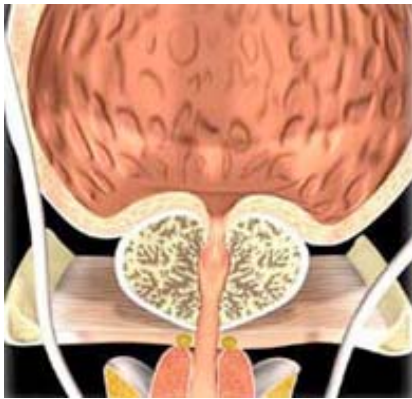


Prostate Brachytherapy

Advisory Group

About Prostate Cancer

What is Prostate Cancer?



Prostate cancer is the growth of malignant prostate glandular cells in the prostate gland. These cells multiply and have the potential to spread beyond the prostate gland. The prostate gland, which is about the size of a walnut, sits between a man's bladder and rectum in the pelvis. A key function of the prostate gland is to provide sperm with the necessary nutrients and help in their maturation. Prostatic fluids also help to protect sperm travelling in the female reproductive system.

Prevalence

Prostate cancer is the most common male cancer in the UK, accounting for almost one in four of the male cancers. Each year, nearly 32,000 men in the UK are diagnosed with prostate cancer and more than 10,000 die from it. Prostate cancer predominantly affects men over the age of 65.¹ The illness is more common in men of Afro-Caribbean or African-American descent and in western countries.²

Detection

The digital rectal exam (DRE) and the Prostate-Specific Antigen (PSA) blood test are the two most common screening methods of detecting prostate cancer.

Staging of Prostate Cancer

When a doctor finds prostate cancer, he or she will try to determine the extent of the disease. This is called clinical staging. The doctor may use various diagnostic tests to find out whether the cancer has spread, and if so to which location. The stage of the disease, later combined with its pathological grade, will help determine treatment options.

Progression of Prostate Cancer

Most prostate cancers will grow slowly. However, in some cases prostate cancer can grow rapidly regardless of the patient's age and can become life threatening. If it is not treated, the cancer may spread beyond the prostate gland, reach surrounding tissue and organs, and eventually spread to other parts of the body.

Treatment of Prostate Cancer

There are many forms of treatment for prostate cancer. The "best" treatment depends on several factors: the disease clinical stage, pathological grade, the man's age and life expectancy, his doctor's recommendations and his own decisions and expectations.

- **Watchful Waiting**

With watchful waiting, there is no immediate prostate cancer treatment. During the watchful waiting period, the physician keeps the cancer under close watch.

Prostate cancer often develops very slowly. With watchful waiting, the patient takes the time to consider possible treatment options. In some cases, particularly with older men, the prostate cancer patient will die of other causes rather than from prostate cancer.

- **LDR Brachytherapy**

Low dose rate (LDR) brachytherapy is a minimally invasive procedure where tiny permanent radioactive seeds (about the size of a grain of rice) are implanted into the prostate. The seeds remain in the prostate, where the radioactive material gives off localised radiation for a number of months to destroy the prostate cancer.

Seed implantation is an effective treatment for men with localised prostate cancer. It requires no surgical incision and offers men a short recovery time. LDR Brachytherapy can be an outpatient procedure, and most men go home the same day as their treatment. Additionally, most men can return to their normal activities a few days after treatment.

- **Surgery**

Radical prostatectomy is major surgery performed under general or regional anaesthesia that removes the entire prostate gland plus some surrounding tissue. The goal is to remove the cancer entirely and prevent its spread to other parts of the body. Some surgeons are now using, when laparoscopic (keyhole) surgery to remove the prostate and cancer completely.

A radical prostatectomy is generally recommended only for men in good general condition who can withstand long anaesthesia and recovery period and have a life expectancy of ten years or more.

- **External Beam Radiation**

External beam radiation therapy (EBRT) treats prostate cancer with radiation. During the treatment, a machine targets a beam of ionising irradiation at the target tissue. The treatment damages genetic material in all dividing cells within the target lesion. This prevents the cells from growing and they eventually die. Patients undergoing EBRT generally receive treatment at an outpatient centre five days a week for six to eight consecutive weeks. EBRT is an option when the cancer is confined to the prostate gland, it may be used alone or combined with medications or surgery.

- **Hormone Therapy**

Testosterone regulates the growth and development of the prostate gland. However, when prostate cancer develops, testosterone can make the cancer grow much faster. Hormone therapy stops or blocks the testicles making testosterone and thereby slows the spread or growth of the cancer.

Hormone therapy may also be used to shrink the size of the prostate gland before another kind of treatment such as radiotherapy or brachytherapy. Men whose cancer has returned after radical prostatectomy or radiation therapy may be offered hormonal therapy.

Living with Prostate Cancer

Early detection and adequate treatment aim to eliminate prostate cancer or to prevent it from progressing, which can greatly reduce the risk of dying from the disease and the occurrence of painful symptoms. Like any form of treatment, prostate cancer treatment can pose physical, psychological and emotional challenges, and some treatments require extensive recovery time. The patient may also have to deal with relational, sexual and other issues during the course of treatment and recovery.

For more information

www.myprostatecanceroptions.com
www.prostatebrachytherapyinfo.net

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