

Permanent seed brachytherapy



In this fact sheet:

- What is permanent seed brachytherapy?
- Who can have permanent seed brachytherapy?
- What are the advantages and disadvantages?
- What does treatment involve?
- What happens afterwards?
- What are the side effects?
- Dealing with prostate cancer
- Questions to ask your doctor, nurse or radiographer
- More information
- About us

This fact sheet is for men who are thinking about having a type of internal radiotherapy called permanent seed brachytherapy to treat their prostate cancer. This is where tiny radioactive seeds are put into the prostate. You might also hear it called low dose-rate (LDR) brachytherapy. Your partner, family or friends might also find this information helpful.

For information about another type of brachytherapy called high dose-rate (HDR) brachytherapy (also known as temporary brachytherapy), or about external beam radiotherapy, read our fact sheets, [High dose-rate brachytherapy](#) or [External beam radiotherapy](#).

Each hospital will do things slightly differently. Use this fact sheet as a general guide and ask your doctor, nurse or radiographer for more information. You can also speak to our Specialist Nurses, in confidence, on 0800 074 8383, or chat to them online.

Symbols

These symbols appear in this fact sheet to guide you to more information:



Speak to our Specialist Nurses



Read our publications

What is permanent seed brachytherapy?

Permanent seed brachytherapy is a type of internal radiotherapy where tiny radioactive seeds are put into your prostate. Each radioactive seed is the size and shape of a grain of rice. The seeds stay in the prostate forever and give a steady dose of radiation over a few months.

The radiation damages the prostate cells and stops them dividing and growing. The cancer cells can't recover from this damage and die. But healthy cells can repair themselves more easily.

The seeds release most of their radiation in the first three months after they're put into the prostate. After around eight to 10 months, almost all the radiation has been released. The amount of radiation left in the seeds is so small that it doesn't have an effect on your body.

Permanent seed brachytherapy is as good at treating low risk localised prostate cancer as other treatments, such as surgery (radical prostatectomy) or another type of radiotherapy called external beam radiotherapy. Read more about low risk prostate cancer in the blue box.

Treatment for prostate cancer can cause side effects (see page 8). Overall, the risk of side effects from treatment is similar for permanent seed brachytherapy, external beam radiotherapy and surgery. Some studies suggest men who have brachytherapy may be less likely to get erection problems or leak urine. But they may be more likely to need to urinate (pee) more often and more urgently. You are less likely to get bowel problems after permanent seed brachytherapy than after external beam radiotherapy, but more likely than after surgery.

Who can have permanent seed brachytherapy?

Permanent seed brachytherapy on its own

Permanent seed brachytherapy on its own may be suitable for men whose cancer hasn't spread outside the prostate (localised prostate cancer) and has a low risk of spreading. This is because the radiation from the radioactive seeds doesn't travel very far, so will only treat cancer that is still inside the prostate.

It may also be suitable for some men whose cancer has an intermediate (medium) risk of spreading (see opposite box).

Permanent seed brachytherapy with other treatments

If you have high risk localised prostate cancer, you may have brachytherapy together with external beam radiotherapy and hormone therapy. This is sometimes called a brachytherapy boost. Having these other treatments at the same time as permanent seed brachytherapy can help make the treatment more effective. But it can also increase the risk of side effects.

Some men with intermediate risk localised prostate cancer or locally advanced prostate cancer (cancer that has spread to the area just outside the prostate) may be offered a brachytherapy boost.

Read more about these other treatments in our fact sheets, **External beam radiotherapy** and **Hormone therapy**.



Low, intermediate (medium) and high risk prostate cancer

Your doctor may talk to you about the risk of your cancer spreading outside the prostate or coming back after treatment. To work out your risk, your doctor will look at your PSA level, your Gleason score or grade group and the stage of your cancer. Your risk will affect which treatment options are suitable for you.

Low risk

Your cancer may be low risk if:

- your PSA level is less than 10 ng/ml, **and**
- your Gleason score is 6 or less (grade group 1), **and**
- the stage of your cancer is T1 to T2a.

Intermediate (medium) risk

Your cancer may be intermediate risk if:

- your PSA level is between 10 and 20 ng/ml, **or**
- your Gleason score is 7 (grade group 2 or 3), **or**
- the stage of your cancer is T2b.

