

Muscle-Invasive Bladder Cancer Treatment



What is Muscle-Invasive Bladder Cancer (MIBC)?

Muscle-invasive bladder cancer (MIBC) is cancer found in the thick muscle of the bladder wall. Over time, the tumor may grow outside the bladder into tissues close by. Untreated MIBC may spread to lymph nodes, the lungs, the liver and other parts of the body. This serious and more advanced stage of bladder cancer should be treated right away. This type of bladder cancer needs more aggressive treatment.

How is MIBC Diagnosed?

Blood in the urine is the most common symptom of bladder cancer. It is often painless. Often, you cannot see blood in your urine without a microscope. If you can see blood in your urine, you should tell your doctor at once. Even if the blood goes away, you should still talk to your doctor about it. If your doctor believes you may have MIBC, you may be sent to a urologist. A urologist is a doctor who specializes in diseases of the urinary tract. The doctor may order these tests:

- **Urinalysis** – to test for blood in your urine and to look for cancer cells
- **X-rays, CT scan or MRI** – imaging tests to help with a diagnosis
- **Retrograde Pyelogram** – an x-ray to look at your bladder, ureters and kidneys
- **Cystoscopy** – this common test lets your doctor see inside your bladder using a thin tube that has a light and camera
- **Positron emission tomography (PET) scan** - lets your doctor see where and how much the cancer is growing
- **Transurethral resection of bladder tumor (TURBT)** - a vital procedure for accurate tumor typing, staging and grading. Your doctor will take tumor samples and cut away what can be seen

Your doctor will grade and stage your cancer. A tumor grade tells how aggressive the cancer cells are. A tumor stage tells how much the cancer has spread. Stages are from T1 (lowest) to T4 (highest). MIBC is a high-grade tumor. Doctors can tell the stage of bladder cancer by taking a small piece of the tumor and looking at it under a microscope.

Treatment for MIBC

Your best chance for healing from MIBC is early diagnosis and early care. Your care will depend on the stage and how far your cancer has grown. Treatment also depends on your health and age. Your health care team may include your urologist, and also may include an oncologist (cancer specialist), radiologist, dietitian and counselors.

Cystectomy

There are two types of cystectomy: radical and partial.

For **partial cystectomy**, the doctor removes only part of your bladder. For MIBC, partial cystectomy is less likely because the cancer may have grown too far into the bladder.

A **radical cystectomy** is when your whole bladder is removed. Radical cystectomy is the most common treatment for MIBC. Bladder removal with chemotherapy raises survival rates for MIBC patients. The surgeon removes the whole bladder, nearby lymph nodes and part or all of the urethra. In men, the surgeon may also remove the prostate. In females, the surgeon may remove the uterus, fallopian tubes, ovaries and vaginal wall. Other nearby tissues may also be removed, or in some cases these organs will remain in place.

When the whole bladder is removed, the surgeon makes some other way for urine to be gathered from the kidneys and stored before you pass it from your body. Ask your urologist about urinary diversion.



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Treatment

Before removing your bladder, your doctor will likely offer neoadjuvant chemotherapy. Adjuvant means “added to.” About six to eight weeks after chemotherapy, you will have your bladder surgery. If you choose not to have chemotherapy before surgery, then you may need it after surgery, based on the tumor stage. This is adjuvant chemotherapy. If you have poor kidney function, hearing loss, heart problems or some other health issues, chemotherapy may not be best for you.

Chemotherapy with Radiation

Radiation alone is not given for MIBC. It is often done along with chemotherapy. Before starting chemotherapy and radiation, your surgeon will cut away the tumor during a transurethral resection of bladder tumor (TURBT). This is done to try to remove all of the cancer cells. If you get this treatment, you must follow up with your health care team. You will need to have ongoing cystoscopy exams, imaging tests (e.g. CT scan) and other methods to check the tumor.

Immunotherapy

Immunotherapy (IO) is a type of cancer treatment that helps the body’s immune system fight cancer. IO is often used after bladder surgery (cystectomy) for patients with high-risk MIBC. This is known as adjuvant immunotherapy, and it is given to reduce the risk of cancer coming back after surgery. It can also be offered to patients who are not able to receive chemotherapy due to other health issues.

IO may also be used in patients who have not had chemotherapy before surgery but are found to have advanced disease during surgery, such as cancer in the lymph nodes or a high-stage tumor. In these cases, IO is given after surgery to lower the chance of the cancer coming back.

After Treatment

After treatment, regular follow-up and surveillance are vital. Patients should have imaging tests done every six to twelve months for the first two to three years, such as CT scans of the chest, abdomen, and pelvis, and may continue every year thereafter. Cystoscopy and laboratory reviews, including renal function tests, will also be part of the follow-up to detect any cancer that has returned early.

To learn the basics about what you should know about MIBC, go to UrologyHealth.org/MIBCbasics for free PDF download.

About the Urology Care Foundation

The Urology Care Foundation is the world’s leading urologic foundation – and the official foundation of the American Urological Association. We provide information for those actively managing their urologic health and those ready to make health changes. Our information is based on the American Urological Association resources and is reviewed by medical experts.

To learn more, visit the Urology Care Foundation’s website, UrologyHealth.org/UrologicConditions.

Disclaimer

This information is not a tool for self-diagnosis or a substitute for professional medical advice. It is not to be used or relied on for that purpose. Please talk to your urologist or health care provider about your health concerns. Always consult a health care provider before you start or stop any treatments, including medications.

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