Treatment for invasive bladder cancer

Contents

- Surgery
- Radical cystectomy
- Partial cystectomy
- Bladder reconstruction
- Radiotherapy
- Chemotherapy
- Information reviewed by

The most common treatment for muscle-invasive bladder cancer is surgery. In some cases, surgery may be used with chemotherapy, or both radiotherapy and chemotherapy. If you don’t have surgery you will probably have a combination of radiotherapy and chemotherapy.

People who have cancer that has only invaded the lamina propria (one level before the muscle) may be treated with BCG – a type of immunotherapy.

Surgery

Surgery is the best treatment option for muscle-invasive disease or cancer that has invaded the lamina propria but has not responded to BCG. The main surgery for invasive bladder cancer is known as a cystectomy.

In some situations it is possible to have laparoscopic (keyhole) surgery. This means a few small cuts are made during surgery.

Some surgeons use robotic technology but this is a specialised technique that can only be done in some hospitals. It has not been shown to be more effective than standard surgery.

Radical cystectomy

This is the most common operation for invasive bladder cancer. In this operation the whole bladder and nearby lymph nodes are removed. In most cases the appendix is also taken out. In men the prostate, urethra and seminal vesicles may be removed. In women the uterus, ovaries, a small portion of the vagina, and fallopian tubes (tubes that connect the ovaries and uterus) are often removed.

The urologist will create a new bladder (reconstruction) to store and remove urine. This can be done in several ways depending on your medical situation and personal preferences – see below.

Partial cystectomy

This type of operation is less common as it is not suitable for most types of bladder cancer. In a partial cystectomy the bladder tumour and a margin of healthy tissue around it are removed.

Cystectomy side effects
After a cystectomy you will probably stay in hospital for 1–2 weeks. You will have tubes in your body to give you fluids and pain-killers, and to drain waste. You will need pain relief for a few days.

After a partial cystectomy your bladder will be smaller and hold less urine so you may need to pass urine more often.

If you have a radical cystectomy the removal of your bladder may affect your appearance, sex life and fertility. In men the nerves needed to get an erection may be affected. Women who have their reproductive organs removed will go through menopause if they have not already.

**Bladder reconstruction**

If you have a radical cystectomy you will need reconstructive surgery so you can store urine in another way. However this is major surgery and it is not suitable for everyone. Before any operation you will talk to your urologist about the risks and possible complications and which type of surgery may be suitable for you.

**Urostomy or urinary diversion**

The most common new storage place for urine is an alternative opening of the urinary system (urostomy). There are two types:

**Ileal conduit**

This is the most common procedure. It allows urine to drain into a bag attached to the outside of the abdomen.

The doctor will use a piece of your small bowel (ileum) to create a passageway (conduit) that connects the ureters to an opening (hole) on the outside of your body. The hole created on the surface of the abdomen is called a stoma. A watertight bag is placed over the stoma to collect the urine. This small bag, worn under clothing, fills continuously and needs to be emptied throughout the day through the tap on the bag. The small bag will be connected to a larger drainage bag at night.

![Ileal conduit diagram](image)

** Continent urinary diversion**

In this procedure the doctor uses a piece of bowel to form a pouch with a valve. This allows urine to be stored inside the abdomen for a period of time before being removed through a stoma (opening).

The surgeon connects the pouch to the ureters which drain urine into it from the kidneys. The pouch valve is joined to the surface of the abdomen, where the stoma is created. Several times a day a drainage tube (catheter) should be inserted through the stoma into the pouch, to collect and drain the urine.
Click here for information about living with a urostomy.

**Neobladder**

Another way of making a storage place for urine is to use a segment of the bowel to make a new bladder, called a neobladder. Having a neobladder usually means you can urinate as usual without the need for a stoma.

About 45–75 cm of your small bowel will be used to make the new bladder, which is stitched to the top of your urethra. The surgeon will stitch your ureters into the top area of the neobladder (chimney). Urine will drain into the ureters from the kidneys.

You will need to go to the toilet to empty the neobladder regularly. This is because you will have lost the nerves that tell you when your bladder is full. Sometimes this nerve loss can lead to slight incontinence (inability to control the flow of urine) especially when you are asleep.