High risk

Your cancer may be high risk if:

- your PSA level is higher than 20 ng/ml, **or**
- your Gleason score is 8, 9 or 10 (grade group 4 or 5), **or**
- the stage of your cancer is T2c or above.



Our fact sheet, **How prostate cancer is diagnosed**, has more information on PSA levels, Gleason scores and prostate cancer staging.

When is permanent seed brachytherapy not suitable?

Permanent seed brachytherapy on its own won't be suitable if your cancer has spread to the area just outside your prostate (locally advanced prostate cancer) or to other parts of your body (advanced prostate cancer). But, if you have locally advanced prostate cancer, you may be offered brachytherapy together with external beam radiotherapy.

It may not be suitable if you have a very large prostate. If you do have a large prostate you may be able to have hormone therapy before treatment to shrink your prostate.

It also may not be suitable if you have severe problems urinating, such as those caused by an enlarged prostate or overactive bladder. These include needing to urinate more often, a weak urine flow or problems emptying your bladder. Permanent seed brachytherapy can make these problems worse. Before you have treatment, your doctor, nurse or radiographer will ask you about any urinary problems, and you may have some tests.

You may not be able to have permanent seed brachytherapy if you have Crohn's disease or ulcerative colitis. This is because it could make your bowel problems worse. Brachytherapy won't be suitable for you if you've had surgery to remove your rectum (back passage), because the treatment involves using an ultrasound probe in the back passage. Your doctor or nurse will explain your treatment options to you.

If you've recently had surgery to treat an enlarged prostate, called a transurethral resection of the prostate (TURP), you may have to wait three to six months before having permanent seed brachytherapy. Some hospitals don't offer brachytherapy to men who've had a TURP because it can make the treatment more difficult to perform.

You will usually have a general anaesthetic while the brachytherapy seeds are put in place, so you'll be asleep and won't feel anything.

This means permanent seed brachytherapy may only be an option if you are fit and healthy enough to have an anaesthetic. However, you may be able to have a spinal (epidural) anaesthetic instead. This may depend on what your hospital offers.

Not all hospitals offer permanent seed brachytherapy. If your hospital doesn't do it, your doctor may refer you to one that does.

Other treatment options

Other treatment options for men with localised prostate cancer include:

- active surveillance
- watchful waiting
- surgery (radical prostatectomy)
- external beam radiotherapy
- high dose-rate brachytherapy
- high-intensity focused ultrasound (HIFU) or cryotherapy, but these are less common.

Unsure about your diagnosis and treatment options?

If you have any questions, ask your doctor or nurse. They will explain your test results and talk you through your treatment options. Make sure you have all the information you need. We have more information about diagnosis and treatment in our fact sheets and booklets and on our website. You can also speak to our Specialist Nurses.



What are the advantages and disadvantages?

What may be important to one man might be less important to someone else. If you're offered permanent seed brachytherapy, speak to your doctor, nurse or radiographer before deciding whether to have it. They can help you choose the right treatment for you. There's a list of questions that you might find helpful on page 14. There's usually no rush to make a decision, so give yourself time to think about whether permanent seed brachytherapy is right for you.

Advantages

- Recovery is quick, so most men can return to their normal activities one or two days after treatment.
- It delivers radiation directly into the prostate, so there may be less damage to surrounding healthy tissue, and a lower risk of some side effects.
- You will only be in hospital for one or two days.
- If your cancer comes back, you may be able to have another type of treatment (see page 8).

Disadvantages

- It can cause side effects such as urinary and erection problems. It can also cause bowel problems but this isn't common.
- You will usually need a general or spinal anaesthetic, which can have side effects.
- It may be some time before you know whether the treatment has been successful (see page 7).
- You will need to avoid sitting close to pregnant women or children during the first two months after treatment (see page 7).

If you are having external beam radiotherapy or hormone therapy as well as permanent seed brachytherapy, think about the advantages and disadvantages of those treatments as well.



Read more in our fact sheets, **External beam radiotherapy** and **Hormone therapy**.

What does treatment involve?

You will be referred to a specialist who treats cancer with radiotherapy, called a clinical oncologist. The treatment itself may be planned and carried out by other specialists including a therapy radiographer, a radiologist, a urologist, a physicist and sometimes a specialist nurse.

