Hormone Therapy for Prostate Cancer

Patient Information Leaflet

Your treatment

Treatment for prostate cancer varies according to the stage and grade of your prostate cancer. Following discussion with your consultant you are being given hormone therapy

Why hormone therapy?

Medical hormone therapy or drug treatment has become increasingly popular for the treatment of certain types of prostate cancer. It will not cure the cancer but will halt its growth and spread. Often there is good shrinkage of the cancer and symptoms such as urinary problems or bone pain, which you may be experiencing, will improve significantly. The length of time for which the hormone treatment works is variable, but it can be effective for many years.

What does hormone therapy involve?

You will be seen regularly by both your General Practitioner and members of the Urology team here at the Queen Elizabeth Hospital to monitor the response of your cancer to treatment, you will have regular blood tests to check your PSA level which is a protein made by prostate tissue, as this is usually a very good indicator to the effectiveness of the treatment. Other blood tests may be done if the need arises. Initially you will be seen in clinic three months after starting treatment, and then once the treatment is established you will be followed up on a 6 monthly basis.

In clinic the nurse practitioner or doctor will ask you questions about your general health as well as specific questions about your urinary symptoms. Because of the possibility of bone involvement she will also ask specific questions to find out whether you are experiencing any symptoms that may indicate that the cancer has spread. These symptoms include sudden pain in the bones, which does not get better, difficulty in walking, areas of pins and needles and numbness. It may be that these signs have nothing to do with your prostate and are often due to lifting badly, an energetic bout of gardening or an injury etc.

Once you have been having treatment for a year or so it may be that your General practitioner will monitor your response to treatment and inform us here at the hospital if there is any change in your condition.

You will still be able to contact the nurse practitioners in the urology department at any time should you need advice or help.
How does hormone treatment work?

Hormones are substances that occur naturally in the body. They control the growth and activity of normal cells. Cancer of the prostate is dependent on the male hormone testosterone for its growth. By using the drugs to stop the production of testosterone or interfere with the bodies’ response to it, the growth and spread of the cancer is slowed down or halted.

The levels of testosterone in the body can be lowered in two ways:

1. By injection
2. By an operation to remove the part of the testicles that produces testosterone.

What does hormone treatment consist of?

Usually hormone treatment consists of injections called LHRH-agonists. You will hear them referred to as ZOLADEX (Goserelin) or PROSTAP (Leuprolelin). These are usually given once a month or once every three months as an injection into the abdomen or arm. There is no difference in how effective the treatment is whether you receive it on a monthly or three monthly basis. This is purely a matter of personal preference and will be decided on by yourself and your GP. Usually you will stay on this treatment for life.

The drugs are released slowly into your body over time so that you get a continuous supply of treatment.

At the beginning of treatment you may experience a worsening of your symptoms (known as tumour flare) To prevent this occurring prior to starting these injections you will be required to take a course of medication usually for approximately four weeks. This medication is called CYPROTERONE ACETATE and is given in tablet form. Once the four-week course is completed these tablets can be discontinued.

There is an alternative to injections. The same effect can be achieved by undergoing a small operation called -

A bilateral sub capsular orchidectomy (BSO for short)

This is also known as surgical castration. This involves removing the inner part of the testicles. As testosterone is predominantly made in the testicles, the effect is that the testosterone production is almost completely stopped. This has the same effect as the 4 or 12 weekly injections. The operation is performed under a local or general anaesthetic, so carries a small risk of anaesthetic complications. It usually involves a short stay in hospital. There will be some pain in the week after the operation which is usually helped by painkilling tablets.

Some men prefer this operation to taking medication over a long period.

Both methods have similar side effects.

Possible side effects of hormone treatment

Because testosterone is the male sex hormone one consequence of treatment is that you will develop erectile dysfunction (lose your ability to get an erection for sexual intercourse.) You may also feel that your desire to have sex is reduced. This normally continues for as long as the treatment is given. There are now many drug therapies available which will restore your sexual function and the nurse specialist will be able to advise you on this.
Please do not feel too embarrassed to ask as this is something he/she deals with on a daily basis.

In about half the men who have drug hormonal therapies or BSO, the side effect which causes the greatest problem, is hot flushes or sweating. Most men who suffer from these describe them as a minor irritation, experiencing only the occasional flush. However for some it can be a larger problem of sweating episodes necessitating a change of clothing, or bedding and interrupted sleep. There are some medicines available that can help with this. Please mention this to the nurse specialist if you are experiencing problems.

Occasionally men on these treatments may notice a change in their ‘body shape’. They may find that they put on weight around their abdomen or notice a change in the size of their breasts and sometimes experience discomfort and tenderness in their breasts. This is fairly uncommon, but there are treatments we can give to reduce or eliminate the discomfort.

Hormone treatments can affect the density of the bones and the nurse will take blood periodically when she sees you in clinic to check this is not occurring.

Other side effects of this treatment include a feeling of tiredness (which usually improves once you are established on the treatment), loss of appetite and rarely some ankle swelling or skin rashes. These are not dangerous and are mentioned in this booklet to help to recognise any side effects you may experience. Please mention any side effects to your nurse practitioner or general practitioner.

**Urinary Symptoms**

It may be that problems with your waterworks were the first thing that brought you to the urology department. Hormone therapy may improve the urinary symptoms you are experiencing, although often further treatment is required to alleviate the problems you are having with your waterworks.

