

Understanding Locally-Advanced Prostate Cancer

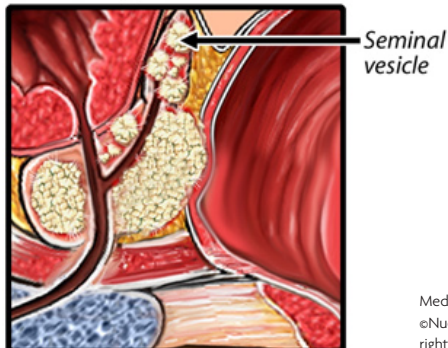
This booklet is to help you and your family understand what it means if you have been diagnosed as having locally-advanced prostate cancer. It gives an outline of the treatments you may be offered by your doctor(s). There is more information in the main booklet 'Early Prostate Cancer Explained' on the prostate, prostate cancer, tests, investigations, treatments and how to decide on which treatment may be the most suitable for you.

At the back of this booklet, there is a handy chart of where you will find the information you may want or need in 'Early Prostate Cancer Explained'.

What is locally-advanced prostate cancer?

Locally-advanced prostate cancer means that it has spread just outside the prostate through the capsule that surrounds the prostate or into the seminal vesicles which lie behind the prostate.

T3 Stage



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There are 4 main ways to treat locally-advanced prostate cancer:

- Hormone therapy
- Radiotherapy
- Active surveillance
- Surgery

How has this been diagnosed?

You will have had some, or perhaps all, of the following tests and investigations to help the doctors decide what type of prostate cancer you have.

PSA test.

This is the blood test that measures the amount of PSA in your blood. You will probably hear this called your PSA level and will most likely have regular PSA tests.

Digital rectal examination (DRE).

This examination means that the doctor will feel your prostate to check on the shape, size and condition of your prostate. The doctor will also have checked for any hardened area, odd shape or unusual lump(s). The results of your DRE will help doctors decide on the stage of your cancer.

Prostate biopsy.

A biopsy means that about 10 or more tiny samples are taken from your prostate and are sent to the lab to be examined. The results of your biopsy will give you your Gleason score.

X-ray.

An x-ray may be done to check out normal wear and tear on bone and joints.

MRI or CT scans.

These are usually done after a prostate biopsy has found cancer in the prostate. You will probably have had one or the other of these scans. They show whether the cancer remains within the prostate or has spread to

other organs or tissues and helps doctors decide on what may be the most suitable treatment. The results of these tests also help the doctors decide on the stage of your prostate cancer.

What might the results of the tests mean for me?

Once the doctor has all your test results, a number of issues will be taken into account before deciding which treatment(s) may be most suitable for you.

They do this by looking at:

- i. Your Gleason Score or grade of your cancer – this is how the cells from your prostate looked under the microscope
- ii. The stage of your cancer - this points to how big the cancer has grown or if it has spread
- iii. Your PSA blood level
- iv. How old you are and how much your symptoms are troubling you
- v. Whether you have any other medical conditions affecting your health
- vi. If the side effects of the treatment would have greater impact on your quality of life than the effect of the cancer

Who decides on which treatment I may be offered?

There is usually a multi-disciplinary team (MDT) of urology surgeons, oncologists, radiologists, pathologists, and specialist nurses in urology or oncology, many of whom will be involved with your care and treatment.

They will:

- Have thought about these points and talk these through with you
- Suggest which treatment(s) may be most suitable and offered to you
- Talk to you about the benefits and drawbacks of the treatment(s) offered
- Ask which type of treatment you would prefer to have, taking into account the possible effect this may have on your life

Hormone therapy or treatment

Once prostate cancer has broken through the prostate capsule or wall and has spread to the seminal vesicles a treatment is needed that tackles all the

prostate cancer cells. The most common way to do this is by giving hormone therapy that ‘switches off’ or removes the male hormone testosterone because prostate cancer cells need testosterone to grow. So, by reducing the amount of testosterone, cancer cells shrink or don’t grow as fast. Hormone therapy can keep prostate cancer in check for many months and in some cases years.

Hormone therapy can be used as:

- A treatment on its own
- Before having radiotherapy (called neo-adjuvant therapy)
- After radiotherapy (called adjuvant therapy)

What is hormone therapy?

