

Bladder Cancer

Urine is formed by the **kidney** and stored in the **bladder**. The bladder expands and contracts depending on how much urine is stored inside. Cancer can develop in the bladder as it does in other bodily organs. Most bladder cancer arises in the cells that line the bladder. The February 16, 2005, issue of *JAMA* includes an article about bladder cancer.

SYMPTOMS OF BLADDER CANCER

- Blood in the urine
- Frequent urination
- Painful urination

RISK FACTORS FOR BLADDER CANCER

- Smoking greatly increases the chance of having bladder cancer. Smoking also increases the death rate from bladder cancer.
- Older persons have a greater risk for bladder cancer than younger individuals.
- Men develop bladder cancer 4 times more often than women.

DIAGNOSIS

Diagnosis and treatment of bladder cancer is usually done by a **urologist** (a doctor with specialized training in surgery of the urinary tract). Urine may be sent to the lab for analysis, cell count, or culture. **Cystoscopy**, passing a lighted tube into the bladder through the **urethra** (the tube that carries urine from the bladder to outside the body), may be performed to see the inner lining of the bladder and examine it for growths or tumors. **Biopsies** (small samples of tissue) may be taken to examine under a microscope. Other testing may include an **intravenous pyelogram**, an x-ray test using dye to look at the kidneys and **ureters**, the tubes that drain urine into the bladder from the kidneys. If more invasive bladder cancer is suspected, other tests may be done to determine if the cancer has spread to other areas.

TREATMENT

Treatment usually includes **transurethral** (through the urethra) resection of the bladder tumor. This surgical procedure is done with the patient under anesthesia. More extensive surgery may be needed if the bladder tumor has invaded beyond the lining of the bladder. This may include **cystectomy** (removal of the bladder) with creation of a urine-draining system. **Chemotherapy** (use of anticancer medications), **radiation** (x-ray) therapy, and immunologic therapy may be used to treat advanced bladder cancer. Immunologic therapy uses biologic agents to help the body's own immune system fight the bladder cancer. Cancer clinical trials are an option for individuals who have advanced or recurrent bladder cancer that has been resistant to standard treatment.

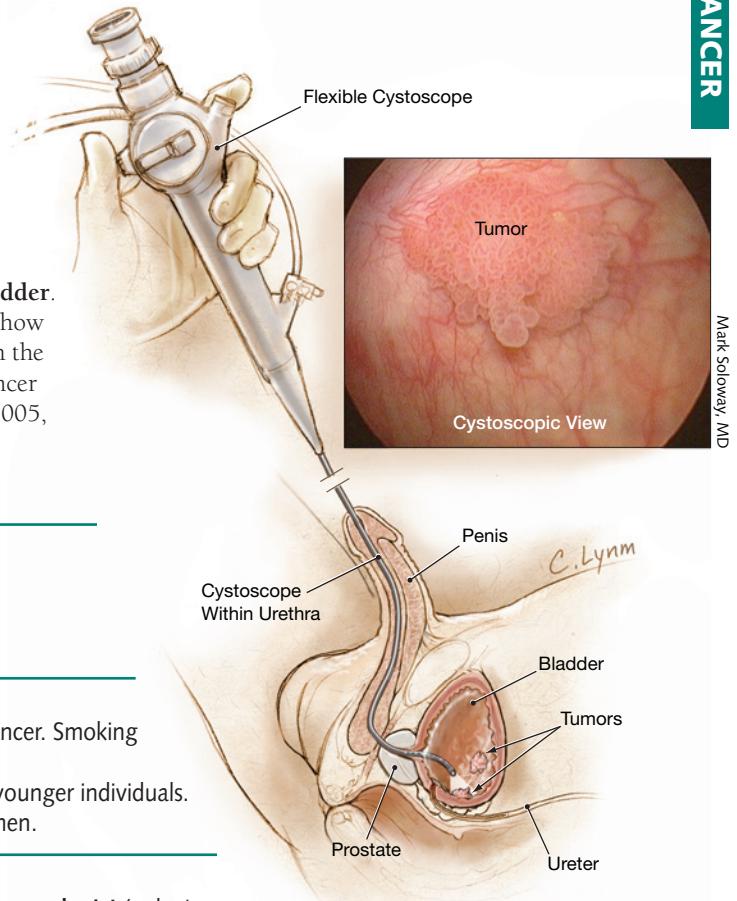
Sources: American Cancer Society, National Cancer Institute, American Foundation for Urologic Disease

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- American Cancer Society
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www.cancer.org
- National Cancer Institute
800/422-6237
www.cancer.gov
- American Foundation for Urologic Disease
800/828-7866
www.afud.org

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To find this and previous JAMA Patient Pages, go to the Patient Page link on JAMA's Web site at www.jama.com. A Patient Page on cancer clinical trials was published in the June 9, 2004, issue; and one on kidney cancer was published in the July 7, 2004, issue.