**Possible treatments for urinary problems**

Most men have an increase in the size of their prostate gland after the age of 60. These are usually due to benign changes (not cancerous). Although you have been diagnosed as having cancer of the prostate gland, it is usual for you to have some enlargement of your prostate gland due to benign changes. It may be that your hormone treatment does not alleviate the problems you are experiencing with your ‘waterworks’ though having a very good effect on the cancer cells within the prostate gland. In these cases it may be necessary to give you additional treatment. This may consist of: -

- Tablets to relax the tissue in the prostate gland, or to shrink the prostate and so release the pressure on your urethra which enables the urine to flow more freely and the bladder to empty completely

- Tablets to reduce the irritability of your bladder muscle and stop the urgency and frequency you may be experiencing
An operation to widen the channel through the prostate gland. This is known as a trans urethral prostatectomy or TURP. This operation widens your urethra to improve the urine flow. It does not remove the prostate cancer.

Before you are prescribed any treatment or operation you may be asked to attend the Freeman Hospital in Newcastle for a test called a cystometrogram or CMG. This test takes approximately 20mins and enables us to determine why you are experiencing waterworks problems and enables us to prescribe the most suitable treatment for you. If you are asked to attend for this test the nurse practitioner will explain everything to you.

Other treatments

Sometimes it may be necessary to add further medication to your treatment regime. This usually occurs if the cancer in your prostate gland starts to grow and you are not responding as well as before to your hormone therapy. Other treatments can include:-

- **Anti-androgens**
  Usually given in tablet form to take alongside with your current injections. These drugs act by blocking any remaining testosterone production within your body.

- **Oestrogen based hormone therapy.**
  Oestrogen may slow the growth of the cancer and may be able to attack the cancer cells directly. Many patients taking oestrogen based hormones develop nausea and there is an increased risk of blood clotting.

- **Chemo therapy**
  Following an appointment with a Consultant who specialises in the treatment of cancer at the Northern Centre for Cancer Treatment (NCCT) you may be given a course of chemotherapy to treat symptoms arising from your prostate cancer such as bone pain. This would be discussed fully in clinic prior to starting treatment.

- **Radiotherapy**
  Radiotherapy is effective in reducing pain caused by prostate cancer

- **Bisphosphonates**
  This is medication that helps prevent thinning of the bones and also helps reduce bone pain as a result of prostate cancer. This is usually given by an injection directly into a vein and is given as a day case at the hospital.

Metastasis

Cancer cells from the main tumour site (your prostate) can break away and enter the bloodstream and lymph system. The cancer cells can then be transported through the body and settle in sites away from the prostate, such as the bones. New tumours can grow from these cancer ‘seeds’ and these are often referred to as metastasis or secondaries. Despite the fact that these may occur, for example, in bone or lung they are still prostate cancers (rather than bone or lung cancers) because they originate from prostate cancer cells. These metastasis are treated in the same way as the cancer in your prostate gland. Many men with prostate cancer have secondaries or metastasis when first diagnosed with prostate cancer and they may find that any pain they are experiencing improves or is eliminated when they start on their hormone therapy.
Tests that may be performed

Bone Scan

A bone scan is performed to see if the prostate cancer has spread to your bones. This may be done when you are first diagnosed with prostate cancer or at any stage during your treatment if spread of cancer is suspected. This test is painless. A tiny amount of a radioactive agent is injected into a vein. This radioactive agent is attracted to any cancer deposits within the bones and sticks to them. A few hours later (you may decide to wait in the hospital or to go home and return in time for the scan) you will be given a scan (rather like an x-ray) which detects these deposits if present.

Computer Tomography (CT scan) Magnetic Resonance Imaging (MRI)

Two other types are scan are available. CT or MRI scans are sometimes used to obtain detailed pictures of the prostate, and the surrounding tissue. The CT scanner uses x-rays and the MRI uses magnetic fields to produce their images.

What now?

Being told you have prostate cancer can be a frightening and worrying time. It is quite normal for you or your wife and family to feel frightened, angry or depressed. These are natural reactions felt by most people given a diagnosis of cancer. You or your family may find it useful to discuss your worries or problems. Many patients find comfort in discussing your problems with other men who have prostate cancer or with your GP. You have been given contact numbers and appointments for the urology Nurse practitioners who work at the Queen Elizabeth Hospital who will be administering and monitoring your treatment. Please feel free to give them a ring on the numbers provided. If you cannot speak to them directly leave a message and a return phone number on their answer machine and they will ring you back as soon as possible. They can provide you with as much or as little information as you want, and can put you in touch with local support groups if you wish. Remember whilst prostate cancer is a serious disease, it can usually be very effectively managed.

References
NICE guidelines
IOG
Prostate cancer charity Patient information

CONTACT TELEPHONE NUMBERS.

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<th>Contact Details</th>
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<tr>
<td>Lorraine Montgomery (Specialist Nurse Practitioner)</td>
<td>(0191) 4452217 or ring switchboard and ask to bleep 2583</td>
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<tr>
<td>Urology Secretary Mon- Fri 9.30 – 4pm</td>
<td>(0191) 445 2218</td>
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<tr>
<td>Main switchboard</td>
<td>0191 4820000</td>
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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 Information Leaflet:

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