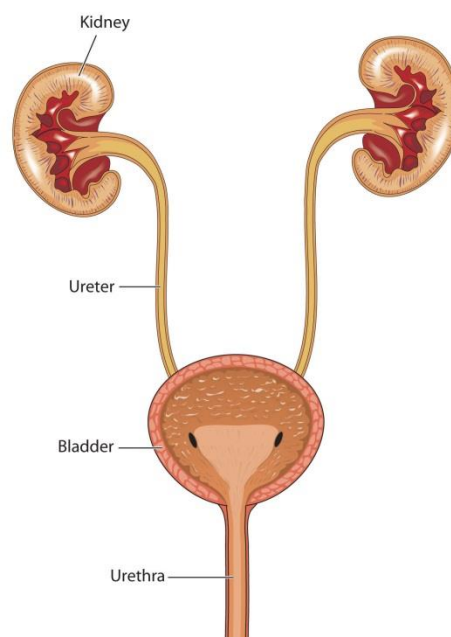


Cystectomy

A radical cystectomy (bladder removal) is the standard treatment when cancer has spread into the muscle layer of the bladder or when earlier stage bladder cancer is not responsive to other therapies. It can also be done if there is severe bladder damage from treatments, conditions, or injuries. This surgery involves removal of the bladder, nearby lymph nodes and part or all of the urethra. The surgeon will also remove the prostate and seminal vesicles in men, and the uterus, fallopian tubes, ovaries and part of the vagina in women. Your surgeon may decide to perform this surgery using robotic assistance.

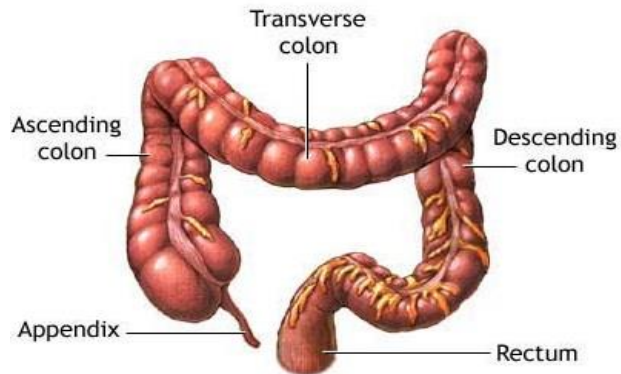
Once the bladder is removed, it is then essential to create a different route to eliminate urine out of the body. This is called a urinary diversion. The most common types of urinary diversions are Ileal Conduit, Indiana Pouch, and Neobladder (Studer Pouch). Each urinary diversion requires special care and management.

The normal urinary tract is made up of two kidneys which filter the blood and remove extra water and waste through the urine. The urine is eliminated by the kidney's collecting system and travels down through the tubes, called ureters, into the bladder. Urine is stored in the urinary bladder until it is full and the person urinates.



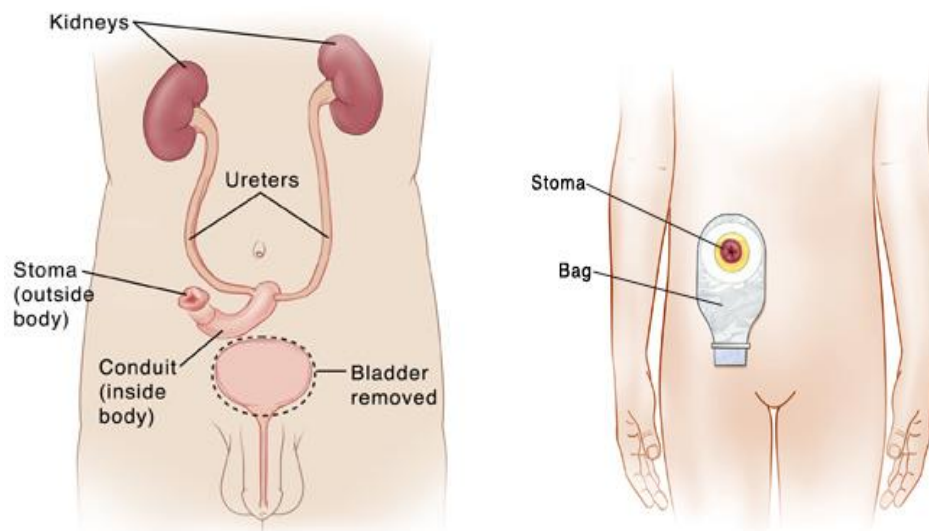
After the bladder is removed, the urine is diverted to exit the body through a urinary diversion. All forms of urinary diversion are made with a part of the body's intestinal tract.

In each type of urinary diversion, a part of the intestine is turned into either a passage tube for urine to exit the body, or a reservoir (pouch) to store urine (like a normal bladder would). The surgery is done in such a way that urine and stool would remain completely separate as they would normally.



Ileal Conduit Urinary Diversion

The ileal conduit urinary diversion is the simplest type of urinary diversion. It is made of a short segment of ileum (small intestine) into which the ureters drain freely. The end of the ileal conduit is brought out to the skin, usually on the right side of the abdomen. This is called a stoma. The stoma is covered by a bag, which catches urine as it drains from the ileal conduit.



