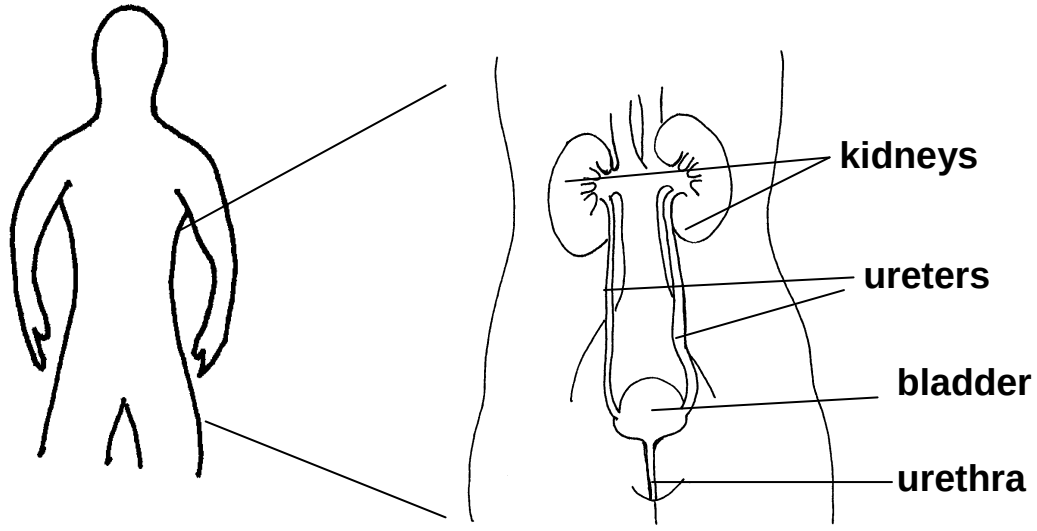
St. Joseph's Healthcare Hamilton

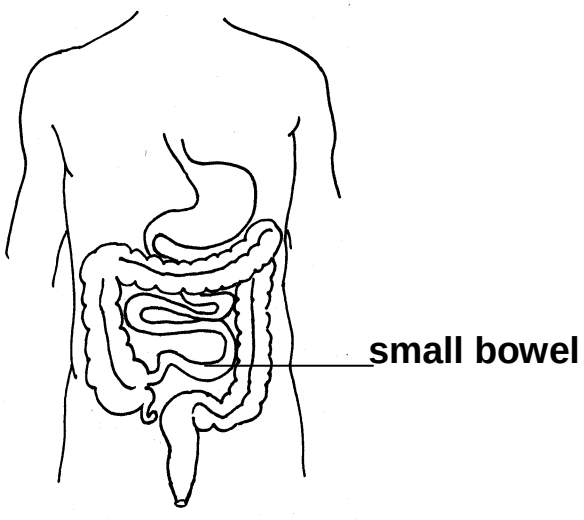
Orthotopic Bladder Reconstruction Surgery
~ Neobladder Surgery ~

Here are some words and pictures to help you understand this surgery:

Kidney	• An organ in the body that makes urine. Most people have 2 kidneys.
Ureter	• A thin tube that carries urine from the kidney to the bladder.
Bladder	• A hollow muscle that holds urine
Urethra	• A thin tube that allows urine to flow out of your body.
Small bowel	• Food travels from the stomach into the small bowel. As the food moves along it is broken into tiny parts. The parts your body needs are picked up by the blood. It is also called the small intestine.



There are many layers in your abdomen. Here is a picture of the small bowel:



What does orthotopic neobladder mean?

- **orthotopic** means ‘in the same place’
- **neobladder** means ‘new bladder’

During this procedure a new bladder made out of the small bowel placed in the same location as the old bladder.

Before Surgery

Surgeon’s office visit and consent

In your surgeon’s office, your surgeon will tell you about the surgery and the risks and benefits. Make sure you understand all of the risks and benefits of the surgery before you sign the consent form.

Pre-Admission Assessment Clinic

You will come to the Pre-Admission Assessment Clinic 1 to 2 weeks before surgery to have any blood work, x-rays and other tests your doctor orders. Bring a list of your current medications so the nurses and doctor can see what you are taking.

If you take medications regularly, the nurse or anesthetist in the Pre-Admission Clinic will tell you which medications you can take and which ones to stop before surgery.

The nurse will tell you when to stop eating and drinking before your surgery. If you take medication each morning, the nurse will tell you if you should take it the morning of surgery. You will also be told what time to come to the hospital on the day of your surgery.

