Bladder cancer often starts in the lining of the bladder. It is of great value to know the signs of bladder cancer so you can act quickly. The most common sign is usually blood in the urine, also called hematuria. As with most cancers, an early diagnosis allows for more treatment options with better outcomes. Talking with your doctor can help you decide which treatment option is best for you.

What is Bladder Cancer?
The bladder stores your body's urine – liquid waste made by your kidneys - before it leaves the body. When cells don’t act normally, they can form tumors and become cancer. A person with bladder cancer has one or more tumors (lumps) made of abnormal, unhealthy cells that first form in the bladder.

Two types of bladder cancer can form:
- **Non-muscle invasive bladder cancer (NMIBC)** grows only in the thin tissue on the inside surface of the bladder. The bladder muscle is not involved, and the tumor does not spread outside the bladder. There are many treatment options for NMIBC.
- **Muscle invasive bladder cancer (MIBC)** spreads into the thick muscle, deep in the bladder wall. This is an advanced stage of cancer. It’s serious and should be treated right away.

What Causes Bladder Cancer?
- Genetics, or family history
- Smoking
- Workplace exposure to chemicals in plastics, paints, leather and rubber
- Cyclophosphamide, a cancer drug
- Radiation to the pelvis

What are the Signs of Bladder Cancer?
Talk with your doctor if you have any of these signs or symptoms:
- Blood in the urine, or hematuria (in early stages, blood is not visible)
- Frequent and urgent need to pass urine, with or without pain
- Pain in your lower abdomen
- Back pain

How is Bladder Cancer Tested?
A urologist, a doctor who specializes in diseases of the urinary tract, uses these tests:
- **A comprehensive metabolic panel**: to see if blood levels are normal
- **Urine cytology**: to check for cancer cells in urine
- **Cystoscopy**: to see inside the bladder and take samples for a biopsy
- **Imaging tests like X-rays, CT scan or MRI**: to scan the body
- **Retrograde pyelogram**: an X-ray to look at your ureters and kidneys
PET-scan: to see where the cancer is and how it’s growing

Transurethral Resection of Bladder Tumor (TURBT): a surgery to remove tissue for a biopsy and remove bladder cancer

What are Bladder Cancer Treatment Options?

Treatment depends on your overall health and your age, plus the stage and location of your cancer. The earlier you can receive treatment, the better. Treatment options include:

- **TURBT (transurethral resection of bladder tumor)**
  
  For TURBT, a tiny camera on a tiny tube (cystoscope) is moved through the urethra to see into the bladder. This lets your doctor cut away (resect) the tumor and get a sample for a biopsy. Removing the tumor is part of your care.

- **Intravesical (within the bladder) Therapy**
  
  - **Intravesical Immunotherapy**: Immunotherapy can boost your immune system to fight cancer cells. Bacillus Calmette-Guerin (BCG) is the immunotherapy drug placed in the bladder to help your body kill abnormal cells. The first course will last about 6 weeks, and it’s done in your doctor’s office. It can be done more than once.
  
  - **Intravesical Chemotherapy**: Intravesical chemotherapy is done usually right after surgery and can kill cancer cells on the lining of the bladder. The most common drugs placed in the bladder are Mitomycin-C and gemcitabine. They can stop cancer cell growth on the surface. Some people need more than one course of treatment.

- **Cystectomy or Bladder removal**
  
  - **Partial cystectomy**: surgery to remove the part of the bladder with cancer.
  
  - **Radical cystectomy**: surgery to remove the whole bladder plus nearby lymph nodes, part of the urethra, the prostate (in men)/the uterus, ovaries, fallopian tubes and part of the vagina (in women). Nearby tissues may also be removed. This treatment is common for MIBC. The surgeon will build another way for urine to be stored before leaving your body.

- **Chemotherapy**

  Chemotherapy are drugs that kill cancer cells in the body. It may or may not be used 6-8 weeks before bladder surgery to improve survival (neoadjuvant chemotherapy). It can also be used after surgery (adjuvant chemotherapy).

- **Radiation**

  Radiation is sometimes used with chemotherapy to kill cancer cells and improve survival. TURBT would be done first to remove as much cancer as possible. With radiation, you will need tests to check tumor growth.

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 or go to UrologyHealth.org/FindAURologist to find a doctor near you.

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 healthcare provider about your health concerns. Always consult a health care provider before you start or stop any treatments, including medications. For more information, visit UrologyHealth.org/Download or call 800-828-7866.

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