Hormone therapy as a treatment is used to reduce levels of testosterone. Your doctor may suggest one of the hormone treatments below on its own in the first instance or may suggest combining these later on.

1. **Luteinising hormone-releasing hormone agonists (LHRH agonists).** These drugs are given by an injection and stop the testes producing testosterone.
- Gonadotrophin-releasing hormone antagonists (GnRH antagonists).** These drugs are given by injection and also stop the testes producing testosterone

Drug/treatment	Name of drug /treatment	Brand name of drug	What it does	How it’s done or given
LHRH agonists	Goserelin	Zoladex Zoladex LA	Stops the testes making testosterone	By injection – monthly, 3 monthly, 4 monthly or 6 monthly
	Leuprorelin	Prostap SR Prostap 3		
	Triptorelin	De-capeptyl SR		
	Historelin	Suprefact		
GnRH antagonists	Degarelix	Firmagon	Very quickly switches off the testes making testosterone	Monthly injection. This will be started in hospital and then given by your GP

2. Anti-androgens. These drugs are taken as a tablet and block the effect of testosterone in the tissues.

Drug/treatment	Name of drug/treatment	Brand name of drug	What it does	How it's done or given
Anti-androgen (non steroidal)	Bicalutamide	Casodex	Block or switch off testosterone	Tablet
	Flutamide	Chimax Drogenil		
Anti-androgen (steroidal)	Cyproterone acetate	Cyprostat	Blocks testosterone being produced in adrenal glands	Tablet

Maximal Androgen Blockade (MAB).

This is also called complete androgen blockade (CAB)

Your doctor may recommend that you take LHRH agonists and anti-androgens together. This treatment works in two ways:

1. LHRH agonists stop the testes making testosterone
2. Anti-androgens block the testosterone from reaching the cancer cells

Prescribing hormone therapy

Continuous therapy.

Some doctors prescribe hormone therapy for you to take all the time. This is called continuous therapy.

Intermittent therapy.

Other doctors prefer to give you a few months treatment until your PSA level is low and staying low. The treatment is stopped for a period of time until the PSA rises. You may find that the time off the drug can vary from a few months perhaps up to about a year. Then the treatment can be started again. You can continue on this stop start treatment for as long as it is working for you.

It seems that both of these treatments work just as well. However, the benefit of having intermittent therapy is that you may not have as many side effects when you are not taking the drug.

3. Orchiectomy. This means that all the testes or the parts of the testes which make testosterone are taken away during an operation. Although this used to be the standard treatment, it is much less common now because hormone therapy gives similar results and may be slightly less upsetting for the man.

Side effects of hormone treatment

The side effects of hormone treatment vary from man to man. Some men say that they hardly notice any side effects but for others the side effects have a big impact on their quality of life. While some men learn to accept these others can be quite unhappy and upset by them. Unfortunately, there is no way to predict which of the side effects you might get or how much they might affect you. The side effect you might get also depends on the type of hormone treatment you have been prescribed. Often when the drug is stopped or changed the side effects ease off. The advantage of having an orchiectomy means that testosterone is not produced but a possible drawback is that the side effects are irreversible although they can be reduced with treatment.

Information on each of the most common symptoms is given below – what they are and what may be done to help if you find any of these to be a problem.

Erectile dysfunction (ED) sometimes called impotence.

Because of the way hormone treatment works (switching off or blocking testosterone) a common side effect is not being able to get or keep an erection firm enough to have sexual intercourse. Although you may not find it easy, or you might feel a bit embarrassed, talking about something as personal as erectile dysfunction, the doctors and specialist nurses are used to hearing about this and helping men with these difficulties.

Another common side effect is losing interest in having intercourse. You might hear this called loss of libido.

Rather than trying to avoid the issue, talk to your partner about your worries or anxieties. In all probability your partner will be very understanding about how you are feeling. Perhaps you may want to speak to the doctor or nurse about this together.

The doctor or specialist nurse can give advice and may suggest you try some kind of medication, so don't be afraid to ask. There is more information on treatments for ED in 'Early Prostate Cancer Explained' on pages 64 to 66.