A continence nurse will teach you how to urinate, which involves bearing down with your abdominal muscles. Emptying the neobladder regularly will also prevent it from stretching too much. You may have to get up during the night to empty the neobladder. Its capacity will gradually increase to about 500 mls over 6–12 months.
The continence nurse

A continence nurse can talk to you about having a neobladder. The role of the nurse is to:

- reinforce a toileting schedule
- teach self catheterisation
- tell you about continence products
- help you apply for assistance through Medicare
- answer related questions.

Side effects of reconstructive surgery

The possible side effects of bladder reconstruction may include:

- wound infections
- urine leakage (incontinence)
- blockage of urine flow
- effects on sexuality.

Your doctor or continence nurse can give you information about aids available to help you cope with side effects you experience, such as urine loss. A physiotherapist may also be able to help you learn how to exercise the muscles in your pelvis, to stop or reduce leakage.

For more information call the National Continence Helpline on 1800 33 00 66.

Radiotherapy

Radiotherapy uses high energy x-rays to kill cancer cells or injure them so they cannot multiply. It may be used instead of surgery to treat invasive bladder cancer without removing the bladder. However radiotherapy alone is not likely to cure the cancer.

Chemotherapy can be given with radiotherapy to make the cells more sensitive to the radiation.

You will lie on an examination table and a machine will direct the radiotherapy towards your body. The treatment is painless and can't be seen or felt.
Radiotherapy is usually given Monday to Friday for several weeks.

**Side effects of radiotherapy**

Radiotherapy for bladder cancer can cause temporary side effects including:

- skin redness and soreness
- burning when you pass urine and feeling that you need to go frequently (cystitis)
- fatigue
- loss of appetite
- diarrhoea
- soreness around the anus.

Less commonly radiotherapy may permanently affect the bowel or bladder. More frequent and looser bowel motions and bleeding may occur. You may also have bladder irritation and blood in the urine.

For more information about radiotherapy see [Understanding radiotherapy](https://www.cancersa.org.au/information/a-z-index/treatment-for-invasive-bladder-radiotherapy).

**Chemotherapy**

Chemotherapy is the treatment of cancer with anti-cancer drugs. The aim is to kill cancer cells while doing the least possible damage to normal cells.

For invasive bladder cancer drugs are given by injection into a vein (intravenously). This type of chemotherapy is often called systemic chemotherapy to distinguish it from intravesical chemotherapy which is used to treat non-invasive bladder cancer.

You may have systemic chemotherapy:

- before surgery—to shrink the cancer and make it easier to operate
- after surgery—if there is a high risk of the cancer coming back
- with radiotherapy—if the cancer has already spread to other parts of the body or if surgery is not an option.

Systemic chemotherapy is given as a course of drugs over a few days. The drugs are given every few weeks for several months.

**Side effects of chemotherapy**

Systemic chemotherapy drugs circulate in the body and can affect normal, healthy cells as well as cancer cells.

Chemotherapy can cause temporary side effects including:

- nausea and vomiting
- fatigue
- skin itchiness
- mouth sores
- hair loss.

Generally side effects are temporary and will go away in time. However sometimes the effects are long-term or permanent. Keep your doctor informed of any side effects you have. You may be prescribed drugs to ease the side effects.

For more information about chemotherapy see [Understanding chemotherapy](https://www.cancersa.org.au/information/a-z-index/treatment-for-invasive-bladder-chemotherapy).

**Information reviewed by:** Dr Paul Gassner, VMO Uro-oncological Surgeon at Bankstown, Liverpool and Shoalhaven Hospitals, NSW; David Connah, Cancer Council Connect Consumer Volunteer; Virginia Ip, Urology Care Coordinator, Sydney Cancer Centre, Royal Prince Alfred Hospital, NSW; Samantha Kelaher, Cancer Council Helpline Consultant, Cancer Council NSW; and Gary Schoer, Cancer Council Connect Consumer Volunteer.

Content printed from [https://www.cancersa.org.au/information/a-z-index/treatment-for-invasive-bladder-](https://www.cancersa.org.au/information/a-z-index/treatment-for-invasive-bladder-).