

# What is Minimal Depth Vaginoplasty?

## Introduction:

This booklet helps explain what vaginoplasty with minimal depth vagina surgery is, how the surgery is done, what the risks and side effects are, and what you need to do to prepare and recover well from the surgery.

Please remember the information provided here does not replace the information you receive from your surgeon. We are constantly working to improve our resources to better suit your needs, this resource will continue to be updated.

## Acknowledgements:

The primary source of information for this decision support booklet has been derived from the patient information from the London Transgender Clinic, OHSU, and Trans Care BC.

## What is minimal depth vaginoplasty surgery?

Minimal Depth Vaginoplasty itself is a series of complex reconstructive procedures to create female genitalia but without a full depth vaginal cavity. This is sometimes called vulvoplasty, shallow depth vaginoplasty, zero depth vaginoplasty or labiaplasty. A large part of any surgery's success depends on your preparedness. This means being in the best possible physical and mental health before the surgery.

A minimal depth vaginoplasty creates the parts of a vulva – the mons, the clitoris, and the outer and inner labia.

The appearance of the genitals will be very different from one woman to another. Some people have a more rounded mons pubis, a less prominent clitoris, fuller labia majora or labia minora of different sizes.

This leaflet provides information on **Minimal Depth Vaginoplasty**, please also see our Vaginoplasty booklet.

The decision to undergo a vaginoplasty with or without a vaginal cavity is a personal one, to be made in accordance with your needs, your expectations, and the impact on your life. For minimal depth vaginoplasty our surgeon uses the same surgical technique as that used in a vaginoplasty, but without

constructing a full depth vaginal cavity. Instead, a very shallow vaginal cavity of three to five centimetres is created.

Removal of the testicles is required as a part of minimal depth vaginoplasty, along with the penis and scrotum.

## What is the preparation needed for minimal depth vaginoplasty surgery?

- If you are eligible for surgery, you will have your appointments and surgery in Wellington, New Zealand.
- Your surgeon must be satisfied that you are in good mental health ahead of surgery.
- Any person undergoing vaginoplasty must have realistic expectations of what can be achieved through surgery and can collaborate with the treatment team.
- Due to the nature of this surgery people will need to have been taking oestrogen as part of their gender affirming healthcare for a minimum of one year.
- You need to be able to tolerate a general anaesthetic and lay on a n operating table for up to eight hours.

**Note:** We do not routinely recommend stopping estrogen (E-GAHT) before your surgery.

### **WPATH eligibility for gender affirming (genital) surgery (GAgS):**

To be eligible for GAgSS you must meet the following criteria from WPATH Standards of Care (version seven):

- Persistent, well-documented gender dysphoria
- Undergone a physical and psychological assessment by qualified gender specialists
- Demonstrate that you have been living as your chosen gender for at least one year prior to surgery
- Capacity to make a fully informed decision and to consent for treatment
- Be on gender affirming hormone treatment (GAHT) for over 12 months
- Age of consent in the given country. In Aotearoa New Zealand, you need to be aged 18 or over

- If significant medical or mental health concerns are present, they must be reasonably well controlled

### **Weight:**

Being overweight is a risk factor for complications and delayed healing.

The GAgS Service accepts people with a BMI less than 35 on to the wait list, with the expectation that patients with a BMI 30–35 will be working with and supported by their general practitioner (GP) on a healthy weight management programme to reduce and maintain their weight to a BMI of 30 or less in a safe and managed way prior to being seen for a First Specialist Assessment (FSA), to decrease general surgery risk. If your BMI is over 30 you are encouraged to speak to your GP to see if you are eligible for the Green Prescription as part of a healthy weight management program.

For some people, minimal depth vaginoplasty may not be possible because of their body shape and weight.