Sweats and hot flushes

Possibly one of the most common complaints from men on hormone treatment is sweating along with hot flushes. A hot flush is a sudden strong feeling of heat in your face, neck, chest or back. The flushes and sweating can last for just a few minutes or can go on for up to an hour. Being stressed may cause a hot flush or sometimes hot flushes can just hit you out of the blue. Some men find that this gets a bit easier as time goes on and so may not need any treatment.

Hot flushes are more common if you take LHRH drugs as these stop testosterone being made altogether.

Things you could try to help:

- You may want make a list of foods which you think sets off your flushes and avoid them e.g. spicy foods or having large meals
- Cutting down on alcohol
- Cutting down or cutting out smoking
- Cutting down on drinks with caffeine such as tea and coffee may help ease this problem
- Wearing a few layers of clothing so you can take something off to help you cool down
- Having fewer covers on at night might help to keep you cool. It may help to have the window open to keep your bedroom cool.
- Not having too hot a bath or shower
- Making sure you are having enough fluids as you can lose a lot of fluid when you sweat
- Using a fan to keep the room temperature cool

If your hot flushes are proving to be a real problem, then let your doctor or specialist nurse know. There are some medications that might help so tell your doctor about these.

Breast swelling and tenderness (gynaecomastia)

Some of the drugs used in hormone treatment (particularly flutamide or bicalutamide) may cause one or both of the breasts to swell or become tender. For some men this can be just a slight tenderness but for others this can be quite painful. Let the doctor or specialist nurse know if this is becoming a problem to you.

Tiredness

Hormone therapy can make you feel very tired and may hold you back from doing your normal day to day activities. If this is the case then you may want think about:

- Planning your day so that you can have a rest or a short nap
- Doing only the things you really need or want to do
- Taking some regular exercise can actually help you get over some of the tiredness
- Asking family or friends to give you a hand with everyday jobs that you find are tiring you out

Weight gain

You may find that you gain some weight and men notice this especially around their middle. Having a healthy, well balanced diet and taking exercise can help with this although it may take quite a long time to lose the extra pounds. If this is becoming a real problem then the doctor may refer you to a dietitian in hospital.

Mood swings

It is understandable that men (and their families) who are having treatment for cancer are going through a very difficult time. You may feel angry, depressed and worried about what the future holds. Hormone therapy can also make you much more emotional and you may get upset more easily and feel quite tearful. Speak to your doctor or specialist nurse early on if you feel very low as it might be possible to change your treatment or get you some additional help.

Taking part in activities you enjoy, spending time with family and friends, taking regular exercise and chatting it over with other people who understand often helps with how you are feeling.

Difficulty in sleeping

This could be because of sweating or hot flushes or being anxious about everything that is going on. Try to relax before bed by having a warm bath, a milky drink, reading, listening to music or doing relaxation exercises. For a short time your GP may prescribe sleeping pills.

Radiotherapy treatment

External Beam Radiotherapy or EBRT is used to treat **locally advanced prostate cancer**. This uses high energy x-ray beams, from outside the body. These are aimed at the prostate to kill the cancer cells in the prostate. EBRT is done in hospital but you won't need to stay in hospital. Before starting on EBRT, your doctor may suggest that you have hormone treatment for several months. This is to shrink the cancer so that radiotherapy has a better chance of working. It may also carry on after radiotherapy treatment as it has been shown to reduce recurrence rates and improve survival.

There is more information on EBRT in 'Early Prostate Cancer Explained' pages 45 to 51.

Active surveillance or monitoring

Doctors may suggest this as an option for some men as some locally advanced prostate cancers grow very slowly and may not cause any symptoms. The aim is, rather than getting rid of the cancer, to keep a careful check on it over the long term. It means:

- There is no immediate treatment of the cancer
- The doctor (either your GP or hospital doctor) keeps a close eye on the man's health and cancer with regular checkups, PSA tests, DRE, possibly biopsies and scans.
- If the cancer shows signs of growing faster or spreading then treatment can be discussed with your doctor and started.

Surgery

With locally advanced prostate cancer, your doctor may discuss surgery with you to remove the prostate (radical prostatectomy) to try to stop the cancer spreading. There is much more information on radical prostatectomy in 'Early Prostate Cancer Explained' on pages 35 to 43.

