



PATIENT INFORMATION

Transurethral Resection of the Prostate (TURP)

*Please pack this booklet with your belongings
and bring it with you to the hospital
on the day of your surgery.*

THE OTTAWA HOSPITAL

Disclaimer

This is general information developed by The Ottawa Hospital. It is not intended to replace the advice of a qualified health-care provider. Please consult your own personal physician who will be able to determine if this information is appropriate for your specific situation.

Table of Contents

Introduction	1
Clinical Pathway – Transurethral Resection of the Prostate	2
 Prostate Surgery	
The Prostate.	3
Transurethral Prostate Surgery.	3
Laser Prostate Surgery	4
 Preparing For Surgery	4
 After Surgery	
Urinary Catheter.	5
Intravenous (IV).	6
Pain Management.	6
Deep Breathing and Coughing	6
Ankle Exercises	7
Moving and Positioning	7
 Going Home	
Discharge Planning	7
At Home	7
Care of the Catheter	8
Catheter Drainage Bags	9
Follow-Up	11
Resources	12



Introduction

Welcome to The Ottawa Hospital. You are being admitted for a Transurethral Resection of the Prostate (TURP). Your hospital stay is planned for two days. You will be discharged on the day after your surgery. This booklet will tell you how to prepare for surgery, your hospital stay and care at home after surgery.

The health-care team (doctors, nurses and other team members) have put together a Clinical Pathway so you will know what will happen to you on a day-to-day basis. This clinical pathway is on page 2 of this booklet. The health-care team will help you with your recovery after surgery.

Please read and bring this booklet to the hospital. The health-care team members will refer to this book during your hospital stay.

Clinical Pathway – Transurethral Resection of the Prostate			
	Pre-Admission	Day of Admission / Day of Surgery	Post-Op Day 1 Discharge Day
Tests	<ul style="list-style-type: none"> • Blood test • Other tests if ordered, e.g. urine, ECG, chest x-ray 		
Treatments		<ul style="list-style-type: none"> • Intravenous (IV) • Urinary catheter • Bladder irrigations 	<ul style="list-style-type: none"> • Removal of IV • Removal of urinary catheter • Reinsertion of urinary catheter (if applicable)
Medications		<ul style="list-style-type: none"> • Pain medication • Other medication as needed 	<ul style="list-style-type: none"> • Pain medication • Other medication as needed
Activity		<p>After surgery:</p> <ul style="list-style-type: none"> • Bedrest x 4 hours • Deep breathing and coughing • Leg exercises <p>4 hours after surgery:</p> <ul style="list-style-type: none"> • Additional activity as tolerated • Walk in hall with minimal assistance by end of the day 	<ul style="list-style-type: none"> • Independent activity
Nutrition		<p>Before surgery:</p> <ul style="list-style-type: none"> • Nothing by mouth <p>After surgery:</p> <ul style="list-style-type: none"> • Sips of clear fluid • Regular diet later in day 	<ul style="list-style-type: none"> • Drink plenty of fluids unless you are told not to • Regular diet
Patient Teaching/ Discharge Planning	<ul style="list-style-type: none"> • Review of clinical pathway instructions and patient education booklet • Discuss discharge plans 	<ul style="list-style-type: none"> • Pain management • Activity • Breathing exercises • Positioning • Nutrition 	<ul style="list-style-type: none"> • Fluid intake • Activity • Medication • Urine • Discharge instructions • Prescription and follow-up appointment • Urinary catheter (if applicable) • Discharge



Prostate Surgery

The Prostate

Urine forms in the kidneys, then travels down the ureters and is stored in the bladder. When you urinate, the bladder muscles squeeze together, thereby pushing the urine through the tube called the urethra and out the urethral opening in the penis.

Sperm are produced in the testes and travel up a tube called the vas deferens to the prostate gland. The prostate is a walnut-sized gland that surrounds the urethra like a donut just below the bladder. The prostate gland manufactures an alkaline fluid which mixes with the sperm. During ejaculation this semen is moved down the urethra and out the penis.