Each hospital may do things slightly differently but you will usually have:

- an appointment to check the treatment is suitable for you
- a planning session, to plan the treatment
- the treatment itself.

The planning session and the treatment itself may be on the same day (**one-stage procedure**), or on two separate hospital visits (**two-stage procedure**).

Before the planning session, let your specialist know if you are taking any medicines, especially medicines that thin your blood such as aspirin, warfarin or clopidogrel. Don't stop taking any medicines without speaking to your doctor, nurse or radiographer.

One-stage procedure

Many hospitals offer treatment in just one visit (one-stage), where you will have the planning session and the seeds put in at the same time under the same anaesthetic. You may not need to stay in hospital overnight.

You will have had an appointment one or two weeks before your procedure to check that the treatment is suitable for you. At this appointment, you'll have had an ultrasound scan to check the size of your prostate and work out how many seeds you need. You won't need an anaesthetic for this scan.

Two-stage procedure

You will have an appointment before your treatment, to check that the treatment is suitable for you. Unlike the one-stage procedure, you won't have an ultrasound scan at this appointment. Instead, your doctor will wait until your planning session to check the size of your prostate and work out how many seeds you need. The seeds will then be put in on your next visit, two to four weeks after the planning session.

Some men may be offered the two-stage procedure if they need treatment to reduce the size of their prostate before having brachytherapy. Some hospitals only offer the two-stage procedure.

Your planning session

During your planning session, your doctor, radiographer or physicist will use an ultrasound scan to work out how many seeds you need and where to put them.

If you've already had an ultrasound to see how many seeds you need, the planning session will be used to work out exactly where to put the seeds to make sure the whole prostate is treated.

A thin tube (catheter) may be passed up your penis into your bladder to drain urine.

You will usually have a general anaesthetic so that you're asleep during the ultrasound scan. This will be given by a health professional called an anaesthetist. If you can't have a general anaesthetic for health reasons, you may be able to have a spinal (epidural) anaesthetic. This is where anaesthetic is injected into your spine so that you can't feel anything in your lower body. In some hospitals, the anaesthetist will talk through the different types of anaesthetic before deciding with you which is the best option.

It's important that your bowel is empty so the scan shows clear images of your prostate. You may need to take a medicine called a laxative the day before the planning session to empty your bowels. Or you might be given an enema when you arrive at the hospital instead. An enema is a liquid medicine that is put inside your back passage (rectum). Your doctor, nurse or radiographer will give you more information about this.

The planning session is a final check that the treatment is suitable for you. If the scan shows that your prostate is too large, you may be offered hormone therapy for up to six months to shrink your prostate. You'll then have another planning session before you have the seeds put in. Very occasionally, the scan may show that permanent seed brachytherapy isn't possible because of the position of your prostate and pelvic bones. If this happens, your specialist will discuss other treatment options with you.

The planning session usually takes about half an hour, as well as the time it takes for you to recover from the anaesthetic. You can go home the same day if you aren't having the treatment straight away. Ask a friend or family member to take you home, as you shouldn't drive for 24 to 48 hours after an anaesthetic.

Using a rectal spacer to protect your back passage

Your doctor may suggest using a rectal spacer to help protect the inside of your back passage. The spacer is placed between your prostate and your back passage. This means less radiation reaches your back passage, which may lower your risk of bowel problems.

Rectal spacers aren't commonly used in permanent seed brachytherapy alone. But you may have one if you're also having external beam radiotherapy. If your hospital doesn't use rectal spacers, you may be able to have one through private healthcare, or a clinical trial. Ask your doctor, nurse or radiographer for more information.

Placing the seeds

The clinical oncologist will put the seeds into your prostate. If you have the treatment on the same day as your planning session, the seeds will be put in straight after the planning scan, under the same anaesthetic.