Trans-urethral resection of the prostate (TURP)

A TURP may help if you find that you are having difficulties passing urine because part of the tumour in your prostate is blocking the urethra (the tube that runs through the prostate taking urine from the bladder outside the body). So, to help with this, the doctor may suggest that you have an operation called a TURP (Trans Urethral Resection of the Prostate). A TURP doesn't mean that your prostate is taken out and it can't get rid of all the cancer cells. It is a fairly common operation for men who have an enlarged prostate. So, although this operation doesn't take the prostate out, it 'trims off' the part of the tumour pressing on the urethra which may make it easier for you to pass urine.

What happens?

(Please remember that this is meant as general guidance. As treatment procedures may vary slightly from hospital to hospital ask for more advice from staff at the hospital you are attending.)

A long thin telescope is passed into the urethra through the penis. This telescope has a light and an operating insert, called a resectoscope, which has a wire loop. A controlled electric current is applied to the wire to 'trim off' the part of the prostate causing the blockage.

Then, a dilute solution called Glycine is used to wash away any blood and the 'trimmings' or pieces from the prostate. The operation usually lasts about an hour. After the operation, the bladder is washed out through a catheter with a salt solution (normal saline 0.9%). This is to prevent the build up of blood clots in the bladder whilst the effects of the operation settle down.

What kind of anaesthetic?

This may be done with an epidural anaesthetic where you will have an injection in your back that makes you numb from the waist down. Alternatively, you may have a general anaesthetic where you will be asleep during the procedure. Ask your doctor which you will have.

Will I have a catheter?

A catheter is a thin, flexible tube which goes up into your bladder, through your penis, and drains urine into a bag after your operation. You might notice that there is some blood in your urine, which will clear before the catheter is removed about 48 hours after your operation. Occasionally, you may be sent home with the catheter still in place. The nurses in hospital will show you how to look after the catheter at home and may arrange for a nurse in the community to check on how you are doing.

How long might I be in hospital?

You may be in hospital for about 2 - 3 days. Ask at the clinic for more information. You will usually get home when you start to pass urine or sometimes you may still have your catheter in.

Are there any likely side effects?

- Blood in your urine
After your operation, you may see some blood or small blood clots in your urine, especially at 7 - 10 days. This is quite usual and might last for a few days. Don't be concerned unless you are having difficulty passing urine or passing large clots
- Pain or discomfort
For a few days after your TURP, you may have some discomfort so you will be given some painkillers to help. If you're concerned, or have a lot of discomfort, then you should contact your doctor
- Infection
Sometimes you might get a urinary tract infection. You will be given antibiotics if this happens

- Retrograde ejaculation

Most men who have a TURP will experience retrograde ejaculation after the operation. This means that at the end of intercourse nothing will come out of your penis because the semen has passed backwards into your bladder rather than down the penis. It won't do you any harm and will pass out in your urine the next time you go to the toilet but it will make your urine look cloudy. Retrograde ejaculation can, of course, affect fertility, although libido and fertility may already have been affected if you are receiving hormone treatment

How long will these side effects last?

Most side effects and symptoms settle down over 3 - 4 weeks after your operation, although some urinary symptoms such as urgency and frequency may take longer to settle down and retrograde ejaculation is usually permanent when it occurs.

Getting home

Even though you don't have a wound you have still undergone a significant operation and it will take time to heal. Here are a few simple steps to help with your recovery.

- Heavy lifting. It's best to avoid lifting anything too heavy for the first 2 weeks or so
- Operating heavy machinery. It's best to avoid this for a short period of time
- Exercise. You may be able to go back to light exercise and activities after a week or so
- You may need to take some time off work
- Driving. It is best not to drive for 3 - 4 weeks
- Drinking (but not alcohol). Try to drink about 8 glasses of water every day to flush the bladder out
- Try to eat plenty of fresh fruit, vegetables, pulses and wholegrain foods to avoid constipation. If you are constipated, you may need a laxative. Ask your doctor for more information about this

To make the most of your appointment with the doctor or specialist

nurse, you may find it helpful to make a list of questions before your appointment.

For more information.....

