

Non-Muscle Invasive Bladder Cancer

What You Should Know



How does the Urinary Tract Work?

Many of our body parts work with each other to form the urinary system. For both men and women, the main parts of the system are kidneys, ureters, bladder and urethra. The kidneys are fist-size organs that make urine. The urine then flows through tubes called ureters, and into the bladder.

The bladder is a hollow, balloon-shaped organ. It is made of muscle and elastic fibers which allow it to stretch. It stores urine until you are ready to release it. The bladder helps you pass urine. Urine then leaves the body through the urethra.

What is Non-muscle Invasive Bladder Cancer (NMIBC)?

Non-muscle invasive bladder cancer (NMIBC) is cancer of the bladder caught early. NMIBC is cancer that grows only in the thin tissue on the inside surface of the bladder. With NMIBC, the bladder muscle is not involved and the tumor has not invaded the wall of the bladder or spread outside the bladder.

What Causes NMIBC?

There are a number of things that may raise your risk of getting bladder cancer:

- Smoking is a big risk factor
- Environmental chemicals like pesticides
- Workplace exposure to chemicals used to make plastics, paints, leather and rubber
- Cancer drugs
- Radiation to the pelvis
- There may be a genetic link

What are the Symptoms of Bladder Cancer?

How do you know that you have bladder cancer? Some people may have symptoms that suggest they have bladder cancer. Others may feel nothing at all. Some symptoms should never be ignored.

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 health care team at once. Even if the blood goes away, you should still talk to your health care team about it.

Blood in the urine does not always mean you have bladder cancer. There are a number of reasons why you may have blood in your urine. You may have an infection or kidney stones. A very small amount of blood might be normal in some people.

Frequent need to pass urine and pain when you pass urine (dysuria) are less common symptoms of bladder cancer. If you have these symptoms, it's of great value to see your health care team. They will find out if you have a urinary tract infection or something more serious, like bladder cancer.

If your health care team believes you may have NMIBC, you may be sent to see a urologist. A urologist is a doctor who specializes in diseases of the urinary tract. The doctor may order these tests:

- Urinalysis
- Blood Tests
- Imaging Tests like X-rays, CT scan, MRI
- Retrograde Pyelogram
- Cystoscopy
- Transurethral Resection of Bladder Tumor (TURBT)



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How is NMIBC Treated?

Your best chance for healing from NMIBC is early diagnosis and early care. Your treatment will depend on how much your cancer has grown. Your urologist will tell you about your risk for the cancer spreading and the stage and grade of your cancer. Risk of harm may be low, intermediate or high. Treatment also depends on your health and age. Your urologist will talk with you about the choices below:

- **Cystoscopy with transurethral resection of bladder tumor (TURBT).** For a cystoscopy, your doctor will pass a small scope (cystoscope) through the urethra into the bladder. A cystoscope is a thin tube that has a light and camera at the end. It lets your doctor to see inside the bladder. Your doctor will also resect (cut) away the tumor and do other tests on the tissue. They may do a TURBT during cystoscopy. A TURBT may help find out if you have cancer or it may be used as part of your care.
- **Intravesical infusion (immunotherapy).** You may get this treatment after you are healed from surgery. Bacillus Calmette-Guerin (BCG) is the immunotherapy drug that is used for this treatment and is inserted into the bladder via a small tube. It is one of the standard treatments for NMIBC. You may also get this treatment more than once. The treatment is often done in your doctor's office, not in the hospital or operating room.
- **Intravesical chemotherapy.** Intravesical therapy is when the drug is put straight into your bladder through a thin tube called a catheter that is placed through the urethra. You will hold the drug in your bladder for one to two hours and then pass it out. Intravesical chemotherapy is most often given right after the first TURBT to help stop the cancer cells from growing or coming back and can also be given in the doctor's office.
- **Cystectomy (bladder removal).** For NMIBC, your doctor may suggest bladder removal if intravesical BCG therapy fails. If you are at a high-risk for the cancer to get worse or to return, radical cystectomy (total bladder removal) may be the best treatment for you.

After Treatment

Most often, patients who have TURBT go home the same day. As the bladder responds and heals to this surgery, it is common for patients to have some bladder symptoms. These symptoms may include having to pass urine more frequently and urgently, pain and burning when passing urine and some blood in the urine. It may take weeks up to a month for the symptoms to go away while the bladder is healing. Also, patients may need to have a catheter or wear a catheter bag for days up to a week after surgery to help the bladder heal.

It is of great value to know that BCG treatments may also have some side effects for a few days after such as pain when passing urine, low-grade fever and chills. Most patients handle this treatment well, but knowing about these side effects may help you talk with your health care team about the recovery process.

Questions to Ask Your Health Care Team

To get the most from the visit with your health care team, you might want to write down a few questions and take them with you. Below are some ideas:

- What kind of bladder cancer do I have?
- Can my cancer be cured?
- How far has the cancer spread?
- What tests will I have to do before treatment?
- What treatment do you suggest? Why this treatment?
- How should I get ready for my treatment?
- What side effects will I have from this treatment?
- Will I need to see other doctors and specialists?
- Will my cancer return after this treatment?
- Are there support groups that can help me through this?

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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.