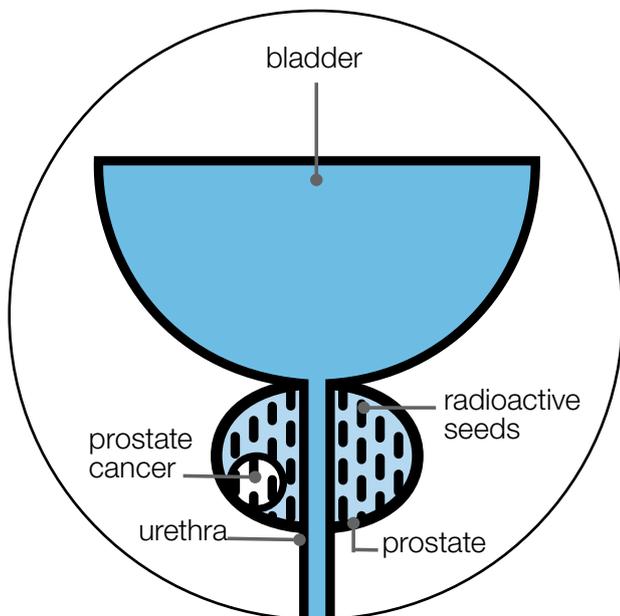
If you have the treatment on a different day to your planning session, you'll need another anaesthetic on the day of your treatment. You may also need another laxative or enema to empty your bowels for the treatment. You may have a catheter to drain urine from your bladder.

An ultrasound probe is again put inside your back passage to take images of your prostate and make sure the seeds are put in the right place. In some hospitals, the clinical oncologist might put gel into your urethra (the tube you urinate through). This may be used if you don't have a catheter and helps the doctor see your urethra more clearly so they avoid putting any seeds into it.

The clinical oncologist then puts thin needles through your perineum (the area between the testicles and the back passage), and into your prostate. They pass the radioactive seeds through the needles into the prostate. The needles are then taken out, leaving the seeds behind.

Depending on the size of your prostate, between 60 and 120 seeds are put into the prostate. The seeds can be loose individual seeds or linked together in a chain using material that slowly dissolves. Each hospital is different and the clinical oncologist will decide what type of seeds you will have. Treatment usually takes 45 to 90 minutes.

Where the seeds go in the prostate



After your treatment

You'll wake up from the anaesthetic in the recovery room, before going back to the ward or discharge area. Most men feel fine after a general anaesthetic but a few men feel sick or dizzy. Your nurse may give you an ice pack to put between your legs to help prevent swelling.

If you have a catheter, it will usually be removed before you wake up. Or it may be left in for a few hours until you are fully awake, and taken out before you go home. Having the catheter removed may be uncomfortable, but it shouldn't be painful.

You can go home when you've recovered from the anaesthetic and can urinate. Most men go

home on the same day as their treatment. But some men find it difficult to urinate at first, and need to stay in hospital overnight. You shouldn't drive for 24 to 48 hours after the anaesthetic. Ask a family member or friend to take you home.

Your doctor or nurse will give you any medicines that you need at home. These may include drugs to help you urinate, such as tamsulosin, and antibiotics to prevent infection.

You may have some pain or bleeding from the area where the needles were put in. You can take pain-relieving drugs such as paracetamol for the first few days if you need to.



The planning and treatment was very straightforward – and I returned to work after a few days.

A personal experience

When to call your doctor, nurse or radiographer

Your doctor, nurse or radiographer will give you a telephone number to call if you have any questions or concerns. Contact them if any of the following things happen.

- If your urine is very bloody or has large clots in it, you may have some bleeding in your prostate. Contact your doctor or nurse as soon as possible.
- If you suddenly and painfully can't urinate, you may have acute urine retention. Go to your local accident and emergency (A&E) department as this will need treatment as soon as possible. Take information about your cancer treatment with you, if you can.
- If you have a high temperature (more than 38°C or 101°F), this may be a sign of infection. Contact your doctor or nurse or go to your local A&E department.

What happens afterwards?

The prostate absorbs most of the radiation, and it's safe for you to be near other people or pets. But you should avoid sitting closer than 50 cm (20 inches) to pregnant women and children during the first two months after treatment. You can give children a cuddle (at chest level) for a few minutes each day, but avoid having them on your lap. If you have pets, try not to let them sit on your lap for the first two months after treatment. Your doctor or nurse can talk to you about this in more detail.

Although the seeds usually stay in the prostate it is possible, but rare, for seeds to come out in your semen when you ejaculate. To be on the safe side, don't have sex for a few days after treatment, and use a condom the first five times you ejaculate. Double-wrap used condoms and put them in the bin.

