Robotic-assisted Radical Cystectomy
What it is

Robotic-assisted radical cystectomy is the surgical removal of all of the bladder and possibly the removal of surrounding organs that may have cancer cells. If the bladder is removed, the surgeon creates a new way or path for urine to be stored and to leave the body.

Reasons for Procedure

Radical cystectomy is commonly performed to treat bladder cancer where it has invaded the bladder wall. Radical cystectomy is performed by either conventional open surgery or using the robot. Open surgery requires a bigger incision. Robotic-assisted radical cystectomy is an alternative for the conventional open surgery.

Advantages of Having a Robotic-assisted Radical Cystectomy

• Lower risk of major complications
• Shorter hospital stay
• Less blood loss and fewer transfusions
• Faster recovery
• Less pain and scarring
• A quicker return to a normal diet
• Quicker recovery of bowel function

Will I Need Additional Treatment (Chemotherapy) Prior to Surgery?

Neoadjuvant chemotherapy refers to chemotherapy that is given before surgery. The rationale behind neoadjuvant therapy for bladder cancer is twofold. First, pre-operative treatment can shrink some bladder cancers and therefore, may allow more complete surgical removal of the cancer. Second, because chemotherapy kills undetectable cancer cells in the body, it may help prevent the spread of cancer when used initially rather than waiting for patient recovery following the surgical procedure. Your treatment team will decide if you need chemotherapy treatment before surgery.

Possible Complications of Robotic-assisted Radical Cystectomy

If you are planning to have a robotic-assisted radical cystectomy, your doctor will review a list of possible complications, which may include:

Complications that may happen during the surgery:
• Reactions to anesthesia
• Injury to the abdominal organs
• Bleeding

Complications that may happen after the surgery:
• Lung infection (pneumonia)
• Bleeding
• Blood clots in the legs and lungs
• Wound infection

What to Expect

Prior to Procedure

Talk to your doctor about your medication. You may need to stop taking certain medication for one week before surgery, such as:
• Blood-thinning drugs, such as warfarin (Coumadin)
• Anti-platelet drugs, such as clopidogrel (Plavix)
• Diabetes medications, such as metformin (Glucophage)

Your doctor may also ask you to:
• Eat a light meal the night before. Do not eat or drink anything after midnight.
• Arrange for a ride to and from the hospital.
• Arrange for help at home after the procedure.
Anesthesia

General anesthesia will be given. You will be asleep during the procedure.

Description of Procedure

During a robotic-assisted radical cystectomy, the patient’s abdomen is inflated with gas and the robot’s camera and operating arms are inserted through six quarter-inch incisions in the abdomen. The robot is then attached to these instruments. The surgeon operates the robot while sitting in a console a few feet from the actual robot and the patient. The surgeon uses the robotic instruments to remove the bladder and surrounding organs. The pelvic lymph nodes are then removed as part of the surgery.

After removing the bladder, the next step is diverting the urine in a way that allows it to be expelled outside the patient’s body. There are two types of urinary diversion that are commonly used:

- **Ileal conduit (urostomy):** In this type of diversion, a 3-inch piece of the patient’s own small bowel is used to create a tube that connects to the ureters from the inside and to the outside through a surgically created opening (stoma). The urine passes from the ureters, through the conduit and out the stoma into an external plastic urostomy bag.

- **Orthotopic neobladder:** In selected patients, a neobladder can be created using the patient’s own small bowel. The neobladder is placed in the pelvis and attached to the ureters on one end and to the urethra on the other end. A longer segment of the patient’s own small bowel is needed for this type of diversion. This allows the patient to pass urine through the urethra and avoids the need for an external urostomy bag.

How Long Will It Take?

The actual surgery usually takes 4 to 5 hours.

How Much Will It Hurt?

Anesthesia prevents pain during surgery. You will be given medication for any pain during recovery. Pain levels vary from patient to patient.

Immediately After Procedure

You will be monitored in the intensive care unit for the first night, where you will have the following interventions:

- Heart monitor
- Tubes to drain any fluid that may collect inside the abdomen
- You will be taught breathing exercises to prevent lung infection

Average Hospital Stay

The average stay is 5 to 7 days.

Post-procedure Care

At the Hospital

- You will continue your breathing exercises to prevent lung infection
- You will have blood tests every day to make sure you are not losing blood and your kidney function remains normal
- To prevent blood clot formation, you will receive injections under the skin for blood thinners and compression boots will be placed on your legs
- Efforts will be made to get you out of bed and walking as soon as possible
- Dressings will be removed in a day or two
At Home

When you return home, do the following to help ensure a smooth recovery:

- Take medicines as directed by your doctor, such as:
  - Blood thinners
  - Pain medicine
- Follow your doctor’s guidelines for caring for your incisions
- Be sure to follow all of your doctor’s instructions

Recovering after Surgery/
What to Expect

Every patient’s recovery can be different. You will need to shower, daily, with a mild soap. Ask your doctor when it is safe to take a bath or soak in water. You may find that there will be some areas of discomfort in the area of surgery that can last for several weeks. Also, it is common that you may feel tired for many weeks following this type of surgery. If you have a stoma, you’ll be seen by the stoma therapist and taught how to take care of your stoma.

Will I Need Additional Treatment (Chemotherapy) or Not?

If you do not have chemotherapy treatment before bladder cancer surgery based on the extent of the disease and your general condition, your treatment team will help you decide if additional treatment is needed. Additional treatment for bladder cancer is usually given four weeks to eight weeks after surgery to allow time for recovery of the tissues.

Do I need to see my doctors for follow-up care and, if so, how often?

Depending on the stage of the disease you will need to see your urologist and medical oncologist every three to six months for the first two years after surgery. This type of follow-up care will help in managing any post-surgical issues and possible disease recurrence.