

## **Consent for Vaginoplasty**

### **Penile Inversion Vaginoplasty**

#### **Description**

The technique that we use to create the vulva and vagina at Women's College Hospital is a one-stage penile inversion vaginoplasty. It is performed under general anesthesia. The duration of the surgery is 4-6 hours. During the procedure the testicles are removed, the space for the vagina is dissected between the urethra and the rectum. The prostate is not removed.

The penile and perineal skin are used to create the labia majora, vaginal entrance and clitoral hooding. The clitoris is created from the tip of the penis (glans) and the blood and nerve supply to this area are preserved so as to keep sensation. The urethra is used to create the vestibule (the area between the clitoris and the urethra). The scrotal skin is thinned and its hair roots are cauterized to inhibit hair growth. It is then attached to the penile tube skin and this is used to line the vaginal cavity.

A urinary catheter is put into the bladder and a packing of gauze is inserted into the vagina. These will both remain in place for at least 7 days. In addition, a drain will be placed around the labia majora and will stay in place at least 2 days.

Skin grafts are occasionally necessary. One location for these can be the inner posterior thigh. When a split thickness graft is harvested it can leave a discolored area of skin over the graft site. The use of skin grafts may increase the risk for post-operative complications and this will be discussed with your TRS team prior to surgery.

#### **Intended results of this surgery:**

- Feminized genitals including an anatomic vulva and vagina
- Vaginal depth adequate for penetration
- The ability to urinate sitting down
- Preserved sensation and sexual function

#### **Surgical risks for vaginoplasty**

We want you to fully understand the risks involved in this surgery so that you can make an informed decision. Your WCH TRS team will use our expertise and knowledge to avoid complications as best as possible. If a complication does occur, we will support you and provide ongoing follow up care for you. We will refer you to the appropriate care provider if the complication falls outside of the scope of the TRS team.

#### **Possible side effects and complications:**

## Intra-operative complications

### **Blood loss:**

Bleeding is a risk of any operation. However, the need for transfusion would be unlikely. We will have blood on hand in the case you do need a transfusion. The risk for a major bleed is typically within the first 48 hours. For this reason, we keep you in Hospital for this period of time.

### **Injury to deeper structures:**

Blood vessels, nerves and muscles may be injured during surgery.

### **Rectal injury, Urinary tract injury and fistula formation:**

An injury to the gastrointestinal tract can create an abnormal path between the rectum and the vagina called a rectovaginal or the urethra and the vagina called a urethrovaginal fistula.

This can be recognized at the time of surgery or after surgery. If recognized at the time of the surgery that repair of that injury will depend on many factors including the location of the injury and the health of the surrounding tissue. Repairing such an injury could require the creation of a temporary diverting ileostomy (bowel stoma). Fistulas will often require additional surgeries to repair.

### **Urologic complications**

Patients may have issues related to the urinary system after surgery. These can be temporary or chronic. An injury to the genitourinary tract can create a hole in the bladder or the urethra. An abnormal path between the bladder and the vagina is called a vesicovaginal fistula. An abnormal path between the urethra and the vagina is called a urethrovaginal fistula. Such injuries could require a prolonged indwelling urinary catheter and are likely to require additional surgeries to repair.

The urethra can become narrowed resulting in a stricture. The urethral opening could become narrowed or closed (meatal stenosis). Patients can have urinary tract infections secondary to the shortened urethra, or have ongoing urinary issues like splayed stream. Urinary issues could also include incontinence or urinary retention. Urinary issues post surgery can require pelvic physiotherapy or medications, procedures and even additional surgeries.

### **Rarer complications**

If they are severe, any of the problems mentioned may significantly delay healing or necessitate further surgical procedures. Medical complications such as pulmonary embolism, severe allergic reactions to medications, cardiac arrhythmias, heart attack and hyperthermia are rare but serious and life threatening problems. Our team consists of a well-trained anesthesiologist who will be present at your surgery and they will do their best to minimize any of these complications. Ensure that you disclose all of your health issues and pertinent medical data to anesthesia prior to surgery. Neglecting to do so may cause serious problems for you and for the medical team during surgery.

A major or severe complication may require rescheduling surgery or may require a staged approach to surgery if the surgical and anesthesia team feel it is unsafe to proceed for physiological or anatomical reasons.

## **Post-operative complications**

### **Constipation**

Due to the nature of surgery and the medications taken during and after, constipation may occur after surgery.

### **Bleeding**

Mild bleeding after this surgery is common. Bleeding can occur from the urethral meatus and vestibule which was created using urethral tissue. It can also occur from the urethra, the skin incisions and from inside the vagina.

### **Hematoma:**

Small collections of blood under the skin are usually allowed to absorb spontaneously. This is a common consequence of surgery. Larger hematomas may require aspiration, drainage or even surgical intervention to remove.

### **Swelling and bruising:**

Moderate swelling and bruising are normal after any surgery.