Enlargement of the prostate gland occurs in some men over 50. The reason for this is not fully understood, however, there is evidence that it is due to the natural aging process and hormones. Sometimes the enlarged prostate compresses the urethra and obstructs the flow of urine. The bladder, therefore, cannot empty completely and the following symptoms may develop:

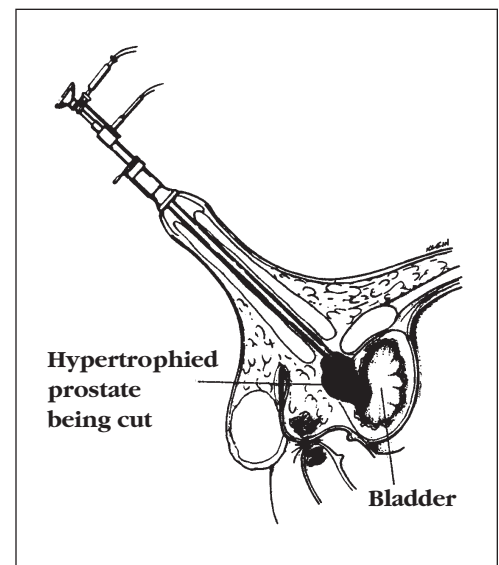
- The urge to urinate frequently, especially at night;
- Difficulty in starting the urinary stream;
- A weaker urine stream than normal or an unsteady stream;
- If untreated, the urine can cause back pressure on the ureters and cause damage to the kidneys.

Surgery is one of the options for treatment of benign prostatic hyperplasia (BPH). The most common type of surgery is a transurethral resection of the prostate (TURP).

Transurethral Prostate Surgery

Spinal anesthetic is commonly used for transurethral prostate surgery. With a spinal anesthetic, freezing is injected into the liquid surrounding the nerves in your back. After the freezing, you will not feel anything from your waist to your toes, and you will be unable to voluntarily move your legs for several hours.

During the surgery, a tube with a special light is inserted down the urethra to the prostate gland. At the end of the tube is a wire loop that the surgeon uses to cut away the inside of the gland leaving the outer capsule or shell of the gland intact, much like removing meat from a walnut,



leaving the shell behind. All the tissue that is removed from the prostate gland is sent to the laboratory to be examined under a microscope by a pathologist. The surgery takes up to one hour. After surgery, you will be taken to the Post Anesthetic Care Unit (PACU). After a couple of hours in the PACU, you will be brought by stretcher to your hospital room.

Laser Prostate Surgery

During the surgery, a laser fiber is passed through the urethra into the prostate. The laser energy destroys prostate tissue and causes shrinkage. As with TURP, this surgery requires anesthesia and a hospital stay, but allows for a quicker recovery time. Newer procedures that use laser technology can be performed on an outpatient basis. If you meet the criteria, your surgeon will discuss this option with you.



Preparing For Surgery

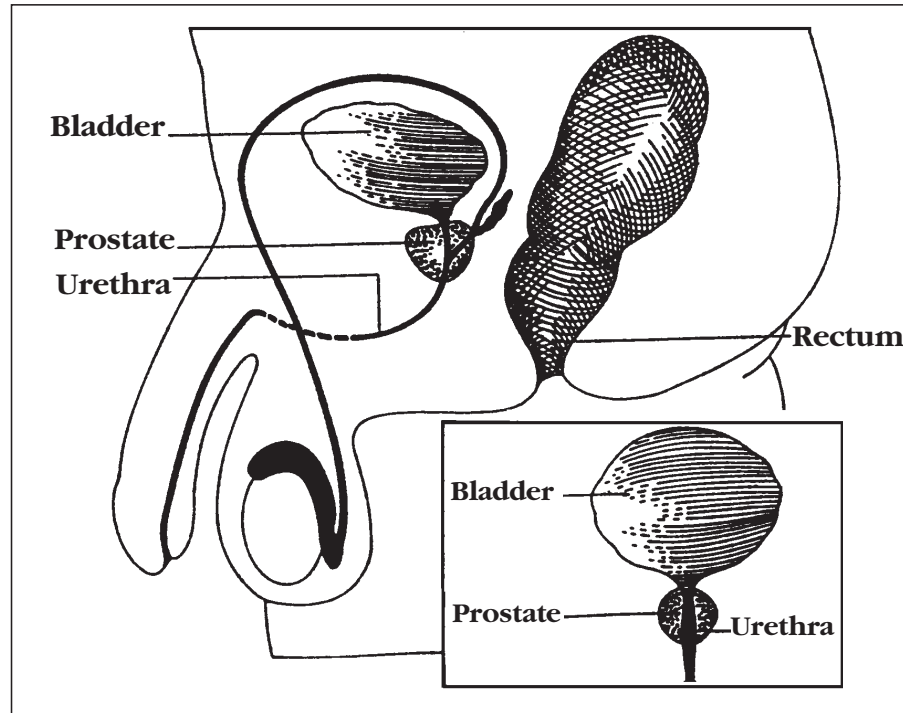
The following is a list of helpful points to consider:

