

Welcome to the Urology Department

Patient Information Leaflet

We aim to make your visits to our department as easy and pleasant as possible.

We aim to offer not only a high quality of physical care at all times, but also information and support, tailored to your needs and your carers. We encourage an open partnership of care between all concerned.

This booklet contains information to try and answer some of the questions you and your family may have about prostate cancer and its treatments. You will be fully involved in any decisions about your care and treatment.

Do not hesitate to contact your key-worker/ specialist nurse practitioner or nurse practitioner if you require any further information

Specialist Nurse Practitioner (Urology)

Or

Urology Nurse Practitioners

Tel. No 0191 445 2217 /445 2829 /445 3403

This number has a 24 hour answer-phone service. If the nurses are not available please leave a message. They will try to return your call within 24 hours (excluding weekends)

Please bring this booklet to your urology appointments or if you are admitted to the Freeman Hospital in Newcastle, to use as a reference.

The urology unit

The urology unit here at the Queen Elizabeth Hospital in Gateshead is part of the bigger urology unit at the Freeman Hospital in Newcastle. Both the medical and nursing staff at the QE are employed by the Freeman Hospital and work at both hospital sites.

Some patients diagnosed with a urology cancer at Gateshead, may receive some treatment either at the Freeman Hospital or the Northern Centre for Cancer Treatment, at Newcastle General Hospital.

Usually any outpatient treatment or clinic visits will take place in Gateshead, and any treatment requiring an in-patient stay or radiotherapy will happen in Newcastle. The QE does not have in-patient beds for urology patients.

What is a specialist nurse practitioner?

- The specialist nurse practitioner (urology) works as part of the urology team within the hospital. She is a qualified nurse who has specialist training in urological nursing and cancer care and is skilled in advising regarding symptoms and treatment options where appropriate.
- The specialist nurse practitioner can provide you with practical information and support in all aspects of urological cancer disease and works alongside the urology nurse practitioner who will be pleased to offer help and advice should the specialist nurse be unavailable. They are both available on the same contact numbers.
- She will be happy for you to contact her to discuss your treatment or concerns confidentially. She can also put you in touch with support groups and other agencies, contact with her can be either personal or by telephone

What is the prostate?

The prostate is a walnut sized gland that is only present in men. It lies in the lower abdomen just below the bladder, and surrounds the tube known as the urethra (through which the urine flows from the bladder to the outside of the body.)

The function of the prostate gland is to make an important liquefying component of semen. The sperm are stored just behind the prostate in the seminal vesicles (which are a pair of tube-like glands). At orgasm and ejaculation the prostate and the seminal vesicles contract mixing their respective contents. The fluid in the prostate contains large amounts of a substance known as prostate specific antigen (PSA), which liquefies the sperm mixture, allowing the sperm to move freely after ejaculation.

The prostate is tiny at birth and throughout childhood, but enlarges after teenage years (puberty). Growth of the prostate is influenced by the male hormone testosterone.

What is the Gleason grade?

Grade is the measure of how aggressive the cancer is. The Gleason grading is the most common method of grading a prostate cancer.

The biopsies taken from your prostate gland are studied under a microscope. Cancer cells in the prostate gland start out looking very similar to normal prostate cells, but start to grow more abnormal as the cancer progresses.

Cancer cells that look similar to normal prostate tissue are considered less worrying, you may hear these described as 'well differentiated' cells.

A sample in which hardly any or none of the cells look like normal prostate cells is more worrying. You may hear the appearance described as 'poorly differentiated'.

The Gleason grading system grades the cancer according to its resemblance to normal prostate cells. Grades one and two most closely resemble normal prostate cells while four and five differ widely from normal prostate cells. The two most common grades within your biopsy are added together to give a reading of between two and ten. Results towards the

lower end of the scale mean that the cancer is less aggressive, those in the middle moderately aggressive, and those at the higher end of the scale are the most aggressive. For example you may have a Gleason score of two + four, which gives a combined score of six out of ten, which is a moderately differentiated cancer.