It is also rare for a seed to come out in your urine. If this happens at the hospital, don't try to pick it up. Leave it where it is and let the hospital staff know straight away. If this happens after you've left the hospital, don't try to pick up the seed. Just flush it down the toilet.

Always tell your doctor, nurse or radiographer if you think you have passed a seed. Your treatment will still work, because there will still be enough radiation left in the prostate to treat your cancer.

It is possible for a seed to move into your bloodstream and travel to another part of your body, but this is rare. This shouldn't do any harm and will often be picked up when you have a scan at your follow-up appointment. If you have any unusual symptoms, speak to your doctor or nurse.

Your radiographer will give you an advice card that says you've had treatment with internal radiation. You should carry this card with you for at least 20 months after your treatment.

If a man dies, for whatever reason, in the first 20 months after having treatment, it won't be possible to have a cremation because of the

radioactive seeds. Speak to your doctor or nurse if you are worried about this. Some men decide not to have permanent seed brachytherapy because of this – for personal or religious reasons.

Going back to normal activities

You should be able to return to your normal activities in a few days. You can go back to work as soon as you feel able. This will depend on how much physical effort your work involves. It's best to avoid heavy lifting for a few days after having the seeds put in. Speak to your doctor, nurse or radiographer about your own situation.

Travel

Remember to take your advice card with you when you travel. The radiation in the seeds can occasionally set off metal or radiation sensors at the airport, train station or cruise port.

Speak to your doctor, nurse or radiographer if you plan to travel anywhere soon after having permanent seed brachytherapy, or if you have any concerns about holidays and travel plans. Read more about travelling with prostate cancer in our fact sheet, **Travel and prostate cancer**.



Your follow-up appointment

You'll have an appointment with your doctor, nurse or radiographer a few weeks after your treatment. They will check how well you are recovering, your PSA level (see below), and ask about any side effects you might have.

After your treatment you'll have a computerised tomography (CT) or magnetic resonance imaging (MRI) scan to check the position of the seeds. This can happen on the same day as your treatment, but it may be up to six weeks after your treatment, depending on your hospital.

PSA test

This is a blood test that measures the amount of prostate specific antigen (PSA) in your blood. PSA is a protein produced by normal cells in your prostate, and also by prostate cancer cells.

You will have regular PSA tests after your treatment to check how well it has worked. You will also be asked about any side effects. In most hospitals, you'll have a PSA test three to six months after your treatment. Then for the next two years you will have a PSA test at least every six months, and then at least once a year after that. Each hospital will do things slightly differently, so ask your doctor or nurse how often you will have PSA tests.

Your PSA should drop to its lowest level (nadir) 18 months to two years after treatment. How quickly this happens, and how low your PSA level falls, varies from man to man, and will depend on how big your prostate is and whether you're also having hormone therapy. Your PSA level won't fall to zero as your healthy prostate cells will continue to produce some PSA.

Your PSA level may rise after your treatment, and then fall again. This is called 'PSA bounce'. It could happen up to three years after treatment. This is more common in younger men and men with a large prostate. It can be worrying but it doesn't mean your cancer has come back.

If your PSA level rises by 2ng/ml or more above its lowest level, this could be a sign that your cancer has come back. If this happens, your doctor will talk to you about further tests and treatment options, if you need them. Treatment options may include hormone therapy, HIFU, cryotherapy, or high dose-rate brachytherapy. Surgery might also be an option, but there's a higher risk of side effects if you've already had brachytherapy.



Read more about follow-up appointments in our booklet, **Follow-up after prostate cancer treatment: What happens next?**



Read more about possible further treatments in our booklet, **If your prostate cancer comes back: A guide to treatment and support.**



You can also speak to our Specialist Nurses if you have any questions about your follow-up or further treatment options.

Looking after yourself after brachytherapy

At some hospitals, you may not have many follow-up appointments after your treatment and be encouraged to take greater control of your own health and wellbeing. You might hear this called **supported self-management**.

Instead of having regular appointments at the hospital, you may talk to your doctor or nurse over the telephone. You'll still have regular PSA tests to check how your cancer has responded to treatment (see page 7). But your GP may give you the results over the phone or in a letter. Some men prefer this type of follow-up, as it means you can avoid going to appointments when you're feeling well and don't have any concerns.