- Make arrangements for help in the home after discharge (if needed), before coming into the hospital.
- Refer to your clinical pathway so you and your family know what to expect on a daily basis.

In preparation for surgery:

- Blood tests, urine tests, electrocardiogram (ECG) and chest x-ray may be done, if ordered by your doctor.
- You will receive instructions about your surgery and care. Please read this booklet before your surgery.
- Do not eat or drink from midnight on the night before your surgery.
- If you have been instructed to take your usual medication (for example, your blood pressure pills or heart pills) on the morning of surgery, you may use only a sip of water.
- Do not smoke or drink any alcoholic beverages within 24 hours before surgery.

Anatomy of the Prostate



After Surgery

Urinary Catheter

You will have a tube (urinary catheter) placed down the urethra and into your bladder to drain urine. The catheter is attached to a bag of irrigation fluid in addition to another bag that collects the used irrigation fluid and urine. The nurse will frequently let some irrigation fluid flow through the catheter into your bladder and then let it drain out again. These intermittent irrigations help to rinse out any blood that has collected in the bladder, therefore, do not be surprised if the fluid looks bloody in the drainage bag. The catheter may create the urge to urinate and you may experience discomfort (spasm) in your abdomen. Inform your nurse if you experience any discomfort or have concerns.

The catheter will be removed the day after your surgery. After the catheter is removed, the urine may be blood tinged and you may experience temporary burning, frequency, an urgency to void, or dribbling. Inform your urologist or nurse if you are having problems passing your urine. After surgery, it is important to drink plenty of fluids during the day, e.g. eight glasses per day.

You may be going home with a catheter if you were unable to void. This catheter will be reinserted by the nurse and will stay in place for seven days. It will be removed by the urologist at your follow-up appointment.

Intravenous (IV)

You will have an IV to replace your fluids until you are able to drink and eat well. Do not pull on the IV tubing. When you are walking, push the IV pole using your hand that does not have the IV.

Pain Management

After surgery, the health-care team wants to make your recovery as pain free as possible. Pain is personal. The amount or type of pain you feel may not be the same as others feel, even for those who have had the same operation.

During your surgery you will receive medication through a small injection in your lower back (spinal anesthetic) to help control pain. After your surgery and for a couple of days you may take pain medication by mouth for any discomfort. You may also receive a suppository placed in your rectum for any spasms you experience while the catheter remains in your bladder.

Deep Breathing and Coughing

Air enters the nose and mouth, travels down the windpipe (trachea) into the large airways (bronchi). As oxygen moves into the lungs, the airways get smaller and smaller like branches on a tree. Along the branches are tiny air sacs called alveoli. This is where oxygen moves into the bloodstream and is carried to the cells. Normally the alveoli stay open because we tend to take large breaths. Because of surgical procedures, anesthesia, pain, or not moving around as much, we tend to take smaller breaths which may cause the alveoli to close. Deep breathing and coughing exercises after surgery will help keep your lungs healthy.

Deep breathing exercises work best when you are sitting up in a chair or on the side of the bed.