Throughout the booklet information on treatments has been given. However, as there is more than one approach, please follow any specific guidance or treatment information given by your GP, consultant or specialist nurse. This leaflet is not intended to replace medical advice or seeing a doctor for specific illness or symptoms.

If you have any questions, then you can speak to your hospital consultant, specialist nurse or GP. It may also help to look at some other relevant websites or contact the organisation by phone or email. These organisations also have information leaflets available and some offer telephone helplines which you can contact for support or to answer your questions. Please see the Early Prostate Cancer booklet page 83 for more details.



The following topics are mentioned in the booklet ‘Understanding locally-advanced prostate cancer’. More information on these can be found in the booklet ‘Early prostate cancer explained’ and the page number is given below.

Topic	What the ‘Early Prostate Cancer Explained’ booklet describes	Page number:
PSA blood test	Prostate Specific Antigen (PSA) is a protein made in the prostate and some PSA normally leaks out of the prostate. A blood test to measure PSA levels may be done. High levels of PSA in the blood may point to something being wrong with the prostate and along with other tests and examinations helps the GP make a diagnosis.	14
Digital rectal examination (DRE)	The GP may do a Digital Rectal Examination (DRE) to check the prostate for any hardened area, odd shape or unusual lump.	15
Prostate biopsy	Prostate biopsy. During a biopsy, a small ultrasound probe is passed into the back passage and a special needle is used to take tiny samples of prostate tissue from different areas in the prostate. These samples are sent to a lab to be examined for any signs of prostate cancer. The results are usually sent to the hospital consultant in a few weeks time who will then discuss the results with you.	17
Gleason score	This number gives an idea of how quickly the cancer is likely to grow and spread; in other words, how aggressive the cancer is likely to be. A pathologist examines the samples of prostate tissue taken during the biopsy and looks for the types of cells which are most common and second most common. These are given a score between 1 and 5. Added together this gives your Gleason Score, usually between 6 and 10. This score indicates whether the cancer is likely to be low, intermediate or high risk cancer.	21

Topic	What the 'Early Prostate Cancer Explained' booklet describes	Page number:
Staging	Staging of the cancer. This is done by the letters TNM and a number where T stands for tumour, N for lymph nodes, M for metastases. It describes the size of the cancer, whether it is within the prostate, has spread just outside the prostate wall or has spread to the bones or other areas in the body. This indicates whether the cancer is early or localized, locally advanced or advanced.	22
MRI scan (Magnetic Resonance Imaging)	An MRI scan uses magnets rather than x-rays to produce detailed pictures of the prostate, surrounding tissues, bones and other organs. It is usually done after a prostate biopsy has found cancer in the prostate. It shows whether the cancer remains within the prostate or has spread to other organs or tissues and helps doctors decide on what may be the most suitable treatment.	26
CT scan or CAT scan (Computerised Tomography)	Although done less often now, a CT scan combines special x-ray equipment with advanced computers to take many pictures in lots of different views inside your body. These pictures can be studied on a screen to see if the cancer has spread outside the prostate to the lymph nodes or areas around the prostate.	28
Erectile Dysfunction (ED)	When a man has trouble getting or keeping an erection firm enough to have intercourse it is called erectile dysfunction or sometimes impotence. This can often be one of the side effects of some of the treatments. ED depends on many factors and the effect will vary from man to man. There are various treatments available to help overcome this, through medications taken as a tablet, by injection, applicator or vacuum pumps.	63



Topic	What the ‘Early Prostate Cancer Explained’ booklet describes	Page number:
External Beam Radiotherapy (EBRT).	High energy x-ray beams from outside the body are aimed at the prostate to kill the cancer cells in the prostate. These beams pinpoint areas to be treated. Treatments are carefully planned and will usually be given 5 days a week for between 4–8 weeks. Hormone therapy may be given in combination with radiotherapy.	45
Making decisions about treatment	<p>In making this decision it is important to include members of your family, the multi-disciplinary team who are involved with your care and, if you are comfortable with it, talking over your situation with men (and their families) from a prostate cancer support group who have been in a similar situation.</p> <p>There are some tips included on how to get the most out of your consultation with the doctors and specialist nurses and some questions you might want to ask.</p>	67
Dictionary, abbreviations and who’s who	What the medical words mean	72

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