Radical Cystectomy with a Continent Catheterizable Urinary Diversion

Here is important information about your treatment for bladder cancer. Your doctor has recommended surgery to remove your bladder. This handout gives you information about your surgery, hospital stay and recovery.

What does your urinary system look like?

The urinary system has two kidneys, two ureters, one bladder and one urethra. The kidneys are bean shaped organs that filter your blood and remove water and waste through the urine.

Connected to each kidney are narrow tubes called ureters. Ureters carry urine to the bladder. The bladder stores urine until you are ready to urinate.

The urine leaves your bladder through a narrow tube called the urethra. The female urethra is just above the vagina. The male urethra passes through the prostate gland and penis.

This handout is for informational purposes only. Talk with your doctor or health care team if you have any questions about your care.

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A cystectomy is surgery to remove the bladder. In men, the bladder, prostate, seminal vesicles and lymph nodes are removed. In women, the bladder and lymph nodes are removed. The ovaries, fallopian tubes, uterus, cervix, vagina and urethra may also be removed. Your doctor will talk with you about the surgery and what is best for you.

After the bladder has been removed, the doctor will make a new urinary pouch. A small section of your small intestine and large intestine (the bowel) are used to make a new urinary pouch.

The bowel will be cut open, folded and then stitched. See pictures B and C.

**B:** The bowel is cut open.

**C:** The bowel is folded over and sutured to create a urinary pouch.
The bowel is used to make the new pouch, which acts like a bladder to store urine. Where the small intestine joins to the large intestine, there is a valve. This valve stops urine from draining out of the pouch.

The end of the small intestine will be pulled through your abdomen to make an opening called a “stoma”. The stoma is used to pass a catheter to drain urine from the pouch. See picture D.

After surgery, you will have some tubes in place to drain urine from the new pouch. These tubes are called ureteral stents, a malecot catheter and a stoma catheter. The tubes drain urine while the new pouch heals. The new urinary pouch will make a thick mucus at first. This mucus can clog the tubes and build up on the lining of the new pouch. Your nurse will teach you how to flush your catheter to clear out the mucus. This will start during your hospital stay and will continue after you leave the hospital. Your doctor will tell you when it is okay to stop flushing the catheter.

**Important Medicine Information**
Talk to your doctor about any medicines you take to thin your blood or prevent clots. You may need to change these medicines or adjust the amount you take before surgery. These medicines include:

- Aspirin
- Clopidogrel, brand name Plavix
- Prasugrel, brand name Effient
- Ticagrelor, brand name Brilinta
- Apixaban, brand name Eliquis
- Ticlopidine, brand name Ticlid
- Warfarin, brand name Coumadin
- Enoxaparin, brand name Lovenox
- Dabigatran, brand name Pradaxa
- Fondaparinux, brand name Arixtra
- Rivaroxaban, brand name Xarelto
- Cilostazol, brand name Pletal
- Edoxaban, brand name Savaysa
If you have a stent, do not stop taking your medicines to prevent clots without first talking to the doctor who put in the stent. For more information, ask a member of your health care team for the patient education handout on protecting your stent.

If you take aspirin or medicines like aspirin for arthritis pain, your doctor may have you take a different medicine in the weeks before your surgery.

If your surgery is canceled for any reason, call your doctor because you may need to restart the medicines you take to thin your blood or prevent clots.

**Before Surgery**

- You may be given a bowel preparation guide. Follow the instructions on that guide.
- An electrocardiogram (EKG), chest x-ray, blood work and other tests may need to be done before surgery. Your doctor and nurse will give you this information.
- You will be called the day before surgery with the time of your surgery and where to check in when you get to the hospital.
- Your doctor may give you special diet guidelines to follow before your surgery.
- Do not eat or drink after midnight the night before your surgery.
- Your doctor will talk with you about which medicines are okay to take before surgery.

**After Surgery**

Once your surgery is done, you will move to the Post Anesthesia Care Unit (PACU) for 1 to 2 hours. Your doctor will decide if you need to transfer to the Surgical Intensive Care Unit (SICU), or a regular hospital room. You will be connected to monitors, drains, and tubes.

The following is a list of what to expect after surgery.

- **Oxygen (O2):** You may need oxygen for 1 to 2 days after surgery. Your nurse will check your oxygen levels often.
- **Central Venous Catheter (CVC):** You will get intravenous (IV) fluids after surgery. These fluids will go into a large vein in your body, often in your neck or chest through a CVC. A CVC is a thin, soft,
plastic tube that is put in during surgery and will be used for IV fluids, medicines, blood transfusions and taking blood samples.

- **Patient Controlled Analgesia (PCA):** A PCA is a pain pump used to help control pain after surgery. The pain medicine is ordered by your doctor. The pump is connected to your IV line and is set so you can push a button when you have pain. This will give a small amount of the pain medicine into your blood stream. **You should be the only person to push the button.** Your nurse will give you further instructions about this pump.

- **Sequential Compression Device (SCD):** The SCD is a soft plastic sleeve that is placed around each leg. The sleeve is connected to a pump. The pump pushes air into different parts of the sleeve in sequence, creating pressure around the legs. This air pressure pushes blood through the vessels in your legs to help prevent blood clots. You will wear the SCD’s during the night while resting, and throughout the day, except when you are out of bed or walking.

- **Incentive Spirometer:** This breathing device is used to keep your lungs clear after surgery. This helps to reduce your risk of lung infection or breathing problems. Your nurse and respiratory therapist will teach you how to use the spirometer.

- **Incision:** Your surgeon will make an incision on your abdomen from above the belly button down to the pubic bone. Staples will be used to close the wound and a dressing will be in place for a few days. Your surgeon will remove the dressing and the incision can be open to the air while it heals.

- **Ureteral Stents:** These are small thin tubes placed in your ureters to drain urine from your kidneys while the new pouch heals. The end of each stent comes through an opening in your abdomen. A small plastic pouch will be attached to your skin to collect the urine. The stents may be removed before you leave the hospital. The small opening in your abdomen will close on its own.

- **Malecot Catheter:** This tube is put through the abdomen below the stoma into the new pouch. It is used to drain urine and help healing. It can also be used to flush the pouch to clear out any mucus. You will go home with this tube. Your nurse will teach you how to flush and care for the catheter. This catheter is usually removed in 3 to 4 weeks after surgery. A cystogram (x-ray) may be done at your first follow-up appointment. The cystogram checks to see if the new pouch has healed before any tubes are removed.
• **Stoma Catheter**: This is a small tube placed through your stoma and into the new pouch. It helps to form a tunnel from the stoma to the pouch. The stoma catheter will be removed in the hospital about 3 to 5 days after your surgery.

• **Hemovac**: This is a type of drain used to remove fluid from the incision area. It is put in during surgery and held in place by stitches. The drain will stay in place until you leave the hospital.

**Discharge from the Hospital**

Before you leave the hospital you will meet with a Patient Care Resource Manager (PCRM). The PCRM will work with you and your family to help with any home care needs you may have before you leave the hospital.

Your nurse will give you the following information when you are discharged from the hospital.

• A follow-up appointment to see your doctor

• Important phone numbers

• Home health care agency information

• Signs and symptoms of infection and when to call your doctor

• Instructions on wound and drain care

• A list of current medicines and prescriptions

• Activities you can or cannot do while healing from surgery