Your urologist and specialist nurse will discuss the Gleason grades and how it affects your treatment choices, with you in clinic. Please feel free to ask any questions.

What is the PSA test?

PSA, prostate specific antigen, is a protein-like substance that occurs in the fluid within the prostate. Testing blood samples to determine the amount of PSA (a PSA test) is central to the early detection and effective treatment of prostate cancer.

PSA can also be raised in prostate conditions that are not cancerous i.e benign prostate enlargement or prostatitis.

Prior to a diagnosis of prostate cancer PSA testing is used (along with a biopsy) to determine whether you may have prostate cancer

Whatever the grade and stage of prostate cancer, once treatment has been started, your specialist nurse, urologist or general practitioner, will monitor your PSA levels on a three or six monthly basis. Monitoring a man's PSA level is extremely helpful once therapy has started, as it can indicate how well treatment is working.

Active monitoring PSA readings plus general health and urinary symptom assessment, help us to determine whether the prostate cancer is stable or it is becoming active and we should consider starting some form of treatment.

Your specialist nurse will inform you of the result of your PSA test after every visit, and discuss the implication of the result with you.

What is prostate cancer?

The word cancer is used to describe the state where normal cells have started to grow uncontrollably, so that they begin to invade and change healthy tissue. As they grow and divide these cells form a mass called a malignant tumour. In prostate cancer, prostate cells start to grow uncontrollably and invade surrounding healthy prostate tissue. If it is not treated, the cancer becomes more advanced and starts to spread into organs that lie close to the prostate. Eventually, cancer cells can break off from the main tumour, travel through the body, and grow at sites far removed from the prostate such as the bones. Prostate cancers are not the same in all men. Some are fast growing aggressive cancers which spread quickly, others grow only very slowly. In fact tiny areas of slow growing prostate cancer are extremely common among elderly men, and many are unaffected by them during their natural lifetime.

There are three stages of prostate cancer, early, locally advanced and advanced. Treatment options and in-depth information leaflets will be given to you by your urologist and specialist nurse, once the stage and grade of your cancer had been determined. Your specialist nurse will be available to go through all the information leaflets with you and your family or carer and answer any queries or concerns.

Early prostate cancer

The term early prostate cancer is used to describe the stage where the region of abnormally growing cells is small and retained in the prostate. Usually tumours of this size are found incidentally, after a prostate operation or a PSA test.

There are several different treatment options available for men with early prostate cancer. Treatment depends on how the cancer appears (stage and grade), your age and general health.

The options that may be discussed with you are:-

- Active surveillance or watchful waiting
- Surgery
- Radiotherapy
- Hormone therapy.

Locally advanced prostate cancer

The term 'locally advanced prostate cancer' is used to describe the stage where the cancer has spread outside the prostate but has not yet spread to the lymph nodes close by, or to more distant locations. It may have started to invade nearby organs (such as the seminal vesicles or the bladder.)

Several different treatment pathways are available for men with locally advanced prostate cancer. Treatment is dependent on age, general health and stage of the cancer.

- Active surveillance or watchful waiting
- Hormone therapy
- Intermittent hormone therapy
- Hormone therapy followed by surgery
- Hormone therapy followed by radiotherapy

Advanced prostate cancer.

In advanced prostate cancer, the tumour has spread outside the prostate to nearby organs and structures and may also have spread to distant sites such as the bones (this is known as metastasis). The cancer cells are transported to distant sites via either the bloodstream or the lymphatic system, and settle in sites away from the prostate. New tumours can grow from these cells; these are metastases and are often referred to as secondary tumours or just secondaries. Despite the fact that these occur in, for example bones, they are still prostate cancers (rather than bone cancer) because they originate from prostate cancer cells.

All the treatment options for advanced prostate cancer involve slowing down the growth of the tumour. At this stage the cancer is not curable, but in most cases we are able to control the growth and further spread of the cancer.