Your doctor may want you to have only clear fluids 2 to 3 days before your surgery. Clear fluids include any liquid you can see through easily such as:

- water, apple juice, clear sodas or pop
- broth or consommé soup
- jello, popsicles or freezies
- clear tea or coffee

✕ Do not drink milk, have any milk products and/or eat any solid foods during this time.

An Enterostomal (ET) nurse may see you in this clinic to assess your abdomen for an ileal conduit in case the neobladder surgery is not possible.

Day Before Surgery

You will need to have an empty bowel before surgery. The day before surgery, follow the instructions that the nurse in the Pre-Admission Assessment Clinic gives you.The bowel preparation will make you have enough bowel movements to clean out your bowel before surgery.

Taking the bowel preparation the correct way is very important to decrease the risk of infection after surgery.

Day of Surgery

You will come to the Day Surgery Unit to get ready. You will be called into the unit by yourself.

The nurses will ask you to go to the bathroom and put a hospital gown on. You will then lie in a bed and a nurse will ask you some questions.

Your nurse will start an intravenous in a vein in your arm. This is a thin tube used to give you fluids and medications.

You may get a medication to help you relax.

When you are ready your nurse will put the bed rails up and ask your support person to join you until you go to the operating room.

During Surgery

You will have a general anesthetic. This means you are asleep during the 6 to 8 hour operation.

The bladder is removed. Then the surgeon removes a small piece of the small bowel. The bowel above and below this area are connected and the function of the small bowel does not change.

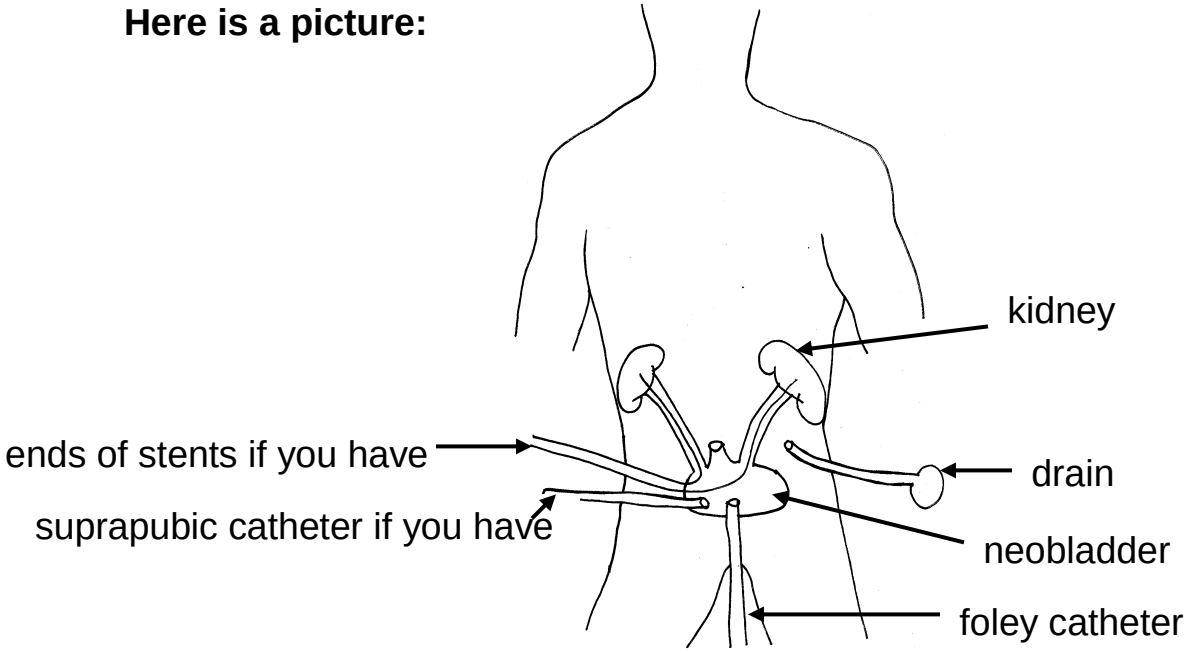
The piece of the small bowel is formed into the new reservoir called a neobladder. Each ureter is attached to the neobladder. Each ureter contains a tube called a stent where it connects to the neobladder. The stent makes sure each ureter stays open and promotes healing. The urethra is attached to the other end of the neobladder.

