Bladder Cancer - Diagnosis [1]

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ON THIS PAGE: You will find a list of the common tests, procedures, and scans that doctors can use to find out what?s wrong and identify the cause of the problem. To see other pages, use the menu on the side of your screen.

Doctors use many tests to diagnose cancer and find out if it has spread to another part of the body, called metastasis. Some tests may also determine which treatments may be the most effective. A bladder biopsy or biopsy from another location (if the cancer has spread) is the only way to make a definitive diagnosis. A biopsy is the removal of a small amount of tissue for examination under a microscope. Imaging tests may be used to find out whether the cancer has spread. This list describes options for diagnosing this type of cancer, and not all tests listed will be used for every person. Your doctor may consider these factors when choosing a diagnostic test:

- Age and medical condition
- Signs and symptoms
- Previous test results

The earlier bladder cancer is found, the better the chance for successful treatment. However, there is not yet a test that is accurate enough to screen the general population for bladder cancer, so most people are diagnosed with bladder cancer once they have symptoms [3]. As a result, some patients have more advanced (later stage) disease when the cancer is first found, although most people diagnosed have noninvasive bladder cancer.

The following tests may be used to diagnose and learn more about the bladder cancer:

Urine tests. The doctor tests a urine sample to find out if it contains tumor cells. If a patient is undergoing a cystoscopy (see below), an additional test may be performed that involves rinsing the bladder and collecting the liquid through the cystoscope or through another small tube that is inserted into the urethra. The sample can be tested in a variety of ways. The most common way is to look at the cells under a microscope, called urinary cytology. Urine passed out of the body during normal urination can also be examined by cytology. There are other urine tests using molecular analysis that can be done to help find cancer, usually at the same time as urinary cytology.

Cystoscopy [4]. This is the key diagnostic procedure for this disease. It allows the doctor to see inside the body with a thin, lighted, flexible tube called a cystoscope. Flexible cystoscopy is performed in the doctor's office and does not require anesthesia, which is medication that blocks the awareness of pain. This short procedure can detect growths in the bladder and determine the need for a biopsy or surgery.

Transurethral Resection of Bladder Tumor (TURBT). If abnormal tissue is found during a cystoscopy, the doctor will do a biopsy [5]. This procedure is called a transurethral bladder tumor resection or TURBT. During a TURBT, the doctor can remove the tumor and a sample of the bladder muscle near the tumor in addition to biopsies of other parts of the bladder. A TURBT is used to diagnose bladder cancer and find out the type of tumor, how deeply it has grown into the layers of the bladder, and additional microscopic cancerous changes called *carcinoma in situ* (CIS). After the TURBT is done, the urologist will also evaluate the bladder to see if any masses can be felt. This is called an exam under anesthesia or EUA. The samples removed during the biopsy are analyzed by a pathologist. A pathologist is a doctor who specializes in interpreting laboratory tests and evaluating cells, tissues, and organs to diagnose disease. A TURBT can also be used as a treatment for a non-muscle-invasive tumor. See the Treatment Options [6] section for more information.

The following imaging tests may be used to find out if the bladder cancer has spread and to help with staging [7].

Computed tomography (CT or CAT) scan [8]. A CT scan creates a three-dimensional picture of the inside of the body with an x-ray machine. A computer then combines these images into a detailed, cross-sectional view that shows abnormalities or tumors. A CT scan can also be used to measure the tumor?s size. Sometimes, a special dye called a contrast medium is given before the scan to provide better detail on the image. This dye can be injected into a patient?s vein or given as a pill to swallow. The patient should tell the staff giving this test beforehand if he or she is allergic to iodine or other contrast media.

Magnetic resonance imaging (MRI) [9]. An MRI uses magnetic fields, not x-rays, to produce detailed images of the body. MRI can also be used to measure the tumor?s size. A special dye called a contrast medium is given before the scan to create a clearer picture. This dye can be injected into a patient?s vein or given as a pill to swallow.

After diagnostic tests are done, your doctor will review all of the results with you. If the diagnosis is cancer, these results also help the doctor describe the cancer; this is called staging.

The next section helps explain the different stages for this type of cancer. Use the menu on the side of your screen to select Stages, or you can select another section, to continue reading this guide.

Links:
[1] http://www.cancer.net/cancer-types/bladder-cancer/diagnosis
[2] http://www.cancer.net/about-us
[3] http://www.cancer.net/node/18524
[4] http://www.cancer.net/node/24511

[5] http://www.cancer.net/node/24406
[6] http://www.cancer.net/node/18527
[7] http://www.cancer.net/node/18526
[8] http://www.cancer.net/node/24486
[9] http://www.cancer.net/node/24578