- Take a deep breath in through your nose. Hold for five seconds. Breathe out through your mouth slowly.
- Repeat this exercise ten times each hour while you are awake and until your activity level increases.

Coughing exercises help to loosen any secretions that may be in your lungs. These can be done after your ten deep breaths.

To produce an effective cough:

- Take a deep breath and cough.

Ankle Exercises

These exercises help the blood circulate in your legs while you are less mobile. Do these ten times each hour, while you are awake and until your activity level increases.

With your legs flat on the bed:

- Point your feet toward your body.
- Point your feet away from your body.
- Move your ankles in a circle clockwise and counter-clockwise.

Moving and Positioning

While you are in bed, it is important to move and reposition yourself every two hours while awake.



Going Home

Discharge Planning

When you are discharged from hospital, you may need general help at home. It is best to make arrangements before being admitted to the hospital. Discuss your discharge plans with your nurse. Arrange for someone to pick you up as early as 10 a.m. on the day of discharge. Verify discharge time with your nurse. You will receive a follow-up appointment to see your urologist in about one week if you have a urinary catheter, and if not, in about four to six weeks. You may also receive a prescription for medication.

Be sure you understand about:

- Medications
- Activity
- Urinary catheter (if applicable)
- Any restrictions
- When to call the doctor
- Follow-up visit

At Home

- Take frequent rest periods as necessary. Let your body be your guide.
- Avoid strenuous exercise, including heavy lifting for the first two weeks (e.g. shoveling, digging, lifting greater than 7 kg or 15 lbs., climbing more than two flights of stairs).
- Gradually resume your regular activities (light housekeeping, exercise) after two weeks. Discuss any specific concerns with your urologist.

- Avoid long car rides or long periods of sitting until after you have seen your urologist.
- You may resume sexual activities in three to four weeks as discussed with your urologist. Your sexual activity is likely to be unaffected; however you may notice a change in that semen that is usually ejaculated out through the urethra may now pass backwards into the bladder. The next time that you urinate after an ejaculation, the urine may appear milky coloured. This is harmless. This retrograde ejaculation does not affect your sexual performance; however, it may make you sterile. Normal ejaculation may return in some individuals after a period of time.
- Drink plenty of fluids, e.g. eight glasses per day.
- Eat well balanced meals with high fibre to avoid constipation, (fruits, vegetables, whole grain products).
- Avoid straining when having a bowel movement.
- Observe your urine. If you notice blood in your urine, rest and drink plenty of fluids. You may experience some leakage of urine for a period of time following catheter removal. This is usually temporary. There are various ways to manage the urine leakage including pelvic exercises and absorbent pads. Should you continue to experience urine leakage at home, it is important to have an assessment to determine the best treatment for you. Discuss any concerns with your urologist.

Care of the Catheter

You may be going home with a urinary catheter (tube) to drain urine out of your bladder. The catheter will be removed in about one week. As a result of having a catheter in your bladder, you may experience discomfort from contractions, since the bladder wall is sometimes irritated by this tube. It is common to feel a false sense of bladder fullness, and an urge to urinate. This sensation is normal, and medications are available to relieve these symptoms. In order to manage the catheter at home, you will need to understand catheter care and signs of urinary infection and bladder distention. Proper cleaning of the urinary catheter is essential in preventing urinary tract (bladder) infections and skin breakdown.

Cleaning the Catheter Exit Site

Wash your hands with soap and water. Using a wet face-cloth and soap, clean the catheter and skin around the catheter twice a day and as necessary. The catheter must be secured to the leg or lower abdomen using tape or a catheter strap.

Preventing Infection

While the catheter is in place, it is important to observe the urine for colour, amount, odour and sediment. Normally, urine is a pale yellow to light amber color, with an inoffensive odour. A small amount of sediment may or may not be present in the urine. Also, a small amount of discharge or leakage from around the catheter may be present.

It is recommended that you drink one to two litres of fluid daily as this will help keep your urine clear. A urinary catheter might lead to urinary tract infection. If you suspect an infection in your bladder, contact your doctor immediately and increase fluid intake. If your doctor gives you a prescription for antibiotics, remember to take your antibiotics as ordered and complete the prescription.