### **Smoking and vaping:**

Smoking and nicotine-based vaping, interferes with the healing process and you are required to be a non-smoker (including nicotine – based vapes) to be eligible for vaginoplasty. Nicotine can cause complications, including poor wound healing, delayed wound healing and increases the risk of graft failure. Research shows that the risk of surgery failure increases 10 times for people who smoke even one cigarette a day. All products that contain nicotine including vapes and gum, although healthier alternatives to smoking tobacco all still have the same negative effect on wound healing. (Source: OSHU Transgender Health Program and Department for Urology)

You are encouraged to speak with your GP regarding nicotine cessation support as people need to be a minimum of 12 weeks nicotine free.

Smoking cannabis, just as for smoking tobacco, contributes to the deterioration of your respiratory system and may interfere with your postoperative recovery.

## **What to consider:**

We encourage you to:

- Consider your surgical goal and priorities and balance these with the risks.
- Your mental health and psychosocial supports. Having good mental health and psychosocial support is crucial for optimal healing.

## **Mental health and psychosocial/social support:**

Gender affirmation surgeries generate multiple changes in the life of the patient. To successfully adapt to all these changes, it may be necessary to seek the help of healthcare professionals in addition to that of your loved ones or support people.

Please keep in mind that each person's surgical plan and experience are unique. It is recommended you engage with a counsellor or therapist before surgery, to develop strategies to prepare and respond to the challenges of vaginoplasty surgery and to help navigate this challenging and exciting period of your life.

## **Hair removal:**

Hair removal is **not** usually required for people who have chosen minimal depth vaginoplasty as their surgical procedure.

## **Here are some factors for consideration:**

- Your desire to have sex with vaginal penetration.
- If your prostate has been completely removed, you will have to opt for vaginoplasty without a vaginal cavity because of the high risk of permanent urinary problems.
- Having had an orchiectomy previously does not affect your suitability for surgery.

## **Minimal Depth Vaginoplasty**

Minimal depth vaginoplasty is a surgical procedure that provides very satisfactory aesthetic results creating external female genitalia, but without creating a vaginal cavity. These results may vary depending on the age, weight, skin quality and elasticity, and overall health of the patient.

## **Expected results:**

A minimal depth vaginoplasty creates:

- a clitoris constructed with the sensitive skin of the glans.
- a hood covering the upper part of the clitoris.
- a vulva with labia majora and labia minora; and
- an erogenous (clitoral) zone with the possibility of sexual pleasure.
- a shallow depth vagina of three to five centimetre depth.
- It is not possible to create a full depth vaginal cavity at a later date.

## **What are the benefits of this surgical technique?**

- A surgical technique in one single surgery.
- The result of the procedure looks the same as the vaginoplasty result externally.
- Surgery is less complex than full depth vaginoplasty, so risks are lower, and surgical and recovery times are shorter.
- Prior hair removal is not required, as the skin from the scrotum is not used to create a vaginal canal.
- Does not require lifetime regime of vaginal dilation since there is only a shallow or no vaginal canal.
- Can be the preferred surgery if you are not interested in receiving penetrative vaginal sex.
- Might be a viable surgical option to consider for people who have medical concerns which limit or prohibit the creation of a vaginal canal. This can include a history of prostate issues, major rectal injury, congestive heart failure or radiation.
- There is less strain on the tissue forming the new genitals, when existing tissue is used to construct the minutiae of the vulva (labia, clitoris, clitoral hood).
- You can also do everyday things that people with vulvas do, like peeing while sitting down. These simple, everyday changes may help you feel more comfortable in your body.
- If your prostate has been removed, vaginoplasty with a full depth vaginal cavity is not an option because of the high risk of permanent urinary problems.

## **Fertility:**

Vaginoplasty is a gender affirmation surgery that will permanently and irreversibly eliminate your reproductive capacity. You will be permanently sterile as this surgery results in the inability to induce conception/produce offspring.

We recommend that you have a discussion and reflection on this subject before proceeding with minimal depth vaginoplasty.

## What happens during/after the operation?

### During the operation:

Minimal depth vaginoplasty is a complex and long reconstructive procedure. You need to be able to tolerate a general anesthetic and lay on an operating table for up to eight hours.

The results of the surgery may vary depending on your age, weight, skin quality and elasticity, circumcision/ scars, and overall health.

During a minimal depth vaginoplasty surgery, the surgeon creates an outer vagina (vulva) by using skin and tissue from your penis. This will involve:

- the skin of the scrotum is removed
- the testicles are removed
- skin from the penis is used to build the **inner and outer labia** of the vagina
- a **new opening for the urethra is created** (so you can urinate/pee)
- tissue from your foreskin to build the **new opening of the vagina** (also called the introitus)
- a clitoris made with the sensitive skin of the glans.
- a clitoral hood: a vulva equipped with labia minora.
- clitoral erogenous zones with the possibility of sexual pleasure
- the labia majora are created.
- removal of the testicles is required as a part of vaginoplasty, along with the penis and scrotum
- the prostate is left in place to avoid complications, as removing it can cause irreversible urinary incontinence.

**Note:** A minimal depth vaginoplasty is still an option if you have had a prostatectomy following prostate cancer.

**Note:** Due to multiple factors that are unique to each individual (e.g., quantity and quality of genital skin, body mass index, circumcision, scars, etc.), results may vary from one person to another.

## **What complications may arise during surgery?**

It is important that you understand that there are possible risks linked with any major operation such as vaginoplasty. All surgical procedures involve some risks, including negative reactions to anaesthesia, blood loss, blood clots and infection. These complications can, in extreme cases, result in death. It's important to discuss these risks in detail with your surgeon.

## **What happens after the operation?**

- When you wake up after surgery you will feel tired, and your energy level will be decreased. You will be kept in a recovery area, where specialised staff will take care of you until you are fit to return to your hospital room.
- Pain medication will be administered to alleviate you having any discomfort before you wake up. You will spend five (or more) days in hospital recovering before being discharged.
- A urinary catheter will be in place for the first five days after surgery, to allow you to pass urine while your urethra heals and to allow staff to accurately monitor your urine output. The catheter will have been inserted while you are under general anaesthetic.
- You will be on strict bed rest in hospital for several days.
- During these days of strict bed rest TED stockings and venaflo foot pumps will remain in place throughout to reduce your risk of deep vein thrombosis.
- You will remain initially on a clear, decaffeinated fluids only diet. We encourage you to drink as much as possible to remain hydrated.
- To reduce the risk of haematoma or build-up of serious fluid to the surgical site, two small drains will be inserted into each labia. These are removed around day two post operatively as long as you are healing as expected and the amount of fluid draining from the site is minimal.
- Dressings are applied to your surgical incisions for protection. In order to minimise swelling and reduce the risk of bleeding, a supportive, adjustable underwear garment will be worn. This will be applied in theatre by your surgeon. You will continue to wear this garment post-operatively for six weeks (day and night) and then another six weeks during the day. Two garments will be provided to you as part of your surgical package so you can change and wash them regularly.

- The surgeon will see you two weeks after surgery, to approve your travel to your home area.
- It takes between eight to 12 (or more) weeks to recover from minimal depth vaginoplasty surgery. You should expect to take at least six weeks off work and avoid heavy lifting and exercise during the recovery period.

**Note:** This procedure does not remove your prostate. You are recommended to have ongoing monitoring of your prostate health with your primary care provider (GP) lifelong.

### **Physical restrictions after surgery:**

After your surgery you are encouraged to avoid any strenuous activity. Once you are released from hospital, anticipate restricted physical activity for up to a further six weeks. We recommend finding ways to function within these physical limits before surgery, while you are feeling well.

Post-surgery complications are a possibility, but these will be managed closely by the surgeon and the GAgS service.

### **What is the recovery time?**

It can take up to a year (or longer) to recover fully from the surgery and the following activities are required:


- Avoid strenuous exercise and activity for six (or more) weeks following your vaginoplasty and avoid swimming and bike riding for three months.
- Abstain from intercourse until your surgeon is happy you have recovered, which is generally around three months after surgery.
- Avoid smoking, vaping, or using any nicotine products, as this decreases blood flow to the area around your genitals and will make it harder for you to heal after your surgery.
- Generally, there is a faster recovery time overall than vaginoplasty during which a full depth vaginal cavity has been created, as there is no need for dilation.

## **What to expect in your recovery?**

### **Bruising and Swelling:**

Moderate pain and swelling are expected for up to seven days after your surgery, and pain medication will be prescribed for you. Swelling may be worse after sitting or standing for a long time.





Labial swelling is normal and will gradually go away three (or more) months after surgery. Swelling may be worse after sitting or standing for a long time. You may have spraying or dribbling when you pee. This should get better in time, as your wounds heal.

The minimal depth vagina does not produce self-lubrication and requires the use of an external lubricant.

### **Scarring:**

Scars will occur as part of the surgery. The surgeon will try to minimise the scars and place them where possible in natural folds, so they are not so visible. You will be advised how to care for your scars as they heal, for up to one year after surgery.


### **Altered sensation/numbness:**

It may take a while to heal, recover, get used to your new body, and adjust to sex and intimacy after gender affirming surgery. You may experience a shooting or tingling sensation as the nerves regrow, which can take three to six (or more) months to return to normal, and sometimes as long as a year. The removal of the testes during surgery may result in a decline in libido for some patients. Although you can participate in and enjoy sexual activity from twelve weeks post-surgery, it is also perfectly natural to want to take things slowly.

### **Pain:**

Pain following surgery is inevitable, and everyone's experience is unique. Patients feel different levels and types of pain for varying lengths of time. Patients may report pain at some surgical areas and none at others. While most pain subsides over the first four to six weeks following each stage, minor discomfort or pain is normal even beyond the normal healing period. It usually subsides within a year after surgery.

While uncommon, it is possible for patients to have long-term chronic pain. Persistent pain — especially a burning or shocking type of pain — can be caused by types of nerve pain at the surgical site. This pain can occur both at the donor sites (thigh and/or forearm) as well as the groin. If you have persistent pain, let your surgical team know. There are both therapy and surgical options available to manage these complications.



# Post operative expectations

## **Possible Complications:**

Our goal is to prevent complications. We do this by using careful surgical techniques, helping you to be in the best health, and ensuring that you have a safe plan for your recovery. However, this is a very complex surgery, and complications are common. We recommend that you prepare yourself – both emotionally and practically – for the possibility of complications. Our team is here to help you with anything that may arise. We do everything we can to ensure your surgery and recovery are as smooth as possible.

## **Infection:**

Infection is a frequent and common risk to many surgeries. An infection occurs when tissues are affected by microorganisms such as bacteria and/or other pathogens. An infection can be treated with antibiotic ointment or with antibiotics taken orally or intravenously.

Infection is possible at the vaginoplasty site. Signs of infection generally include spreading redness, pus discharge, odour, swelling, warmth to touch, red streaking, or fever. If you are concerned about a possible infection, contact our office immediately and your GP or local hospital.

## **Hematoma:**

Hematoma is a collection of blood. Surgical site hematomas occur from a blood vessel that is actively bleeding following a surgery. Small hematomas typically heal on their own. Large hematomas may need to be drained, sometimes the patient may need to return to the operating room to stop the blood vessel from bleeding, however this is rare. Hematomas are most likely to occur within the first few days following surgery.

Remember, you will have a lot of swelling at the surgical site. This is normal.

## **Granulation tissue:**

This is an area of bright red or pink tissue around an incision where healing is not complete. It can sometimes show up as painless bleeding or spotting. It is quite common and can be easily treated during follow up appointments.

## **Wound separation, reopening of wounds and/or slow healing:**

This is one of the more common complications after surgery. The healing process is influenced by a series of factors: oedema, infection, strain on wounds, deficient blood circulation, alcohol use, smoking, poor nutrition, etc. These factors can slow healing and cause the reopening of wounds that require a longer healing period. Generally, this does not affect the final appearance of the operated area. Wound separation occurs when two areas of skin have been stitched together, but the skin edges pull apart after surgery. This typically heals on its own if the suite is kept clean and dry.

## **Bleeding:**

Sudden bleeding can happen. This often can be controlled with local pressure to the area. If local pressure does not control the bleeding, then putting in a urethral catheter may stop the bleeding. Bleeding in the early days after surgery occasionally require further surgery to remove clots and control bleeding and rarely, a blood transfusion is needed.

It is not unusual for localized hematomas (collection of blood) to spontaneously drain through the vagina or suture line. This usually occurs a week or more after surgery.

## **Loss of sensation and pain hypersensitivity:**

Following surgery, you may experience numbness due to swelling and stretching of the tissues. You may have small areas of numbness that takes three to six (or more) months to return to normal. It is possible the perineal area may not regain sensitivity or, on the contrary, some areas may remain hypersensitive and painful. This situation should return to normal after a few months. However, numbness in some areas may persist and the sensation may not return completely. Should this occur, your ability to achieve orgasm could decrease. Loss of clitoris tissue is a remote possibility. You may benefit from a follow-up in physiotherapy for pelvic floor re-education.

## **Hypersensitivity:**

Some patients can experience chronic pain in the vagina, labia and clitoris that may persist and make sexual intercourse difficult. This pain may have to be controlled by medication or with specialist pain management and can impact on daily living. This can affect the sexual response and alter the ability to experience pleasure.

## **Appearance:**

The appearance of the genital area depends on a number of factors such as: the amount of fatty tissue beneath the skin, the elasticity of the skin, and the amount of skin available, which can affect the result. This makes predicting the appearance difficult. With aspects of the appearance and cosmetic result and whilst we can correct this with revision surgery it is not always possible to achieve the results that some patients want.

## **Enlarged and thick scars (keloid):**

The scarring process differs from person to person and scars may become larger and/or thicker on the arm, thigh, phallus, or genital area. Your own scarring history should be a good indication of what you can expect. If your scars are large and/or thick, they can sometimes be corrected with medications such as steroid injections and silicone dressings.

## **Vaginal prolapse:**

Despite all postoperative care and precautions the vagina may prolapse, this is likely to occur in the first three months post operatively, and this may require further surgery for functional or aesthetic reasons.

## **Urinary Problems**

Genital surgery can lead to complications in the urinary tract. When the urinary catheter is removed, the urinary stream may be erratic due to swelling and may take up to six months to recover. It may be weaker and less powerful. You may also experience urinary retention and have difficulty controlling the urge to urinate. This should generally improve within a few months after your procedure.

In shortening the urethra, a stricture (narrowing) may occur, or healing may be asymmetrical, and this will result in difficulty passing urine or the urine stream being at an awkward angle, this may require further surgery if the problem is sufficiently severe.

## **Urinary retention:**

You may have difficulty passing urine (peeing) due to swelling, and may need to have a catheter for five to seven days after surgery

## **Urethral stenosis:**

Occasionally urethral stricture is a result of retained erectile tissue, you may experience intermittent swelling which obstructs the urinary flow. This will require further surgery. This can happen when the urethra (that passes urine) becomes narrow and needs to be dilated or have further surgery.

## **Additional risks:**

Additional risks exist associated with any other major pelvic operation, such as chest infections, Deep Vein Thrombosis and Pulmonary Embolism, post operatively and very rarely can be life threatening.

**Blood clots** (sudden swelling in one leg or difficulty breathing) can form during and after surgery due to prolonged inactivity including being immobilized while under anesthetic. If you notice one of your legs swells suddenly or if you suddenly have a hard time breathing, you may have a blood clot, you should go to the emergency department straight away.

Please see our additional resources, including **Choosing your Support person** and **Fact Sheet for Caregivers**.