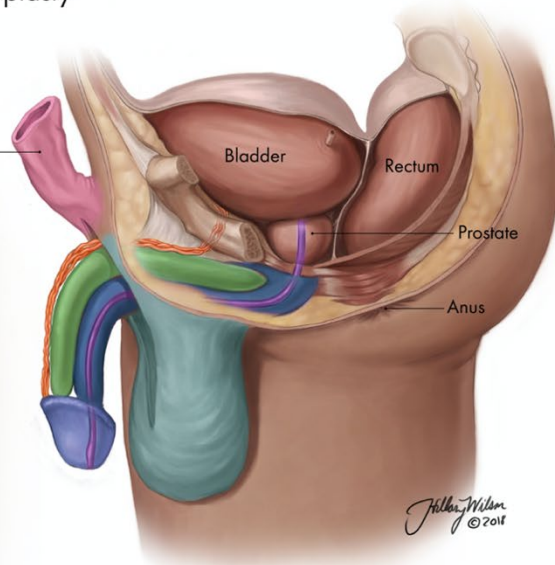
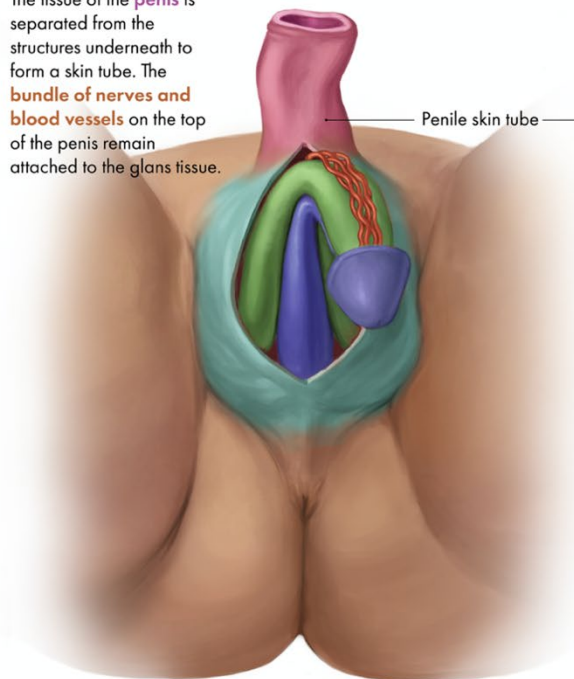


- | | |
|-------------|-----------------------------|
| Scrotum | Corpus Cavernosum |
| Penile skin | Corpus Spongiosum and Glans |
| Urethra | Neurovascular Bundle |

1 of 4 in series

Vaginoplasty

The tissue of the **penis** is separated from the structures underneath to form a skin tube. The **bundle of nerves and blood vessels** on the top of the penis remain attached to the glans tissue.



- | | |
|-------------|-----------------------------|
| Scrotum | Corpus Cavernosum |
| Penile skin | Corpus Spongiosum and Glans |
| Urethra | Neurovascular Bundle |

2 of 4 in series

Vaginoplasty

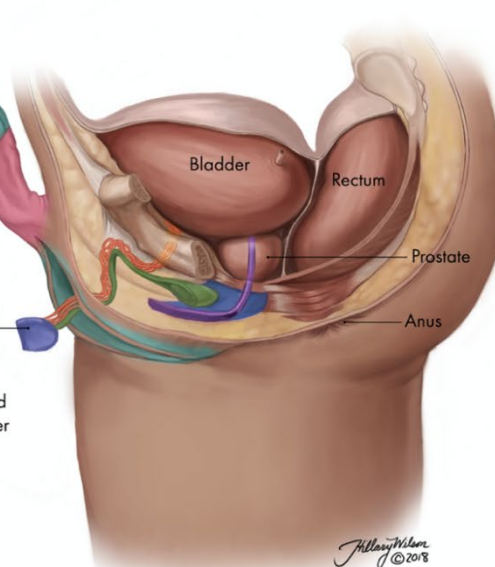
A skin graft is taken from the **scrotum** and attached to the end of the **penile skin tube**.

Most of the **urethra** is removed, and the rest is spread open like a book.

Penile-scrotal skin tube

New clitoris

The **corpus cavernosa** (erectile bodies) are opened and shortened, and the inner erectile tissue removed

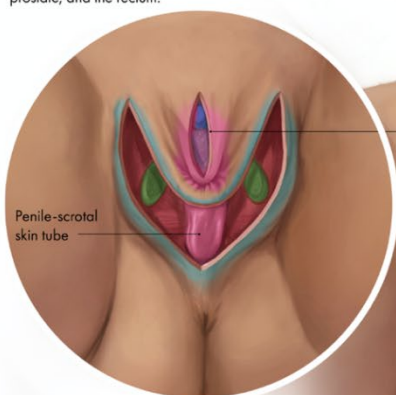


- | | |
|---|---|
| ■ Scrotum | ■ Corpus Cavernosum |
| ■ Penile skin | ■ Corpus Spongiosum and Glans |
| ■ Urethra | ■ Neurovascular Bundle |

3 of 4 in series

Vaginoplasty

The penile-scrotal skin tube is turned inside out and inserted into the space between the bladder and the prostate, and the rectum.