It is known that the male hormone testosterone has an important role in stimulating tumour growth, so stopping its production or blocking its effects on cancer cells form the basis of the treatment options for advanced prostate cancer:

- Surgery to remove both testicles to reduce the production of testosterone.

- Hormone therapy by injection or tablet form to reduce the production of testosterone.
- Combination of both injections and tablets to totally suppress the production of testosterone.

Treatment for advanced prostate cancer aims to make your period of remission (when your cancer is not actively growing) as long as possible, even though the cancer is deprived of testosterone, it may over time become active again. This stage is described as hormone escaped disease. If this happens your urologist and specialist nurse will discuss further treatment options with you. This may include

- Further hormones in tablet form
- Chemotherapy
- Steroids
- Oestrogen based hormone therapy
- Radiotherapy for pain relief or symptom control

Treatment at this stage of disease may involve travelling to the Northern Centre for Cancer Care or the Freeman Hospital in Newcastle.

Further investigations for prostate cancer.

You will have already attended the urology department at the QE for a trans-rectal ultrasound and biopsy of your prostate gland. (TRUS) The tissue removed during that procedure will have been analysed in pathology, and had been shown to contain some cancerous cells. In order to fully investigate your condition your urologist may request further investigations. These investigations will help to stage the cancer.

Most commonly used tests are CT scan, computerised tomography or MRI – magnetic resonance imaging are the.

They are used to obtain pictures of the prostate and surrounding tissue. Both are painless and take around 30 minutes. The CT scanner uses X-rays and MRI uses magnetic fields to produce their images.

A bone scan may be used to detect whether any tumour has spread from the bladder to the bones. A tiny amount of radioactive dye is injected into a vein; two – three hours later the whole body is scanned. The test will give the patient a low level of radioactivity, but the dye only remains active for a few hours within the body.

Problems with your waterworks?

Many men with prostate cancer experience troublesome urinary symptoms.

These include:-

- A poor urinary flow,
- A feeling of urgency or not being able to 'hold on'
- Leakage of urine
- Getting up at night to pass urine
- Going to toilet more frequently during the day.
- A feeling that your bladder still is not empty even after passing urine.

At your first visit to the prostate clinic the specialist nurse will ask you questions about your urinary symptoms. Often men with prostate cancer also experience enlargement of the prostate gland due to benign (non- malignant) disease.

You will have a urinary flow test and ultrasound scan of your bladder, which will help us decide any appropriate treatment.

Often urinary symptoms will improve once you have started treatment for your prostate cancer, but if they persist it may be necessary to add in further tablets or arrange an operation to improve your urinary flow.

Any treatment necessary will be fully explained to you by your nurse specialist.

Erectile dysfunction (Impotence) Caused by treatments for urological cancers

Information for patients

Medical and health information for men with prostate cancer

Many people continue to enjoy sex throughout their lives and well into old age. If you are one of these people, it is very important to consider whether your sexual function will be affected by any treatments you may be considering for prostate cancer. Some treatments affect sexual function completely and others only partially, therefore it is important to understand the differences between them.

What is impotence?

Impotence is a condition where a man is unable to achieve or maintain an erection long enough to reach orgasm.

Some men with urological cancers have some form of physical injury after surgery, chemotherapy or radiotherapy, which causes changes in the erections. The nerves may have been cut or damaged during the procedure, or the blood supply to the penis may be affected. Some treatments can affect sexual desire (libido) and cause a man to lose interest in sex. The good news is that libido should return to normal whenever treatment is stopped and with the development of new drugs, in the future, libido may not be affected as with current medicines.

How is impotence treated?

An erection is produced when blood rushes into the penis and fills the spongy tissue, making the penis stiffen. Therefore, many of the treatments for impotence affect the flow of blood into the penis.

Drugs taken by mouth for impotence include Viagra, Cialis, levitra and Uprima. Early studies of these drugs suggest that they have very few side effects and work well for the majority of men.

