How is a bladder removed?

The bladder lies in the lower pelvis. In order to remove it, the arteries and veins on the lower sides of the bladder must be controlled with clips and then cut. Lymph nodes in the area are removed in order to tell if the tumor has spread. The urine channel is separated from the bladder and prostate and a sample is sent for examination to see if the tumor has spread to the urine channel. If tumor is found at that site, the urine channel is removed. The bladder is then removed.

A portion of the small intestine is used to make a reservoir for the urine to drain. The ureters ([you – reh – ters], the tubes that drain the urine from the kidneys, are connected to the reservoir. Stents (small plastic catheters about the size of a pencil lead) are left in the ureters to make sure there is no blockage or leakage from the connection. A drain is placed in the area of the surgery to remove any blood or fluid that may collect following surgery. One or two catheters are left to drain the urine reservoir.

A few weeks after your surgery, an x-ray will be done to make sure that the reservoir is healed. The catheters will be removed and you will start to drain the reservoir by putting a catheter into the drain tube. It is very important that you drain your reservoir frequently. If too much urine over-filled the reservoir, it could rupture. This could cause a life-threatening infection.
What do I need to do to prepare for the surgery?

Your surgeon will order some laboratory tests, a chest x-ray and an electrocardiogram (if you have not had one recently). There may be other tests as well. These tests are done to help us make sure that the surgery will be as safe as possible for you. Because the surgery requires that we cut out a piece of intestine, we will order a some laxatives and antibiotic pills to cleanse your intestines (bowel prep). It is very important that you follow the instructions given with the bowel prep. If your intestines are not cleaned out, your surgery may have to be postponed or cancelled. The risk of infection is higher if the intestines are not cleansed.

What are the possible complications of having the bladder removed?

Although we try our best to do everything possible to make the surgery safe, there are potential complications of the procedure. The most common complication of bladder removal is a partial blockage of the intestines where they are reconnected. Narrowing at the point where the urine drain tube opens on the skin can also happen. If this occurs, a second surgery may be necessary. Anytime we operate around large blood vessels, there’s always a possibility of some bleeding. If bleeding occurs, a blood transfusion or a second surgery may be necessary. Infection is also possible following major surgery such as this. If an infection occurred following a bladder removal, additional antibiotics may be necessary. It might also be necessary to place a drain catheter or to perform a second surgery to drain an infection pocket.

Because the urine reservoir is lined with intestinal tissue, mucus will form. If the mucus stays in your reservoir, you will have a higher risk of getting a urine infection or a stone. By irrigating the mucus out regularly, you can prevent infections and stones. If you were to let your reservoir get too full, it could burst. This could cause a life-threatening infection. You can prevent this by draining your reservoir regularly.

Because other organs lie near the bladder, they need to be moved in order to remove the kidney. It is possible that those organs (the intestine, nerves to the legs, blood vessels, etc.) could be injured during the surgery. If so, a repair surgery would be required. This is quite rare. It is possible that the muscle tissue might not heal together following any surgery causing a hernia. If that happens, a hernia repair surgery would be necessary. Fortunately, this is very rare.

As with any major surgery, it is possible that a blood clot in the leg, a blood clot traveling to the lung, or pneumonia could develop following bladder removal. We take special precautions to try to prevent such complications. This includes having the patients cough and take deep breaths regularly to keep the lungs opened up. We also encourage patients to walk starting the day following the surgery. Other more rare complications could also occur. If you have specific questions, please ask your surgeon.

How long will I stay in the hospital?

Most kidney patients are ready to leave the hospital 6 to 9 days after surgery. Of course, each patient is unique, so your hospital stay could be longer. When you are eating regular food, when your pain is controlled with pain pills and when you are able to do the physical activities necessary at home, you will be ready to leave the hospital.

How much pain will I have? What can you do to control the pain? How long will the pain last?

These are some of the most difficult questions to answer because each person experiences pain in a different way. Following your surgery, you will be given pain medicine through an intravenous line so you won’t need a shot. Depending on your surgeon, you may use a computerized pump (Patient Controlled Analgesia or PCA). This will allow you to take a dose of pain reliever when you feel you need it. It is important that only you use the pump. We usually use PCA until the second day following surgery. Some patients will receive ketorolac (a strong cousin of ibuprofen) through an intravenous line for pain. Within one or two days after surgery we will start pain pills that you can take at home. Most people need to take pain medicine at home for 3-4 weeks following the surgery. However, because each person is unique, it is impossible to predict how long you’ll need to take pain pills.

When will I be able to eat?
You will not be able to eat or drink for a few days after your surgery in order to allow time for the intestine re-connection to heal. When you are passing gas out of your bottom, you will start drinking clear liquids (apple juice, tea, broth, Jello, etc.). When you do well with liquids, you will start solid food. Most patients can start solid food 4 to 6 days following surgery. Many patients notice that their appetite isn’t as strong for several days following surgery.

**When can I drive again?**

We recommend that you not drive until you no longer need narcotic pain medication. These medications can alter your ability to respond quickly in an emergency situation.

**When can I go back to work?**

You should plan to take at least 2 months off work. Some patients are ready to go back to work sooner and some are ready later than eight weeks. You will need to listen to your body to know when you are ready. It may be helpful to return to work part-time or doing light work at first. If you need a letter for your employer, let us know.