### **Discomfort and Pain:**

Mild to moderate pain or discomfort is typical after any surgery. We will support you with pain management strategies in the perioperative period. This often includes the use of pain medication, rest, ice and other modalities. Chronic pain after this surgery is possible and would require the support of different health care professionals.

### **Crusting along the incision lines:**

This typically occurs as the incision is healing. We can use a topical antibiotic ointment over the incision lines to help with this.

### **Sensations during healing:**

Itching and sometimes small shooting electric sensations felt on the skin frequently occur as the nerve endings heal. Ice and massage can be helpful. To provide reassurance, these are normal parts of healing after surgery.

### **Scars:**

The majority of scars are located in the labia and will be covered by pubic hair. All new incisions new scars are red, pink, or purple or darker brown. Incisions may take up to one year or longer to fade. Rarely, in some people the scar may not fade and abnormal scarring may occur. Your own history of scarring should give you some indication of what to expect. Injection

of steroids into the scars, placement of silicone sheeting on the scars, or further surgery to correct the scar may be discussed.

**Numbness/loss of sensation:**

Small sensory nerves to the skin surface are disrupted during surgery. The sensation in those areas gradually returns, usually within the first year as the nerve endings heal spontaneously. Skin sensation may feel different after surgery than it did prior to surgery and rarely small areas of numbness may persist.

**Loss of sexual function:**

Sexual sensation may feel different or it may be diminished following surgery. Erotic sensation and the ability to orgasm may be impacted.

**Infection:**

Infection after surgery could include a superficial infection to more serious infection including abscess formation or cellulitis. A superficial infection may require an antibiotic ointment. More significant infections are treated with oral or IV antibiotics. Development of an abscess may require drainage and antibiotics. Infection is a standard risk for all surgical procedures. You will be given antibiotics through the IV while you are undergoing surgery and will be prescribed oral antibiotics for the first week after surgery.

**Skin necrosis**

Loss of skin, either to the external genitals or the internal graft skin is possible.

**Wound Separation or delayed healing:**

Any incision, during the healing phase, may separate or heal unusually slow for a number of reasons. These include inflammation, infection, wound tension, decreased circulation, smoking or excess external pressure. Wound separation can interfere with dilation and create pain and discomfort.

Hypergranulation is a common complication of this surgery. It is an abnormal overgrowth of healing tissue. It may produce bleeding and discharge and be painful or uncomfortable. This can be excised, treated with silver nitrate or other topical treatments. You will require follow up with a medical provider for the management of this complication and your WCH TRS team is available to provide this care.

**Sensitivity or allergy to dressing or tape:**

Occasionally, allergic or sensitivity reactions may occur from soaps, ointments, tape or sutures used during or after surgery. Such problems are unusual and are usually mild and easily treated and resolve. In extremely rare circumstances, allergic reactions can be severe and require aggressive treatment.

**Increased risks for smokers:**

Smokers have a greater chance of poor healing, skin loss, decreased sensation, poor outcomes and complications. We strongly recommend a period of 6 months no smoking prior to surgery. The consequences of not stopping smoking can be significant.

### **Compartment syndrome and nerve injury in the lower limbs**

Though it is very uncommon, there have been reports of nerve injury in the legs or injury to the muscles associated with how the patient is positioned during surgery. If compartment syndrome of the leg occurs, then the muscles may need to be surgically released. Much care is taken to prevent this from occurring using padding and careful positioning during surgery. Occasionally patients experience areas of numbness or a change in sensation on the skin of the legs, especially the thigh. This is usually temporary with normal sensation returning within several months but could be permanent.

### **Revision surgery**

Cosmetic concerns related to healing and the external appearance of the vulva can occur. In many cases these are very much personal perceptions and not functional concerns. Revision surgeries are currently covered under insurance for “complications causing significant physical symptoms or functional impairment.” As changes occur throughout the healing process it is strongly recommended to wait 12 months to observe the final result following surgery before deciding on further surgeries.

### **Blood clots and pulmonary embolism**

These problems can occur rarely with any surgery but are a little more common in pelvic procedures and in patients on estrogenic medications. We will advise that you stop estrogen therapy for some period of time prior to surgery and during recovery. Post-op leg movements and walking soon after surgery will help to avoid these complications. Although pulmonary embolism and blood clots can be life threatening, they usually resolve completely with hospitalization and care by a medical specialist.

### **Vaginal complications**

Vaginal prolapse is possible after surgery. This is caused by the skin graft used to line the vaginal vault not taking. This may require the vaginal packing being reinserted. Vaginal prolapse could lead to permanent graft loss and closure of the vaginal vault.

The creation of a vaginal vault using penile and scrotal skin or skin grafts will necessitate the ongoing need for regular dilations. You will be required to use surgical dilators in regular frequency, as advised by your TRS team, to keep the vaginal vault open. The narrowing or closing of the vaginal vault (vaginal stenosis) is likely if dilations stop. The narrowing or closure of the vaginal vault may require additional surgeries to re-open the vault. Any secondary surgeries are likely to increase the risks of surgical complications.

