

# Prostate Cancer

## What Is The Prostate?

The prostate is a gland located underneath the bladder and surrounding the urethra, the tube that carries urine out of the body. It is usually the size of a walnut and grows larger with age. The prostate helps to make semen, the fluid that carries sperm.

## Understanding Prostate Cancer

Prostate cancer is the most common cancer in men in the UK, with around 50,000 men diagnosed annually. This means that 1 in 8 men will develop prostate cancer during their lifetime. Early diagnosis and treatment can result in an excellent prognosis. Approximately 400,000 men in the UK are living with or after prostate cancer.

Prostate cancer occurs when cells in the prostate gland grow uncontrollably. The risk of prostate cancer increases with age. Some prostate cancers grow very slowly and do not cause symptoms or affect life expectancy, allowing many men to live for years without needing treatment. However, some prostate cancers are aggressive, growing quickly and spreading to other parts of the body. Early and accurate diagnosis is essential for identifying fast-growing prostate cancer and starting treatment promptly to ensure the best possible outcome.

## Who Can Be Affected?

The following people have a prostate so can develop prostate cancer:

- Men
- Trans women (the prostate is not removed during genital reconstructive surgery)
- Non-binary people assigned male at birth
- Some intersex people

## Prostate Cancer Causes And Risk Factors

The exact cause of prostate cancer is not known, but several factors can increase your risk:

- **Age:** Most common in men over 50.
- **Family history:** Higher risk if a close relative (father, brother, grandfather, uncle) has had prostate cancer.
- **Ethnicity:** Black men are at higher risk, while Asian men have the lowest risk.
- **Genetics:** Certain inherited genes can increase risk.
- **Overweight and obesity:** A BMI greater than 25 increases risk.

## Prostate Cancer Symptoms

### Early-stage prostate cancer symptoms

Often presents no symptoms. When symptoms do occur, they may include:

- Needing to urinate more often, especially at night
- Difficulty or straining when urinating
- Weak urine flow
- Feeling like your bladder isn't empty after urinating
- Blood in your semen or urine

### Advanced prostate cancer symptoms:

- Bone pain (usually in the pelvic area or lower back).
- Feeling tired or unwell.
- Unexplained weight loss.

Having these symptoms doesn't always mean you have prostate cancer, but it's important to get them checked. Other prostate conditions, such as benign prostatic hyperplasia (BPH) and prostatitis, can cause similar symptoms.

## Diagnosis

- **PSA test:** Measures the level of prostate-specific antigen in the blood. Elevated levels may indicate prostate cancer.
- **Digital rectal examination (DRE):** A physical exam where a doctor feels the prostate through the rectum to check for abnormalities.
- **MRI and ultrasound:** Imaging tests to get a detailed view of the prostate.
- **Biopsy:** A procedure to remove small samples of prostate tissue to check for cancer cells.

## Staging And Grading

- **Staging:** Determines how far cancer has spread, ranging from Stage I (localised, confined to the prostate) to Stage IV (advanced, cancer has spread to other parts of the body).
- **Gleason score:** A grading system that assesses the aggressiveness of cancer based on biopsy results, with scores ranging from 6 (least aggressive) to 10 (most aggressive).

## Treatment Options

- **Active surveillance:** Monitoring low-risk cancers closely with regular tests and follow up without immediate treatment.
- **Surgery:** Removal of the prostate gland, typically via a robotic-assisted laparoscopic

prostatectomy (RALP).

- **Radiotherapy:** Using high-energy radiation to kill cancer cells.
- **Hormone therapy:** Medication to lower testosterone levels to slow cancer growth.
- **Chemotherapy:** Using drugs to kill or slow the growth of cancer cells, usually for advanced cancer.

## Advantages Of Robotic-Assisted Laparoscopic Prostatectomy (Ralp)

- Shorter hospital stays
- Less blood loss
- Quicker return to normal activities
- Faster return to urinary continence
- Reduced risk of serious complications

## Living With Prostate Cancer

Managing prostate cancer involves regular follow-ups and monitoring. Many men live long and healthy lives post-diagnosis, especially when cancer is detected early. Support services, including counselling and support groups, are available to help manage the emotional and psychological impact of a prostate cancer diagnosis.

## Prevention And Awareness

- **Healthy lifestyle:** A balanced diet and regular exercise, can contribute to overall prostate health.
- **Screening:** Men over 50, or over 45 for those at higher risk, should discuss prostate cancer screening with their doctor.
- **Awareness:** Knowing the symptoms and risk factors can lead to earlier detection and better outcomes.

## Why Choose Birmingham Urology Centre

Prostate cancer is a significant health concern, but with early detection and appropriate treatment, many men successfully manage the disease. At our clinic, we offer comprehensive care, from initial diagnosis to post-treatment support, ensuring personalised and effective treatment for each patient. Using advanced new diagnostics, we can assess your individual prostate cancer risk, avoiding invasive tests such as a biopsy unless absolutely necessary.

**Contact us** at Birmingham Urology Centre if you suspect or have been diagnosed with prostate cancer. Our expert team is here guide you through every step of your diagnosis and treatment.