A continence mechanism is surgically established to store your urine and prevent leakage. The pouch collects urine and prevents urinary reflux (backflow) to your kidneys. With time, the pouch's capacity enlarges. This increases the volume of urine it can hold. It reaches its permanent size about 4 months after surgery.

Urine then flows from the kidneys, through the stented ureters, into the neobladder. A thin hollow tube called a foley catheter is put into the urethra to drain urine. This helps the neobladder heal.

Sometimes, another tube called a suprapubic catheter may be put into the neobladder and comes out of a small incision on your abdomen. This also drains urine to help the neobladder heal. The 2 stents come out of a small opening beside the suprapubic catheter.

Here is a picture:



After Surgery

Recovery

After surgery, you will go the recovery room. You will be watched closely until you are fully awake. If you feel pain or have an upset stomach, the nurse will give you medication to help.

When you are stable, you will move to an inpatient room. Here, the nurses will monitor your blood pressure, breathing, heart rate, incisions, pain, tubes, drains and general recovery from surgery.

As you recover, members of the health care team will help you learn how to look after yourself.

Sometimes, after surgery a patient and/or support person like to have the surgery explained again. You can ask your surgeon or resident doctor to review it if needed.

Pain and Discomfort

You may have a Patient Controlled Analgesia (PCA) pump to control pain and discomfort. The machine is attached to an IV tube that goes into a vein in your arm. When you have pain, you can push a button on the machine. The machine sends a dose of pain medication into your body. You may use a PCA pump for a few days. Then, you can have pain medication by mouth.

You may have an epidural pump to control pain and discomfort. An epidural means the doctor puts a small tube called a catheter in your back during your operation. A machine is attached to the tube and you receive doses of pain medication constantly in controlled amounts. You may use this pump for a few days and then begin pain medication by mouth.

Other ways to relieve pain and discomfort are:

- drinking warm fluids
- walking
- any method of relaxation, such as listening to music or deep breathing

Pain should be less each day. If your pain does not decrease, talk to a member of the health care team.

Tubes and Drains

You may have some or all of the following tubes and drains:

Intravenous Tube

The IV will be used to give you fluids and medications until you are able to drink safely. Members of the health care team will listen to your abdomen to check for bowel sounds. You will be asked if you are passing gas as well. When this happens the IV will be taken out.

Jackson Pratt Drain

This is a special tube in your abdomen that drains fluid from the surgery. It is taken out when drainage slows down.

Catheters

As described during surgery, these drain urine while the new bladder heals.

The neobladder makes a lot of mucous that can block the catheters. Your nurses will irrigate the catheters to keep them open. This means that about every 6 to 8 hours a nurse will put 40 to 60 cc of a fluid called normal saline into each tube and draw this fluid out again. This procedure is called flushing.

Catheters are left in place for about 3 weeks after surgery to allow swelling to decrease, prevent over distention of the pouch and pressure on internal suture lines and to enhance healing of the pouch and valve(s).

During your hospital stay, the catheters are first cared for by your surgical team, ET nurse, unit nurses and members of your health care team caring for you. They will involve you in the care as soon as you are ready so you will be comfortable with caring for yourself by the time your go home.

Stents (you may or may not have)

Each stent is held in place with a stitch. The stitch is cut and each stent is gently taken out at your follow-up apointment.

Suprapubic Catheter (you may or may not have)

This catheter is large and rigid and comes out of your lower left or right abdomen. It is inserted into the top of the neobladder. It is used to flush the neobladder with fluid to rinse away the mucous that accumulates. The mucous comes from the small bowel the pouch is made out of and will decrease in time.

Leg Compression Stockings

In the recovery area, compression devices will be put on your legs to help with circulation and prevent blood clots. As you walk more and more after surgery, these will be needed less and less and then removed.

Gas and Bowel Movements

A few days after your surgery, you should begin to pass gas through your rectum. It may be several days before you have a bowel movement.

You should not strain to have a bowel movement. Straining increases the pressure on your incision. You can prevent straining by having soft bowel movements. Your doctor may order medication to prevent or treat constipation. You can also help prevent constipation by:

- eating foods high in fibre
- drinking extra fluids
- exercising regularly

Talk to your surgeon or ask to see a dietitian about the amount of fluid to drink if you have kidney or heart problems.

Checking Skin and Incisions

You will have a dressing or special tape over your incisions. There may be stitches or staples underneath. Your nurses and doctor will check your skin, incisions and the dressings daily. They are checking for infection and will teach you what to look for.