Your doctor or nurse will give you information about the possible side effects of your treatment and any symptoms to look out for, as well as details of who to call if you notice any changes.

You, or your doctor or nurse, can arrange an appointment at any point if you have any questions or concerns.

What are the side effects?

Like all treatments, permanent seed brachytherapy can cause side effects. These will affect each man differently, and you may not get all the possible side effects.

Side effects usually start to appear about a week after treatment, when radiation from the seeds starts to have an effect. They are generally at their worst a few weeks or months after treatment, when the swelling is at its worst and the radiation dose is strongest. They are often worse in men with a large prostate, as more seeds and needles are used during their treatment. Side effects should improve over the following months as the seeds lose their radiation and the swelling goes down.



You might have worse side effects if you have permanent seed brachytherapy together with external beam radiotherapy and hormone therapy. You can read about the side effects of these treatments in our fact sheets, **External beam radiotherapy** and **Hormone therapy**.

You might also get more side effects if you had problems before the treatment. For example, if you already had urinary, erection or bowel problems, these may get worse after permanent seed brachytherapy.

After the treatment, you might get some of the following:

- blood-stained urine or rusty or brown-coloured semen for a few days or weeks
- bruising and pain in the area between your testicles and back passage that can spread to your inner thighs and penis – this will disappear in a week or two
- discomfort when you urinate and a need to urinate more often, especially at night, and more urgently.

Some side effects may take several weeks to develop and may last for longer. These may include problems urinating, erection problems, bowel problems and tiredness.

Sometimes bowel, urinary and sexual problems after radiotherapy treatment are called pelvic radiation disease. For more information about pelvic radiation disease visit www.prda.org.uk

Researchers have been looking at whether smoking increases the chance of having long-term bowel and urinary problems after radiotherapy for prostate cancer. At the moment only a small number of studies have been done, so we need more research into this. If you're thinking of stopping smoking there's lots of information and support available. Visit www.nhs.uk/smokefree

Urinary problems

Permanent seed brachytherapy can irritate the bladder and urethra. You may hear this called radiation cystitis. Symptoms include:

- needing to urinate more often or urgently
- difficulty urinating
- discomfort or a burning feeling when you urinate
- blood in your urine.



I had no side effects for about a month. Then I developed radiation cystitis, which took about three months to clear up.

A personal experience

In some men, permanent seed brachytherapy can cause the prostate to swell, narrowing the urethra and making it difficult to urinate.

A few men may find they suddenly and painfully can't urinate in the first few days or weeks after treatment. This is called acute urine retention. If this happens, contact your doctor or nurse straight away, or go to your nearest accident and emergency (A&E) department as soon as possible. They may need to put in a catheter to drain the urine. You may need to have the catheter in for several weeks until your symptoms have settled down.

Urinary problems may be worse in the first few weeks after brachytherapy, especially in men with a large prostate, but they usually start to improve after a few months.

Medicines called alpha-blockers may help with problems urinating. You can also help yourself by drinking liquid regularly (two litres or three to four pints a day) and by avoiding drinks that may irritate the bladder, such as alcohol, fizzy drinks, artificial sweeteners, and drinks with caffeine, such as tea and coffee.

Permanent seed brachytherapy can also cause scarring in your urethra, making it narrower over time. This is called a stricture, and can make it difficult to urinate. This is rare and may happen several months or years after treatment. If it happens, you might need an operation to widen your urethra or the opening of the bladder.

Some men leak urine (urinary incontinence) after permanent seed brachytherapy, but this isn't common. It may be more likely if you've previously had surgery to treat an enlarged prostate, called a transurethral resection of the prostate (TURP). Problems with leaking urine may improve with time, and there are ways to manage them.



Read our fact sheet, **Urinary problems after prostate cancer treatment**, for more information about managing urinary problems. There are also lots of tips on managing urinary problems in our interactive online guide: prostatecanceruk.org/guides



I have some long-term bladder irritation, but I manage this with medication.

A personal experience

Bowel problems

Your bowel and back passage are close to the prostate. Permanent seed brachytherapy can irritate the lining of the bowel and back passage, which can cause bowel problems. The risk of bowel problems after permanent seed brachytherapy is low. But you are more likely to have problems if you're also having external beam radiotherapy.