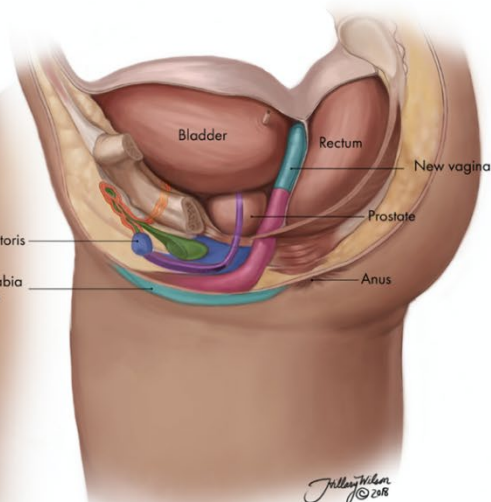


A cut is made to expose the clitoris and urethra

New clitoris

New labia majora

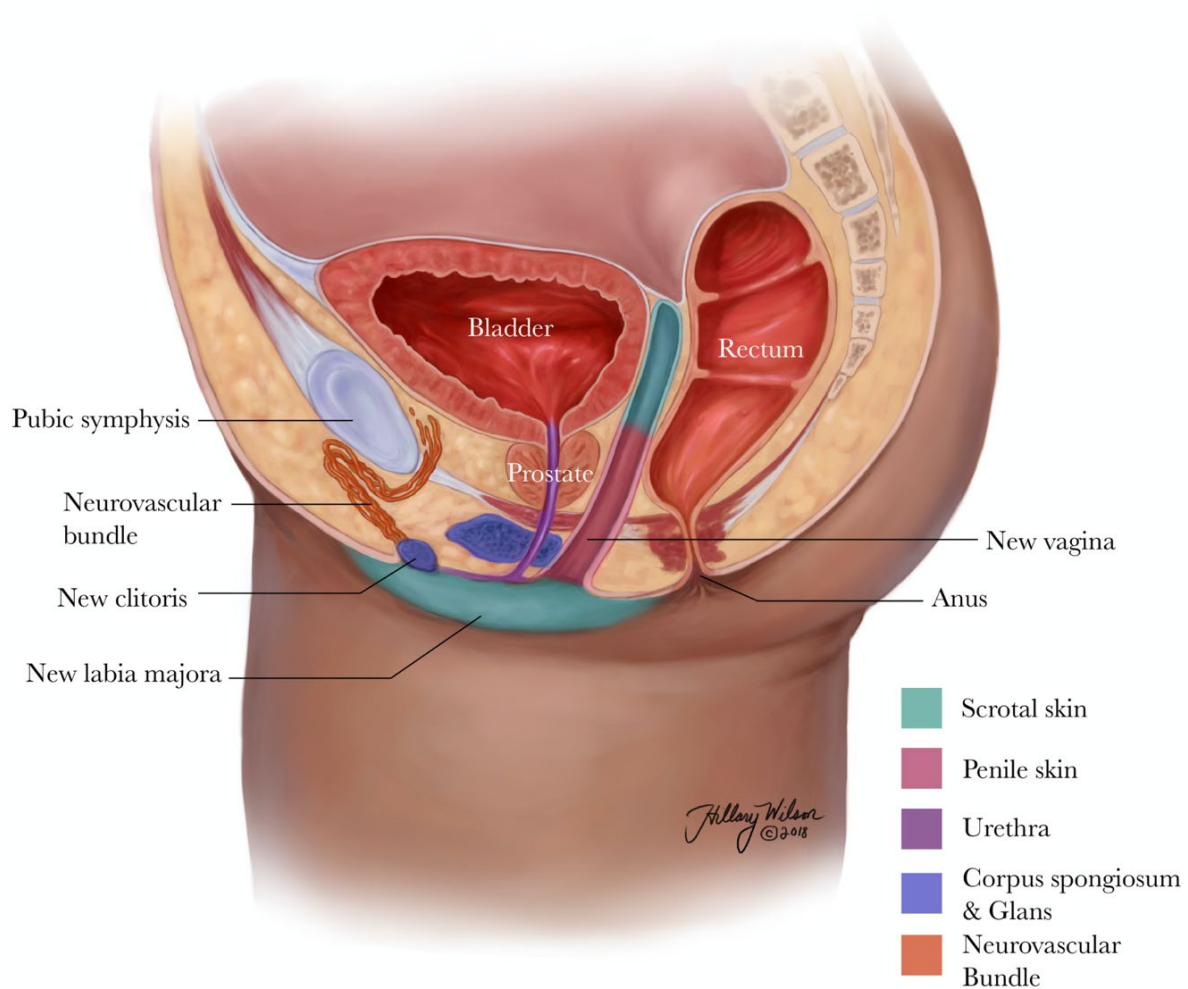
New vagina



- | | |
|---|---|
| ■ Scrotum | ■ Corpus Cavernosum |
| ■ Penile skin | ■ Corpus Spongiosum and Glans |
| ■ Urethra | ■ Neurovascular Bundle |

4 of 4 in series

Transgender Vaginoplasty: Post-Operative Anatomy



Consent

For zero and full depth vaginoplasty:

- Bilateral orchiectomy (if not done before)
- Partial penectomy
- Clitoroplasty
- Vulvoplasty: Creation of labia for zero and full depth vaginoplasty
- Urethroplasty
- Vaginoplasty: If undergoing full depth vaginoplasty

Risks are:

- Bleeding
- Infection
- Deep venous thrombosis (blood clot in a deep vein)
- Abnormal urinary stream
- Abnormal sensation of clitoris
- Persistent gender dysphoria
- Desire for future labial revision

For full depth vaginoplasty, other risks are:

- Loss of vaginal depth
- Vaginal stenosis (narrowing of vagina)
- Pain with penetrative intercourse
- Loss of vaginal graft
- Rectal injury