Signs of urinary tract/bladder infection may include:

- Fever (temperature greater than 38.5° C/101.3° F)
- Chills
- Increase in mucous and/or sediment in urine, cloudy urine
- Dull pain over the kidney area, lower back pain

Bladder Distention

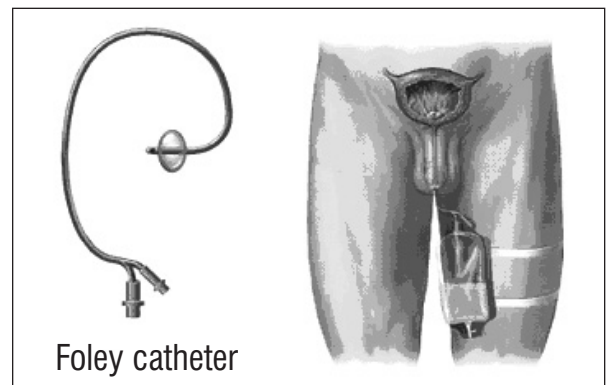
A catheter can occasionally block. When this happens, urine will not be able to drain and the bladder will become distended (over-full). If any of these signs of distention occur, contact your doctor.

Signs of distention may include:

- Full feeling in the bladder
- No urine drainage
- Chills/perspiration
- Leakage around the catheter, with little or no urine coming through the catheter tubing.

Catheter Drainage Bags

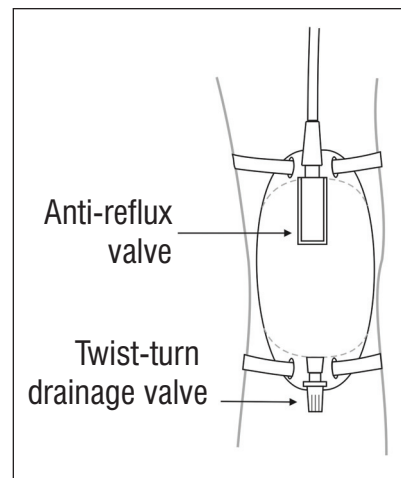
In addition to understanding how to care for your urinary catheter, you will also need to become comfortable with a leg (day) bag and an overnight drainage bag. A leg bag is a smaller bag. It attaches securely to your leg and can be easily hidden beneath your clothing. It should be used when you are in an upright position, e.g. during the day and when you go out.



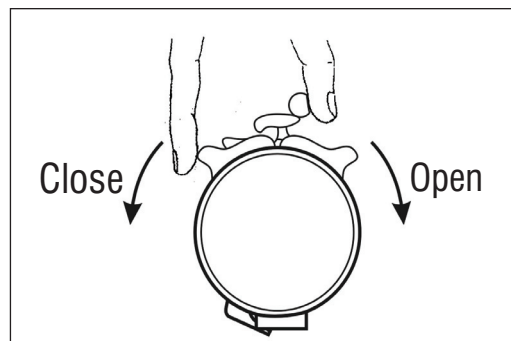
Always keep the drainage bag below the level of the bladder.

To disconnect or change your leg bag follow these steps:

1. Place rubber straps through the holes in the bag on the thigh with the end marked up facing up.
2. Secure the leg straps on the thigh at a comfortable level, ensuring that the straps are on the underside of the bag (straps on the topside of the bag may inhibit flow of urine). The bag should be placed snugly.
3. Wash your hands prior to attaching the bag to the catheter.
4. Remove the protective cap from the top stem. Wipe the stem with an alcohol swab.
5. Firmly push the catheter over the stem. Place the protective cap on the stem of the night drainage bag for storage.
6. To empty the bag, position the twist-turn drainage valve over the toilet and twist valve counter-clockwise to drain bag.
7. To close, move the valve counter clockwise to closed position.
8. Clean the overnight drainage bag.



An *overnight drainage bag* is a larger bag and should be used during the night. It attaches to the catheter in the same manner as the leg bag. At night, attach the bag to the bed frame or sideboard with the hook or cord located on the rear of the bag. To empty the overnight drainage bag, open the drain spout by moving the lever clockwise. To close, move counter-clockwise until the lever snaps into the closed position.



Cleaning the drainage bags

Follow these instructions to care for either your leg bag or your night drainage bag:

1. Drainage bags must be cleaned daily with either:
 - a. a household bleach solution diluted in a 1:10 ratio (one part bleach to ten parts tap water)
 - b. a vinegar solution (one part vinegar to three parts tap water).
2. Wash your hands with soap and water.
3. Before changing the bag, clean the junction between the catheter and the bag with an alcohol swab or cotton balls and alcohol.
4. Disconnect the used bag.

5. Clean the connection of the clean bag with an alcohol swab or cotton ball with alcohol.
6. Connect the clean bag to your catheter and secure it to your leg.
7. Rinse the used bag twice with water by agitating the water vigorously and let drain.
8. Fill the bag with the 150mL of the prepared solution and agitate vigorously. Drain the bag and allow to air dry. If you are using the bleach solution, wear protective gloves. Skin irritation can occur if bleach is allowed to contact with skin surface.
9. Wash your hands with soap and water.

Special note:

You may use both types of drainage bags for up to one month. After one month, you will need new bags. You can buy new bags at most health care supply stores..

Call your urologist if you experience any of the following:

- Chills or fever (temperature greater than 38.5° C/101.3° F).
- Increase in mucous and/or sediment, cloudy urine.
- Little or no urine drainage from catheter, with or without leakage around the catheter.
- Pain over kidney (flank) area, lower back pain.

Follow-Up

Following discharge from hospital, expect to return to see your urologist in one week if you have a urinary catheter in place, and if not, in about four to six weeks. If you are unable to keep your appointment, please telephone in advance.

Dr. Bella	Office Number	613-798-5555, ext. 14500
Dr. Blew	Office Number:	613-737-8899, ext. 73636
Dr. Breau	Office Number	613-737-8899, ext. 73019
Dr. Cagiannos	Office Number	613-798-5555, ext. 14500
Dr. Gerridzen	Office Number:	613-798-5555, ext. 14500
Dr. Mahoney	Office Number	613-737-8899, ext. 78373
Dr. Morash	Office Number	613-798-5555, ext. 14500
Dr. Oake	Office Number	613-737-8899, ext. 79513
Dr. Roberts	Office Number	613-798-5555, ext. 14500
Dr. Saltel	Office Number	613-798-5555, ext. 14500
Dr. Warren	Office Number	613-737-8899, ext. 73288
Dr. Watterson	Office Number	613-737-8899, ext. 78373

Resources

Resources are provided for your information only and are not intended as a substitute for medical care.

(Items can be found in The Ottawa Hospital patient and family library — see the next page over for information on how to loan these materials).

- The Canadian Prostate Health Council,
P.O. Box 7600, Pointe-Claire, Dorval, Quebec H9R 4P8.
Web site: www.canadian-prostate.com
- Benign Prostatic Hyperplasia video, 1996, Science & Medicine Canada
- The Complete prostate book: what every man needs to know / Jones, J. Stephen. --
Amherst, NY: Prometheus Books, 2005. (Book) WJ 750.1 J66 2005
- 100 questions and answers about prostate disease / Loughlin, Kevin R.; Nimmo, John. --
Sudbury, MA: Jones & Bartlett, 2007. (Book) RC 899 L68 2007
- Mayo Clinic on prostate health / Barrett, David M. (editor). -- Rochester, MN: Mayo Clinic,
2000. (Book) RC 899 M39 2000
- Men's private parts: a pocket reference to prostate, urologic, and sexual health /
Gilbaugh, James H. -- New York, NY: Simon & Schuster, 2002. (Book) RC 881 G539 2002

We hope this booklet has helped to give you information on your recovery following a TURP. This information comes from team members and patients like yourself. Your suggestions are greatly appreciated.

— *The Ottawa Hospital Urology Clinical Pathway Team*
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