ADVANTAGES

- Shorter recovery
- Shorter surgery time
- No need to use a catheter (tube) at scheduled times throughout the day
- Less complications

DISADVANTAGES

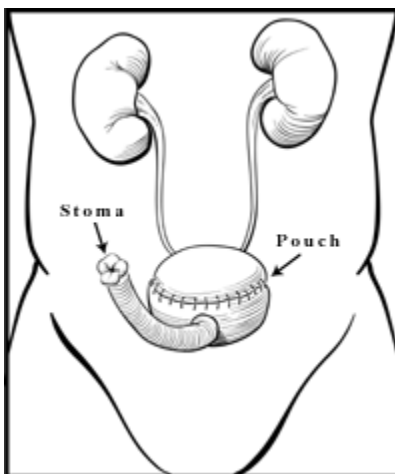
- External bag on abdomen to collect urine
- Minor limitations on physical activity

Indiana Pouch Reservoir

In this form of urinary diversion, a reservoir (pouch) is made out of the right colon (large intestine) and ileum (small intestine). Urine flows down from the kidneys through the ureters into the pouch.

A short piece of small intestine is brought out to the skin as a small stoma. At specific times during the day, usually every four to six hours, the patient empties the urine that is kept inside the pouch by passing a small thin catheter (tube) through the stoma into the pouch.

A bag is not required and the patient simply wears a bandage over the stoma.



ADVANTAGES

- Urine is kept inside the body until it is ready to be emptied
- No collection bag is needed
- Stoma is small and can be covered by a bandage
- No activity restrictions

DISADVANTAGES

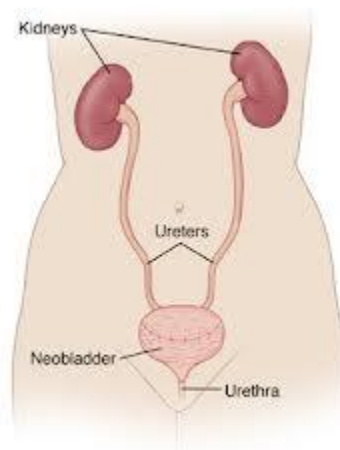
- Longer surgery time than an ileal conduit
- Higher complication rate
- Longer recovery period
- Need to use a catheter at scheduled times throughout the day, passing a small thin catheter through the stoma into the pouch every four to six hours to empty the pouch

Neobladder to Urethra

For some patients, it is possible to safely connect a reservoir (pouch) made of small intestine to the urethra. This urinary diversion is made to function like a normal bladder.

The patient is able to pass the urine through the urethra, although there is a period of incontinence (leakage of urine) that most patients go through following this surgery.

It may take some patients up to one year to regain control of their urination. A few patients may not be able to empty urine from this reservoir well and will need to do catheterization (passing of a small tube into the urethra) to empty the reservoir. There must be no evidence of cancer to be considered for this sort of reservoir. Patients must be willing and able to pass a catheter (tube) into the urethra to empty the reservoir if necessary.



ADVANTAGES

- Most patients are able to empty their pouch by normal urination
- No external bag is needed
- No stoma
- No activity restrictions

DISADVANTAGES

- Longer surgery time
- Higher complication rate
- Longer recovery period
- Risk of urinary incontinence (leakage of urine)
- Risk of the inability to empty the reservoir requiring catheterization at scheduled times throughout the day

The goal of the surgery is not only to cure the disease, but also to enable you to enjoy life and go back to your work and hobbies. It is important to take the time you need to recover and regain your strength for your physical, psychological, and social well-being. There may be times after your surgery when you will feel discouraged or depressed. These feelings are uncommon. Discussing your feelings with family, friends or health care professionals may help you to work through these emotions.

You may wonder how other people will accept you after they find out that you have a urinary diversion. It is a normal concern to wonder how you will explain the surgery to others. You can tell your friends and family as much as you want them to know. You do not have to explain your surgery to everyone who asks. If you are considering marriage or a long-term relationship, talk with your future partner about life with a urinary diversion and its effect on sex, children and family acceptance. Open discussions with your doctor and other couples, in which one partner has a urinary diversion, can help you learn everything you can about living with urinary diversion.

You can continue to work in most jobs with a urinary diversion. There are job hazards to be aware of if you have a urinary diversion. Heavy lifting can cause harm to your stoma. A sudden blow near the stoma could also cause damage. Check with your doctor about your type of work and any job hazards that you should be aware of and try to avoid.

People with urinary diversions can be as active as they were before their surgery. Whatever activity you enjoyed before your surgery you can enjoy again, once you have fully recovered.

People with urinary diversions can continue to participate in sports. Consult your doctor regarding sporting hazards and protective equipment for your individualized needs.

There are no eating restrictions due to urinary diversion. The urinary and digestive tracts are entirely separate.

If there is a special dietary concern, your doctor will discuss it with you. You are encouraged to drink lots of fluids.

You can enjoy all types of travel and vacation. Make sure to take enough supplies, as there may not be a place to purchase your needed items. Travel fully prepared!

As with all changes in life, it will take time to get used to your urinary diversion. Patience and acceptance will help with period to pass quickly. At St. John's, there is a dedicated health care team to support your needs and answer any questions you may have along the way.