**What physical activities can I do following the surgery?**

After you get home from the hospital, you should plan to do a little walking every day. Start slowly and gradually build up your endurance. If you overdo it, you will be sore. Listen to your body and use your head. Starting 2-3 weeks following the surgery, you may begin to do some stretching exercises that will help you to stay limber. Starting three weeks following the surgery, you may begin to do some light exercise. Gradually build up your exercise plan over the next four weeks.

One of the most frustrating things that kidney patients complain about is lack of energy. Major surgery takes a lot out of a person. When you think about spending 3-4 weeks at home, away from work, you will probably think of some projects around the house that you’d like to finish such as cleaning out a closet, organizing the garage, doing some yard or housework, etc. We advise you to put all those plans on hold for a while. It will be better for you to plan to read some good books, watch movies, listen to music or try some low energy hobbies. Plan to do things that will keep your active mind busy while your body is healing.

**When can I shower?**

You can take a brief shower (5-10 minutes) after all the stents and drains are removed. You may let the water run over the incision.

**How long will it take before I feel “normal?”**

Most patients tell us that it takes approximately 8 to 12 weeks before they feel back to “normal.” Remember, there is a lot of variation from one person to another. Don’t get discouraged if you don’t feel back to 100% six weeks following your surgery.

**Will I need to eat a special diet after the surgery?**

No. You can eat anything you would like. Of course, we recommend that you eat a healthy diet including plenty of fresh fruits and vegetables. You should also take a stool softener to prevent constipation following your surgery.

**Can I drink alcohol?**

Yes. As with your diet, we recommend moderation.

**What about sex?**

If you enjoyed sex before your surgery, you will probably want to make sexual activities part of your life after surgery. It is important to take it slowly and not to be too aggressive when you start sexual activity. In order to remove the tumor, it is sometimes necessary to remove the nerves that cause erections of the penis. If this happens, medications or surgery can help you to have an erection. After your bladder and prostate are removed, no semen (cum) will come out of your penis during sex. This is because the organs that produce semen are removed. You may notice that your penis is not as long as it was before surgery. This does not mean that you or your partner will not enjoy sex as much following surgery, but it may be different. If you have trouble with sexual function, please let your surgeon know. Treatment is available for these problems. Some couples find that other sexual activities (besides sexual intercourse) can be satisfying. Several web sites provide information about sex after bladder surgery. Search on “sex after cystectomy.”
What if I have other questions?

We’re happy to answer all of your questions. It may be best to write down questions as you think of them. Please call your surgeon with any questions you may have.

**Patient Shopping List**

- Beverages: Buy a wide variety of beverages: Gatorade, juices, ensure, boost, milk, etc.
- Protective pad for the bed
- Disposable briefs
- Distilled water
- Bounty towels
- Liquid soap (not antibacterial)
- High protein snacks: South Beach protein bar, Carnation breakfast bar, peanut butter, cheese, yogurt, eggs, fish, meat, etc.
- Iron supplement

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**Department of Urology**
Loyola University Medical Center
2160 S. First Avenue
Maywood, IL  60153

**Office:** 708/216-4076
**Appointments:**
**Central Scheduling (all clinics)** 708/216-8563
<table>
<thead>
<tr>
<th>Before Surgery</th>
<th>Day of Surgery</th>
<th>Post op Day 1-2</th>
<th>Post op Day 3-4</th>
<th>Post Op Day 5-7</th>
<th>Clinic Visit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Activity</strong></td>
<td>Deep breathing exercises</td>
<td>Deep breathing Sit in chair, Walk in room</td>
<td>Deep breathing Sit in chair, Walk in hall</td>
<td>Going home</td>
<td>Walk 3x daily No heavy lifting Showers-no bath Ok to climb stairs</td>
</tr>
<tr>
<td><strong>Nutrition</strong></td>
<td>Clear liquids only Nothing to eat or drink after midnight</td>
<td>Ice chips</td>
<td>Liquids or normal diet when bowel function returns</td>
<td>Normal diet</td>
<td>Drink plenty of fluids</td>
</tr>
<tr>
<td><strong>Medications</strong></td>
<td>Take usual medications only as directed</td>
<td>IV fluids</td>
<td>Restart oral medications when tolerating food</td>
<td>Pain pills Antibiotics Stool softener Iron supplement Anticoagulant</td>
<td>Usual meds Check with your doctor about blood pressure and diabetic meds Begin antibiotics day before catheter is removed</td>
</tr>
<tr>
<td><strong>Treatments &amp; Tests</strong></td>
<td>Bowel preparation</td>
<td>lab work Vital signs Ted Hose Stockings Compression boots</td>
<td></td>
<td>Lab work 1 week after discharge X-rays 2 weeks after discharge</td>
<td></td>
</tr>
<tr>
<td><strong>Tube Care</strong></td>
<td>NG tube keeps stomach empty JP drain collects pelvic fluid Catheters keep bladder empty</td>
<td>NG tube removed Bladder Irrigation</td>
<td>Bladder Irrigation</td>
<td>JP removed Stents removed Home with one catheter draining and one catheter capped Bladder irrigation 4x daily</td>
<td>Staples removed 1 week after discharge Catheter removed 2 weeks after discharge then SP catheter removed 3 days later</td>
</tr>
<tr>
<td><strong>Education &amp; Discharge Planning</strong></td>
<td>Make arrangements for going home Complete ‘shopping list’</td>
<td>Be sure to ask any questions you may have</td>
<td>Learn about irrigation</td>
<td>Irrigate with supervision</td>
<td>Review pathology and plan more treatment if needed Learn to drain pouch and keep diary</td>
</tr>
</tbody>
</table>