Signs of infection include:

- increased swelling, redness, and/or temperature
- discharge from area
- pain that does not get better

Diet and Nutrition

Your doctor or nurse will tell you when it is safe for you to eat and drink after surgery. Usually you start with clear fluids and gradually increase your diet. It may take several days before you can return to your regular diet.

When you are allowed to eat solid foods, eat foods high in fibre and drink fluids to prevent constipation. Foods high in fibre are whole grain cereals and bread, bran, fruits and vegetables.

Activity and Exercise

After surgery, it is very important for you to do deep breathing, coughing and circulation exercises each hour you are awake.

You need to do these exercises even though it may be uncomfortable. Your nurse or physiotherapist can show you how to do these exercises. When you do these exercises, place a pillow or rolled up blanket over your incision. This will give extra support to your incision and prevent straining.

You will get out of bed on the day of your surgery. Ask your nurse to help you the first time you get up. As you feel stronger, you will be able to take longer walks.

Moving and walking as soon as possible after surgery will:

- keep your muscles strong
- prevent breathing problems
- help your blood move around your body to prevent blood clots
- help your bowels become active and pass gas

CCAC Case Manager

Before you leave the hospital, the Community Care Access Centre (CCAC) Case Manager will visit to talk about going home. You will be having a visiting nurse come to your home to help you with your care and follow your recovery. The CCAC Manager will also give you any supplies you need to take home.

At Home After Surgery

CCAC Visiting Nurse

You will have a Community Care Access Centre (CCAC) visiting nurse follow you at home. You will go home with a catheter in your urethra. You may also have a suprapubic catheter that is pouched with an ostomy appliance or connected to a urine drainage bag.

The nurse will work with you the make sure the tubes are working well and teach you how to keep them running. Each catheter will be attached to a collection bag and you will empty these and keep the bags clean.

The CCAC nurse will check your incisions and teach you what you need to know as you heal and recover. The nurse contacts members of the health care team when needed to talk about any problems or concerns you have.

Managing Pain and Discomfort

Before you go home you will be given a prescription for pain control. Take this when needed as directed by your doctor. Your pain or discomfort should be less each day.

Catheter Care

You will continue to do irrigations at home. You need to be able to do these on your own. Irrigations are done to prevent mucous from clogging the tubes and building up in the lining of the pouch.

Each catheter needs to be irrigated every 6 to 8 hours even during the night. Your doctor will give you a schedule to follow. However:

- ❑ If you have a suprapubic and a foley catheter, irrigate the suprapubic catheter the first time, then the foley the next time, then the suprapubic and so on.
- ❑ If you have a foley catheter only, irrigate the foley each time.

Steps to irrigate a catheter (follow these steps for each catheter):

1. Gather supplies:
   - ❑ normal saline solution
   - ❑ container
   - ❑ catheter tip syringe
2. Pour normal saline into the container.
3. Draw up 50 to 60 cc of solution into the syringe.
4. Disconnect the catheter from the drainage bag.
5. Gently push the solution into the catheter.
6. Gently pull back on the syringe to withdraw the solution into the syringe or allow if to drain freely into the foley or toilet
7. Reconnect the catheter to the drainage bag.

Diet and Nutrition

You can eat your normal diet when you go home.

Activity

You can do moderate exercise like walking. Avoid contact sports. Do not do any strenuous activities like shovelling snow, raking leaves, vacuuming or mowing the lawn. Do not do any heavy lifting for 6 to 8 weeks. Heavy lifting is lifting more than 10 pounds or 4 kilograms. This weight is like a full grocery bag, a small suitcase or a small baby.

You can slowly resume your normal activities. If you have questions or concerns about your activity, ask your doctor.

Pelvic Muscle Exercises

Pelvic muscle exercises, also called pelvic floor muscle exercises. These muscles allow you to control your neobladder function. You may learn to do these before surgery. After surgery, you will be told when you can start doing them again. Do not begin to do pelvic muscle exercises until your doctor or nurse tells you to. It is important for the surgery area to heal first.

Both men and women do the exercises the same way. To locate the muscles, it is best to sit down. Try and squeeze the muscles that prevent you from passing rectal gas. Do not tighten your abdominal muscles, buttocks or hold your breath.

To do one pelvic muscle exercise, follow these steps:

1. Squeeze the pelvic muscle.
2. Hold and count slowly ... 1 and 2 and 3
3. Relax for 1 and 2 and 3.

- There are 10 exercises in 1 set.
- Do 1 set of exercises 3 times a day.
- You can start with doing 5 pelvic muscle exercises 3 times a day and work up to doing a full set 3 times a day.