Loss of vaginal depth.

Vaginal hair growth is possible without the permanent removal of hair to the scrotal/penile/skin grafted skin prior to surgery. Although intra-operative measures will be taken to remove the hair, permanent hair removal cannot be guaranteed.

Vaginal discharge after vaginoplasty is common. It can be bothersome and may require medical management.

**Psychologic and psychiatric effects**

Although this surgery is being performed with the intention to improve your overall long-term mental health, surgery may lead to a temporary decline in mental health. Depression and low mood are not uncommon following this surgery. The adjustment to your new body and your new daily routine in addition to the healing process can bring up complex emotional reactions. In our experience, patients with a history of mood-related issues are particularly at risk for post-op depression. All patients should work with their primary care provider, TRS team, and social supports to prepare for the possibility of post-op depression or mental health destabilization.

We have outlined the common and not-so-common risks of surgery in general. The specific risks and complications of each surgical procedure have been explained elsewhere in this preoperative package. We have not discussed every possible problem that may occur, and you cannot assume that a problem will not occur because it was not discussed here.

I acknowledge that the risks and complications of the surgery I am to undergo have been explained and discussed with me in detail by Dr. \_\_\_\_\_. I have been given the opportunity to ask questions and any concerns I have about my surgery have been addressed and explained to me. My signature here attests to my understanding and satisfaction with the answers I have been given.

SIGNATURE: \_\_\_\_\_

DATE: \_\_\_\_\_

WITNESS:

## CONSENT FOR SURGERY: VAGINOPLASTY

I, the undersigned, being of perfectly sound mind, make the following declarations:

Following various consultations with the following specialists:

1. \_\_\_ Dr. Yonah Krakowsky \_\_\_\_\_
2. \_\_\_ NP Emery Potter \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

Who are all in agreement with my desire for transition related/gender affirming surgery. I have asked Dr. Yonah Krakowsky and the TRS surgical team to proceed with the following intervention: PENILE INVERSION VAGINOPLASTY (THE CREATION OF A VAGINA AND VULVA)

The nature and purpose of the operation, possible alternative methods of treatment, including no treatment/surgery, risks and possible complications have been fully explained to me by Dr. Krakowsky prior to surgery. I have been advised that all surgery involves general risks, including but not limited to bleeding, infection, nerve or tissue damage and rarely cardiac arrest/death or serious bodily injury. I acknowledge that no guarantees or assurances have been made as to the result that may be obtained.

Thus, in accurate terms, I understand that the correct surgical procedure is as follows:

- There will be an amputation of the penis
- The two testicles will be removed, the scrotal skin will serve as a tentative construction of a vulva and vagina
- The urethra will be shortened and positioned anatomically between the entrance to the vagina and the clitoris
- By means of a penile skin flap (penile and sometimes scrotal skin) we shall attempt to construct a cavity between the urethra and rectum. This new grafted vaginal cavity necessitates maintenance to prevent it from closing. Maintenance includes lifelong commitment to ongoing dilations of which the details have been explained to me

It has been explained to me that during the course of the operation unforeseen conditions may be revealed that necessitate an extension of the original procedure (additional skin grafts) and I hereby authorize my doctor and/or such assistance as may be selected by them to perform such procedures as are necessary and desirable, including but not limited to the service of pathologists, radiologists, or a laboratory. The authority granted in this paragraph shall extend to remedying conditions that are not known to my surgeon at the time the operation commences.

Therefore, I understand precisely, as this has been explained to me.

- A . That it is an “apparent” “visible” change in the genitals and that after the operation I shall not have any organs which would enable me to birth children or to have menstrual periods
- B. That the operation is absolutely irreversible, that is, one the penis and testicles are removed, it will be impossible to “remake” new ones
- C. That after the operation, there will be a change in sexual function and a functional change in achieving orgasm will occur

I understand that this surgical intervention comprises risks as in all major surgical interventions, and in a case such as this one, a recto-vaginal, urethra-vaginal or vesico-vaginal fistula is possible. The other possible complications are the following: blood loss, injury to deeper structures, rectal injury, urinary tract injury, fistula formation, urologic complications, bleeding, scarring, hematoma, swelling and bruising, pain, discomfort, numbness or a loss in sensation, loss of sexual function, infection, skin necrosis, wound separation or healing issues, hypergranulation, compartment syndrome, nerve injury, unsatisfactory aesthetic results, blood clots, vaginal prolapse, stenosis, loss of depth, vaginal hair growth, vaginal discharge and negative psychologic and psychiatric effects.

I realize that the medical team and the hospital staff can in no way promise me the success of this operation.

I therefore wish to assume by myself all the inherent risks of such a surgical intervention

I declare having read this declaration, having perfectly understood all its implications, and it is in all liberty that I consent

Signed \_\_\_\_\_ on this \_\_\_\_\_ day of \_\_\_\_\_

Witness: