Total Pelvic Exenteration

Your doctor has recommended that you have a surgery called a **total pelvic exenteration**. This type of surgery treats recurrent cancer of the cervix, uterus, vagina and vulva. On average, you will stay in the hospital between 5 and 14 days after the surgery.

A total pelvic exenteration includes removal of the bladder, the lower part of the bowel (descending colon and rectum), and the female reproductive organs (including the uterus, ovaries, fallopian tubes and vagina). See Figures 1 and 2 below. The doctor can only do this surgery if the cancer is in the central part of the pelvis and has not spread to lymph nodes or muscles in the pelvic walls.

After surgery, you will no longer be able to have children, and you will not have a menstrual period every month. Also, your surgeon will create a new way for your body to pass urine and stool.

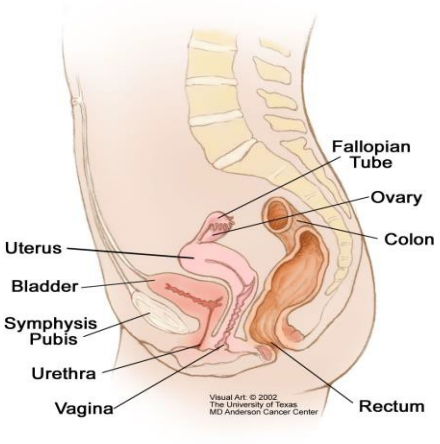

Figure 1. The Pelvis Before Surgery – Side View

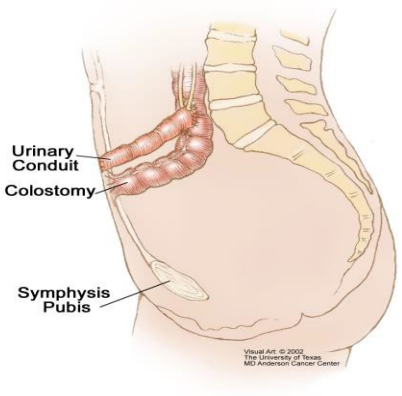

Figure 2. The Pelvis After Surgery – Side View

Stomas

A stoma is a small opening in the abdomen wall that helps rid the body of waste like urine and stool. The doctor creates two stomas during a total pelvic exenteration surgery. One is a colostomy, which drains stool into an odor-free pouch. The other is a urinary diversion, which drains urine. Talk with your doctor to learn more about stomas and your specific case. Some

patients may only need 1 stoma instead of 2. This may depend on whether you are having an anterior or posterior pelvic exenteration.

The thought of living with stomas can be difficult for many patients. You will meet with a specially-trained nurse before your surgery to learn more about living with stomas. This type of nurse is called an enterostomal therapy nurse or a wound ostomy nurse. After the surgery, you and your caregiver will learn how to care for the stomas. It can be helpful to speak with other patients who have had this procedure and learn from their experience. Talk with your care team about connecting with others.

Colostomy

During colostomy surgery, the end or a portion of the colon is brought through an opening created in the abdomen called a stoma. A healthy stoma is red or pink in color and moist. When you wake up from surgery, you will have your first ostomy pouch. On average, your stoma will start working in about 3 to 7 days after surgery.

The pouches are:

- Odor-free
- Made of clear or beige plastic with a cloth backing
- Held in place against the skin with a sticky (adhesive) material
- Available in many different styles

Your wound ostomy nurse will teach you how to care for your stoma, empty and change the pouch, and help you choose the pouch that is best for you.

Ask your care team for more information about a colostomy.

Urinary Diversion (Conduit)

A urinary diversion (conduit) is a way to remove urine from the body when the urinary system is damaged or not working. There are 2 types of urinary conduit: an incontinent conduit and a continent conduit. Both use a piece of the intestine to create a new tube for the urine to travel to the outside of the body. Before your surgery, you and your surgeon will discuss which type of urinary conduit is best for you.

After surgery, patients with conduits may require placement of drainage tubes called **stents** or **catheters**. These tubes give the body time to heal and prevent scar tissue from forming.

Incontinent Conduit

With an incontinent conduit, the surgeon takes 6 to 8 inches of the small or large bowel, and makes it into a conduit to direct the urine to a stoma on the outside of the abdomen.

Like the colostomy, the stoma is red, moist, and shiny. It is covered with a bag that gathers the urine as it drains. This is called a urostomy pouch. Pouches are available in different styles. Your wound ostomy nurse will help you choose the right pouch for you and teach you how to change and empty it. There is no control over the urine flow. It passes freely into the bag day and night. The bag lies flat against the abdomen under clothing and other people cannot see it. The bag has an outlet to release urine into the toilet without having to remove it from the stoma.

Ask your care team for more information about a urostomy.

Advantages	**Disadvantages**
• Requires less surgery time. • Will not need to use a catheter. • Less likely to have problems than with a continent conduit.	• Risk of hernias. A hernia is when tissue or organ pushes through a weak spot in the muscle or abdominal cavity that holds it in place. • Uses a bag to collect urine, which might leak or have an odor. • Risk of infections if the urine backs up into the kidneys. This could cause kidney damage over time.

Continent Conduit

With this type, the doctor uses a piece of the small intestine to create the conduit and a piece of the large intestine to create a pouch inside the body. The pouch stores the urine, and you use a catheter to empty the urine every 4 to 6 hours.

Advantages	**Disadvantages**
• Urine is in the pouch inside the body until you drain it. You do not need a bag. • Risk of urine leaks is small, and you can cover the stoma with a small bandage.	• Surgery takes longer than with an incontinent conduit. • Must use a catheter every 4 to 6 hours and wash it with soap and water after each use. • Risk of infections if the urine backs up into the kidneys. This also increases the risk of a conduit stone forming compared to the incontinent conduit. This could cause kidney damage over time.

Vaginal Reconstruction

Most of the vagina is removed during surgery, so you may choose to have vaginal reconstruction. You will need to decide before surgery. With vaginal reconstruction, the doctor creates a new vagina using muscle from the inner thigh or abdominal wall. A plastic or reconstructive surgeon or your gynecologic oncologist does this part of the surgery.

The benefits to vaginal reconstruction:

- You are able to have sexual intercourse.
- It may keep the intestines from moving out of place and developing scar tissue in the pelvic area.

If you choose not to have vaginal reconstruction, your doctor may not be able to go back and create a vagina later.

Sometimes a condition called **vaginal stenosis** occurs after reconstruction. This is when the vagina tightens and shortens. Sexual intercourse or the use of a dilator often may help prevent or improve this condition.

Also, you may not be able to feel the same sensations, or in some cases, you may have no sensations with the new vagina.

Preparing for Surgery

You will meet with many health care team members. This includes a social worker, counselor, enterostomal therapy nurse and chaplain, if you wish. You will also meet with an anesthesia provider and possibly with a provider from the Center for Reconstructive Surgery.

If you would like, you can choose to speak with a patient that has been through the procedure to learn more about what to expect. This person shares their experience and helps answer questions you may have.

Tests

You will have the following tests before surgery:

- Blood tests within 30 days before surgery, and again within 48 hours before surgery. These are done to determine your blood type and to screen your blood. Blood transfusions are common with this type of surgery.
- Positron emission tomography (PET) and/or computerized tomography (CT) scan to assess whether the cancer has spread.
- Electrocardiogram (ECG) if you are over 40 years old. An ECG is a record of the electrical activity of the heart.

Anesthesia

You will have an appointment with an **anesthesiologist**. This is a doctor who gives anesthetic to patients. Anesthetic is a medicine that makes you fall asleep during surgery. He or she will talk with you about the medicine and review your medical history.

Medicines

Tell the anesthesiologist about all of the medicines you take. This includes over-the-counter medicines, supplements and vitamins. If you take aspirin or anti-platelet medicine or blood thinners, speak with the doctor or your heart doctor (cardiologist) who prescribed this medicine. **Do not** stop this medicine without supervision from your doctor. Stopping this medicine on your own can be dangerous.

Your anesthesiologist may tell you to take your regular medicines with a small amount of water on the day of surgery. Talk with your doctor or nurse if you are not clear about what medicines you should take.

Pre-operative Teaching

You will learn why you need this surgery, how to prepare for it and how to take care of yourself after. You will also learn about the drain that will be in place for a brief time after surgery. You will also receive information about our Enhanced Recovery after Surgery Program.

The Night Before Surgery

- **Do not eat solid food after midnight before your surgery day**. This includes gum and candy.
- **Do not drink alcohol**.
- You may have **clear liquids**, such as water, clear tea (nothing added), black coffee (nothing added), and juice (no pulp) – up until 2 hours before your surgery report time. Stop all liquids at that time. Follow these important instructions to avoid serious medical problems. Your surgery may be cancelled or delayed if instructions are not followed correctly.
- Your anesthesiologist may tell you to take medicines with a small amount of water.
- **Do not smoke after midnight**. If you must smoke after your operation, wait at least 1 day after leaving the hospital, unless your doctor gives you different instructions.
- We encourage you to quit using tobacco products. Programs are available to help you stop smoking. For more information, ask your doctor or nurse.

Skin Care

Preparing your skin for surgery is very important. You will receive instructions on how to clean your skin the night before surgery using a standard anti-bacterial soap.

This helps lower your risk for wound infection. You will shower with a new bar of this soap the night before and with a new bar the morning of surgery.

Do not shave the surgery area (abdomen or vulva) before your surgery. Avoid any scrapes or injury to the skin that could get infected, which could delay your surgery. We will shave or clip hair as needed in the operating room before your surgery.

Packing

Bring the materials about your plan of care, basic toiletries and a robe and slippers with you to the hospital. Leave all valuables at home. The hospital is not responsible for any lost valuables.

Day of Surgery

Your family and friends may stay in the surgery waiting area while you are in the operating room. Your caregiver may come with you to the holding area.

Getting Ready for Surgery

- You will wear a hospital gown. Do not wear undergarments or anything that can come off during surgery, such as dentures or partial plates, eyeglasses or contact lenses, jewelry, bobby pins, hair clips or wigs, or any removable prosthesis, such as an artificial eye or leg.
- You may be given medicine to help you relax.
- You will lie down on a stretcher, and then move you to the holding area (a patient waiting room near the operating room).

In the Holding Area or Operating Room

- Staff will be wearing surgical scrubs, masks, and caps.
- A blood pressure cuff will be placed on your arm or shoulder area.
- An ECG machine will monitor your heart rate.
- An IV will be placed in a vein in your hand or arm. An IV is a small tube inserted into a vein, through which you will receive medicine and fluids.
- A nurse will ask questions to confirm your identity, your surgery site, your consent to do the procedure, and verify any drug allergies.
- An anesthesiologist will talk with you about the anesthetic medicine used to make you to sleep during surgery.
- You will receive the anesthetic through your IV.
- After you are asleep, a tube will be put in your throat to help you breathe.

The Procedure

This surgery usually last 6 to 8 hours. We will monitor you closely and give you medicines and blood transfusions during your surgery, as needed.

We may place a small nasogastric tube (NG tube) in your stomach to drain it and keep it empty. The NG tube will be placed through your nose, down the throat and into the stomach. It is removed after surgery in most patients.

Your surgeon may start the surgery by doing tests on tissue or removing lymph nodes in the area to check for cancer. **If the tests show that the cancer has spread**, the doctor may cancel the surgery. If the tests show that the cancer has not spread, then the surgery will go on.

The doctor will remove organs through a cut (incision) in the lower abdomen. If you decided to have vaginal reconstruction, it will be done as part of the surgery.

Recovery After Surgery

You will wake up in either a recovery area or the intensive care unit (ICU). In some cases, a patient may need to stay in the ICU for more than 1 day.

Pain

You will have some pain for a few days. You will take medicines to treat the different types of pain that are common after surgery, such as inflammation and nerve pain. These medicines prevent inflammation and decrease nerve pain that may occur from the surgery. Nerve pain can be described as shooting, traveling or burning pain. If your pain is not well-controlled, pain medicine (opioid pain relievers) is used as needed to decrease your pain.

Eating and Drinking

When you are able to eat, you will start slowly eating regular foods. This may be as early as the first day after your surgery. Your stomas will already be in place and covered with the bags. The enterostomal therapy nurse will check these and change them regularly.

Drains

You may also have a drain from the vagina, abdomen, and/or conduit to help drain fluid and promote healing. These drains may stay in place for a few days. Overall, you may feel swollen because of all the IV fluids you received during surgery.

Exercises

When your doctor or nurse tells you it is okay, try to sit up on the side of your bed and then stand with help. We will encourage you to walk around your room. It may be painful to get up and

walk the first few times, but the exercise will help you heal. Your nurse will help you. A physical therapist may be asked to help as well.

Do breathing exercises **every hour** while you are awake using the incentive spirometer. The incentive spirometer is a tool to help prevent lung infections. Be sure you get a copy of the handout Breathing Exercise Using the Incentive Spirometer.

Anticoagulation Therapy

With surgery, there is a risk for a condition called **Venous Thromboembolism (VTE)**. VTE is a condition that includes **deep vein thrombosis (DVT)**. DVT's are blood clots that most often form in deep veins of the leg, groin, or arm. They can travel in the body and settle in the lungs. This is known as **pulmonary embolism (PE)**. Together, a DVT and PE are known as a VTE, a dangerous and possibly fatal condition.

You will likely receive daily injections to prevent blood clots from forming. These injections will continue at home for about 1 month after your surgery. Before you are discharged from the hospital, you and your caregiver will learn how to give these injections.

Home Care

When you are ready to leave the hospital, you will still be very weak and will need help from your caregivers, including doing many daily tasks.

Recovery from this surgery is a long process. Do not expect to do everything all at once. Your body and mind will need many months to fully recover.

After Vaginal Reconstruction

You may be instructed not to sit for at least 10 to 14 days if you have had a reconstructed vagina. This helps with the healing process and prevents pressure on the new tissue.

Exercise

You will tire easily. Take breaks and rest often.

- Avoid any strenuous activity, such as heavy housework (vacuuming). Do not lift anything over 10 pounds (4.5 kg) until your doctor approves.
- You may walk a little more each day. This helps with the healing process.

Swelling

You may have some swelling in your genital area. This will go down in time.

Driving

Do not drive until your doctor tells you it is okay. Continue to avoid driving if your incision is painful or if you are taking pain medicine because your reflexes may be slower.

Bathing

Take showers only for the first 14 days. Do not scrub the incision until it has healed completely. Gently wash with soap and water and pat dry with a towel. Do not apply ointments, creams or anything else on the incision unless instructed by your doctor.

Diet

You may eat a normal diet as instructed by your doctor or dietitian.

Clothing

Do not wear tight clothing (girdle or knee-high hose).

Sex

If you have a reconstructed vagina, your doctor will let you know when it is okay to have vaginal sex again. About half of women resume vaginal intercourse after the reconstruction, but most find it more difficult to feel sexual pleasure or have an orgasm than in the past. Sensation in the new vagina may feel different or less intense. However, sensation may improve over time.

If you plan to have vaginal intercourse, it is important to use a lubricant because the reconstructed vagina may not produce enough lubrication. With this type of surgery, most women keep their clitoris and vulva, which can remain sources of sexual pleasure along with the breasts and other parts of the body. Some women find they can learn to enjoy sexuality in new ways.

Medicines

Refer to the Updated Home Medicine List given to you by your health care provider. These are the only medicines your doctor wants you to take.

Emotional Support

You may have many different feelings after this surgery. You may feel sadness, anger or doubt. You may also find yourself tearful and depressed at times. This is normal. Your care team is here to help you through this long recovery process.

Social workers and counselors provide support and counseling to help you and your family cope, adjust, and address concerns, such as social isolation, self-confidence, marriage or relationship

changes, and disability. They can also help connect you with MD Anderson and community resources.

Remember that recovery is a long process. Be patient with yourself and ask for help. Share your fears and worries with your care team. This will help you cope better with these changes.

Follow-up Care

You will have regular follow-up visits with your care team. Contact them if you have any problems or questions.

When to Go to the Hospital Emergency Room

You should feel better each day after discharge from the hospital. There are some symptoms that require **urgent** attention.

Go to the nearest hospital emergency room (ER) right away if you have any of these symptoms:

- Fever of 101°F (38.3°C) or higher and/or shaking chills
- Chest pain or difficulty breathing
- Fainting or become confused
- Pain that worsens and does not get better with pain medicine
- Wounds that break open and/or drain pus
- Heavy vaginal bleeding (soaking one maxi pad within an hour)
- Not able to drink or eat
- Vomit more than once
- Not able to get up and walk around for short periods of time

These symptoms are a general guideline. Go to the nearest hospital emergency room **right away** if you have any other urgent symptoms. **Call 911** if you do not have immediate transportation to the ER.

Contact Information

For **any urgent medical issues**, go to the nearest hospital ER **right away.**

For **non-urgent medical issues only**, after business hours or on the weekends, contact the on-call doctor at 904-202-7300 and ask or the GYN Oncology Physician.