

# Bladder Cancer

## What Is Bladder Cancer?

Bladder cancer begins in the cells lining the bladder, the organ responsible for storing urine. It is one of the most common cancers, particularly affecting older adults. Early detection is crucial, as it allows for more effective treatment and better outcomes. Common symptoms include blood in the urine, frequent urination, and pain during urination.

## Types Of Bladder Cancer

Bladder cancer is classified based on the type of cells where the cancer begins:

- **Transitional cell carcinoma (TCC):** Also known as urothelial carcinoma, TCC is the most common type of bladder cancer. It starts in the urothelial cells that line the inside of the bladder.
- **Squamous cell carcinoma:** This type develops in the thin, flat cells that line the bladder and is often associated with chronic irritation or infection.
- **Adenocarcinoma:** A rare form of bladder cancer that begins in the glandular cells that produce mucus in the bladder lining.

## Symptoms Of Bladder Cancer

The symptoms of bladder cancer can vary. Common signs include:

- **Blood in the urine (haematuria):** This is the most common symptom. It can be visible, causing urine to appear orange, pink, or, less commonly, dark red, or it may be detected microscopically during a urine test.
- **Frequent urination:** Needing to urinate more often than usual.
- **Painful urination (dysuria):** A burning sensation or discomfort when urinating.
- **Urgency:** Feeling the sudden, urgent need to urinate even when the bladder isn't full.
- **Pelvic pain:** Discomfort or pain in the lower abdomen or pelvis.
- **Back pain:** Pain in the lower back may occur if the cancer has spread to the kidneys or other areas.

If you experience any of these symptoms, it's important to seek medical advice promptly.

## Causes And Risk Factors

The exact cause of bladder cancer is not always clear, but several risk factors can increase your likelihood of developing the disease:

- **Smoking:** The leading risk factor, as harmful chemicals in tobacco smoke are filtered by the

kidneys and can accumulate in the bladder.

- **Exposure to certain chemicals:** Long-term exposure to industrial chemicals, particularly in the rubber, textile, and dye industries.
- **Age and gender:** Bladder cancer is more common in people over 55 and is more prevalent in men than women.
- **Chronic bladder inflammation:** Conditions such as chronic urinary infections or prolonged use of a catheter can increase the risk.
- **Family history:** A family history of bladder cancer can also elevate your risk.

## Diagnosing Bladder Cancer

At Birmingham Urology Centre, we use a combination of diagnostic tools to detect bladder cancer:

- **Urine tests:** To detect blood, abnormal cells, or infection.
- **Cystoscopy:** A procedure where a small camera is inserted into the bladder through the urethra to directly view the bladder lining.
- **Imaging tests:** Ultrasound, CT scans, or MRI may be used to get detailed images of the bladder and surrounding organs.
- **Biopsy:** If abnormal tissue is found during a cystoscopy, a small sample may be taken for further analysis in the lab.

## Staging And Grading

Once diagnosed, bladder cancer can be classified by how far it has spread (staging) and how abnormal the cells appear under a microscope and how quickly they are growing (grading).

- **Staging:**
  - **Non-muscle-invasive bladder cancer (early bladder cancer):** If the cancerous cells are contained inside the lining of the bladder, it is described as non-muscle-invasive bladder cancer (early bladder cancer). This is the most common type of bladder cancer.
  - **Muscle-invasive bladder cancer (invasive bladder cancer):** When the cancerous cells spread beyond the lining into the surrounding bladder muscle, it's referred to as muscle-invasive bladder cancer. This type is less common but has a higher chance of spreading to other parts of the body.
  - **Advanced or metastatic bladder cancer:** If bladder cancer has spread to other parts of the body, it is known as advanced or metastatic bladder cancer.
- **Grading:**
  - **Low-grade:** Cancers are usually slower growing.
  - **High-grade:** Cancers are more aggressive and likely to spread.

## Treatment Options

The treatment for bladder cancer depends on its stage, grade, and your overall health. Options may include:

- **Surgery:** The most common treatment for bladder cancer, ranging from removing the tumour (transurethral resection of bladder tumour, TURBT) to removing part or all of the bladder (partial or radical cystectomy).
- **Intravesical therapy:** Treatment delivered directly into the bladder via a catheter, often using immunotherapy or chemotherapy.
- **Radiotherapy:** High-energy radiation is used to target and kill cancer cells.
- **Chemotherapy:** Drugs used to kill cancer cells. Chemotherapy can shrink the tumor before surgery (neoadjuvant therapy), eliminate any remaining cancer cells after surgery (adjuvant therapy), or be the main treatment if surgery isn't an option.
- **Immunotherapy:** Treatments that help the body's immune system fight the cancer, such as Bacillus Calmette-Guérin (BCG) therapy.
- **Targeted therapy:** Drugs that target specific aspects of cancer cells to stop their growth.

## Risks Associated With Treatment

The risks associated with bladder cancer treatment vary depending on the type of treatment:

- **Surgical risks:** Infection, bleeding, injury to surrounding organs, and complications from anaesthesia.
- **Chemotherapy risks:** Nausea, vomiting, hair loss, increased risk of infection, and fatigue.
- **Radiotherapy risks:** Skin irritation, bladder irritation (leading to frequent urination or discomfort), and bowel issues.
- **Immunotherapy risks:** Flu-like symptoms, bladder irritation, and a risk of severe immune reactions.
- **General risks:** Emotional and psychological stress, impact on sexual health, and urinary issues.

## Recovery

Recovery from bladder cancer treatment involves several stages:

- **Immediate post-treatment care:** Depending on the treatment, this might include hospital stays, managing surgical wounds, and dealing with immediate side effects of chemotherapy or radiotherapy.
- **Rehabilitation:** Physical therapy, dietary changes, and other supportive measures to help you regain strength and adjust to changes, especially if major surgery like cystectomy was performed.
- **Emotional and psychological support:** Counselling, support groups, and therapy to help you cope with the emotional and psychological impact of cancer treatment.
- **Lifestyle adjustments:** Adapting to any permanent changes, such as living with a urinary diversion if the bladder has been removed.

## Follow-Up Care And Prognosis

Bladder cancer has a high risk of recurrence, so regular follow-up care is essential. This typically includes:

- **Regular cystoscopies:** To monitor for any signs of cancer returning.
- **Urine tests and imaging:** To check for abnormalities.
- **Lifestyle changes:** Quitting smoking and reducing exposure to known carcinogens can help lower the risk of recurrence.

## Why Choose Birmingham Urology Centre

At Birmingham Urology Centre, we offer expert care in the diagnosis, treatment, and management of bladder cancer. Our team of highly skilled urologists is committed to providing personalised care using the latest advancements in medical technology. We understand the importance of early detection and tailored treatment plans, and we work closely with you to ensure the best possible outcomes.

### Contact us

If you have concerns about bladder cancer or would like to schedule a consultation, please contact Birmingham Urology Centre today. Our dedicated team is here to provide you with the highest standard of care and support every step of the way.