Another drug available is alprostadil. This is prescribed in the form of a suppository, which is inserted down the penis before intercourse. This drug has effectively restored

the capacity for erections and sexual intercourse in a substantial number of men tested. This medication is called MUSE

Another form of treatment is **injections** into the penis to cause erection. With this method, the man is trained to inject the base of his penis with a very fine needle before having sex. This injection releases a drug, causing the penis to fill with blood and stiffen.

Some men prefer to use a **vacuum device**. This is a plastic tube, it is passed over the penis and a hand pump creates a vacuum in the tube, forcing blood into the penis, which then becomes erect. A tight ring is then slipped onto the base of the penis, which prevents most of the blood escaping once the plastic tube is removed and thereby maintaining the erection.

Some men opt for an **operation** to re-establish their erections. There are a number of devices available, which are surgically implanted into the penis. One such device is a **semi-flexible rod**, which gives permanent rigidity to the penis and enables intercourse.

Another method involves implanting **inflatable inserts** into the penis, which have the inflation devices located in either the penis or scrotum. These can be activated by squeezing the inflation device, which then fills the inserts with air or fluid and making the penis erect. However, a drawback of this method is that the penis is rarely as large as it was prior to treatment, as only a portion of the penis is inflated.

Many of the treatments for impotence are a little clumsy and may contribute towards 'losing the moment' when you are feeling aroused. This may affect the quality of your sex life and make it more difficult for you and your partner to even think about having sex. However, with a little understanding and patience, some of the embarrassments and difficulties can be overcome and the mechanics of how you eventually achieve an erection can be used during foreplay.

Further information

The Urology Nurse Specialist or Urology consultants will be pleased to discuss this with you, please don't be embarrassed to ask them about it. They are available in clinic or you can contact Sisters Montgomery or Bowden on 0191 4452217

You may also like to contact:

The Impotence Association
P O Box 10296
London
SW17 7ZN
Telephone: 020 8767 7791

SELF HELP INFORMATION

BACUP (British Association of Cancer United Patients)

3 Bath Place
Rivington Street
London
EC2A 3JR
Phone 0808 800 1234
Web www.cancerbacup.org.uk

Cancerlink

17 Britannia Street
London
WC1X 9JN
0800 132 905

The Prostate Cancer Charity

Du Cane Road
London
W12 0NN
Helpline:- 08453008383

e-mail info@prostate-cancer.org.uk

The Prostate Cancer Support Group

Northern region
North Tyneside general Hospital
Telephone 0191 2934142

Cancer Bridge

Holistic Cancer Help Centre
Cancer Bridge
St Camillus
Oakwood
Hexham
Northumberland NE46 4JY
Telephone – 01434 605551
Website: www.cancerbridge.org.uk
Email: info@cancerbridge.org.uk

Northumberland Cancer Support Group

Meetings held at Cancer Bridge (Address above)
Contact
Pat Fog 0191 4102679
Betty Hesplop 01434 684337
L. Brinkhurst 01661 842919

CONTACT TELEPHONE NUMBERS.

Telephone numbers	
Lorraine Montgomery (Specialist Nurse Practitioner)	<i>(0191) 4452217 or ring switchboard and ask to bleep 2583</i>
Urology Secretary Mon- Fri 9.30 – 4pm	(0191) 445 2218
Main switchboard	0191 4820000

The Patient Advice and Liaison Service (PALS) can provide help, advice and support to patients, relatives or carers who have any questions or concerns regarding their health care. PALS are unable to give medical advice. You can contact PALS on free phone 0800 953 0667. Monday - Friday, 9.00am – 5.00pm. An answer phone is available outside of these hours and calls will be returned the next working day.

Data Protection

Any personal information is kept confidential. There may be occasions where your information needs to be shared with other care professionals to ensure you receive the best care possible.

In order to assist us improve the services available your information may be used for clinical audit, research, teaching and anonymised for National NHS Reviews. Further information is available in the leaflet Disclosure of Confidential Information IL137, via Gateshead Health NHS Foundation Trust website or the PALS Service

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This leaflet can be made available in other languages and formats upon request