Pelvic muscle exercises can be done over a ½ hour or throughout the day. As you get better at doing these exercises and the pelvic muscles strengthen, you can count to 5 and then relax for a count of 5.

The most important thing to remember is that you must relax your muscles for the same amount of time as you squeeze. As you get used to doing these exercises, you can do them any time, any place and in any position.

Return to Work

When you return to work will depend on the type of work you do. Please talk about this with your doctor.

Most people return to work in 6 to 8 weeks.

Sexual Function

This surgery may result in changes in sexuality. Most men will have erectile dysfunction. Many treatment options are available and you should talk about these with your surgeon.

Women will also have some changes in sexual function although it is generally limited to a shorter vaginal canal.

However, sexuality and intimacy involves more than just intercourse and much of this can still be enjoyed.

Follow-up with Surgeon and X-ray

Before you leave the hospital, the nurse reminds you to call and make a follow up appointment with your doctor.

Your doctor wants to see you 1 to 2 weeks after you go home.

When will I be able to void on my own?

After your surgeon is satisfied that your neobladder has healed, the foley catheter coming out of the urethra if you have one after surgery.

As your neobladder fills, you will get a feeling of fullness. You will learn to bear down with your muscles to void.

Your doctor will give you a schedule about how often to:

- clamp the suprapubic catheter and let the neobladder fill **and**
- unclamp and let the noebladder empty **and**
- record the amount you empty

When your surgeon is happy with how well you are voiding, the suprapubic catheter is removed. During this visit you will have a pouchogram to assess healing. This is an x-ray where special fluid is put into your pouch and pictures taken to see if the pouch is healed and is working well.

The neobladder slowly stretches over time to accommodate an increase in volume.

There is a chance that you may not be able to empty your neobladder completely. Your surgeon will help decide if you need to do intermittent self-catheterizations. We have a book you can ask for that shows how to do this step-by-step.

There is also a chance that you may have urinary incontinence after the surgery. This occurs more often at night. Your surgeon will help you manage this problem if you have it. You can ask to be referred to a continence nurse advisor for help.

Call your doctor or the urologist on-call if you have:

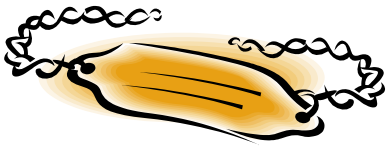
- increased swelling, redness and/or discharge from any incision
- urine draining from incision or drain sites
- increased temperature – over 38°C or 100°F
- cloudy, foul smelling urine
- drastic change in colour of urine; large amount of bright red bleeding
- significant decrease in the amount of urine from the catheters or stents
- no urine produced in 3 hours or more
- plugged catheter that does not drain, no return of fluid when irrigating
- pain that does not get better; new abdominal and/or back pain
- increase in size of your abdomen
- a catheter or stent comes completely out

Contact your doctor if you have signs of a urinary tract infection:

- dark, cloudy urine
- strong smelling urine
- back pain where your kidneys are
- fever
- loss of appetite
- nausea or vomiting
- cannot empty neobladder for 3 or 4 hours
- foley catheter will not drain (blocked)

If you have questions or concerns call your doctor.

Medical Alert Identification



It is a good idea to wear medical alert identification.

It should have written: Reconstructed Neobladder.

Resources

Bladder Cancer Canada

- Call: 1-866-674-8889
- Website: www.info@bladdercancercanada.org

Canadian Association of Enterostomal Therapists (CAET)

- Toll free: 888-739-5072
- Website: www.caet.ca
- E-mail: caet.ca

Canadian Cancer Society

- Toll-free: 1-888-939-3333
- Website: www.cancer.ca
- E-mail: ccs@cancer.ca

The United Ostomy Association of Canada (UOAC)

- Toll free: 1-888-969-9698
- Website: www.ostomycanada.ca
- E-mail: info@ostomycanada.ca

Wellwood: www.wellwood.on.ca

- A community-based, non-profit organization which provides information, supportive care programs and peer support to people who have received a diagnosis of cancer, their families and caregivers

Juravinski Cancer Centre Site	**Community Site**
711 Concession Street, Level 1, Hamilton Ontario Telephone: 905-389-5884	501 Sanatorium Road Hamilton, Ontario Telephone: 905-667-8870

Notes:

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