Bowel problems can include:

- loose and watery bowel movements (diarrhoea)
- passing more wind than usual
- needing to empty your bowels more often

- needing to empty your bowels urgently
- bleeding from the back passage
- feeling that you need to empty your bowels but not being able to go.

Bowel problems tend to be mild and are less common than after external beam radiotherapy. They often get better with time but a few men have problems a few years after treatment. Try not to be embarrassed to tell your hospital doctor or your GP about any bowel problems. There are treatments that can help.

A small number of men may have bleeding from the back passage after brachytherapy. This can also be a sign of other problems such as piles (haemorrhoids) or more serious problems such as bowel cancer, so always tell your doctor, nurse or radiographer about any bleeding. They may do tests to find out what is causing it. They can also tell you about treatments that can help.

Screening for bowel cancer

If you're invited to take part in the NHS bowel screening programme soon after having brachytherapy, the test may pick up some blood in your bowel movements, even if you can't see any blood yourself. Your doctor, nurse or radiographer may suggest that you delay your bowel screening test for a few months if you've recently had brachytherapy. This will help to make sure you don't get incorrect results.

Sexual side effects

Brachytherapy can affect the blood vessels and nerves that control erections. This may cause problems getting or keeping an erection (erectile dysfunction). Erection problems may not happen straight after treatment, but sometimes develop some time afterwards.

The risk of long-term erection problems after brachytherapy varies from man to man. You may be more likely to have problems if you had any erection problems before treatment, or if you are also having hormone therapy or external beam radiotherapy.

If you have anal sex and prefer being the penetrative partner (top) you normally need a strong erection, so erection problems can be a particular issue.

There are ways to manage erection problems, including treatments that may help keep your erection hard enough for anal sex. Ask your doctor or nurse about these, or speak to our  Specialist Nurses.

You may produce less semen than before the treatment, or none at all. This can be a permanent side effect of brachytherapy. Your orgasms may feel different or you may get some pain in your penis when you orgasm. You may also notice a small amount of blood in the semen. This usually isn't a problem, but tell your doctor or nurse if it happens. Some men have weaker orgasms than before treatment, and a small number of men can no longer orgasm afterwards.

If you have anal sex and are the receptive partner (bottom), there's a risk that your partner might be exposed to some radiation during sex in the first few months after treatment. Your doctor or radiographer may suggest you avoid having anal sex for the first six months. Anal play is unlikely to move the brachytherapy seeds out of the prostate, but ask your doctor, nurse or radiographer for more information about having anal sex after permanent seed brachytherapy. They might be able to give you specific advice about how long to wait before having sex that is tailored to you and your treatment.

If you prefer to be the receptive partner during anal sex, then bowel problems or a sensitive anus after permanent seed brachytherapy may affect your sex life. Even when the risk of radiation to your partner has passed, wait until any bowel problems have improved before trying anal play or anal sex.

 Read more about sexual side effects in our booklets, **Prostate cancer and your sex life** and **Prostate cancer tests and treatment: A guide for gay and bisexual men**. You can also get tips on managing sexual problems in our interactive guide at prostatecanceruk.org/guides

Having children

Brachytherapy may make you infertile, which means you may not be able to have children naturally. But it may still be possible to make someone pregnant after brachytherapy.

It's possible that the radiation could change your sperm and this might affect any children you conceive. The risk of this is very low, but use contraception for at least a year after treatment if there's a chance you could get someone pregnant. Ask your doctor or clinical oncologist for more information.

If you plan to have children in the future, you may be able to store your sperm before you start treatment so that you can use it later for fertility treatment. If this is relevant to you, ask your doctor, nurse or radiographer whether sperm storage is available locally.

Tiredness (fatigue)

You may feel tired for the first few days after treatment as you recover from the anaesthetic. The effect of radiation on the body may make you feel tired for longer, especially if you're also having external beam radiotherapy or hormone therapy. If you get up a lot during the night to urinate, this can also make you feel tired during the day.

Fatigue is extreme tiredness that can affect your everyday life. It can affect your energy levels, motivation and emotions. Fatigue can continue after the treatment has finished and may last several months.

There are things you can do to help manage fatigue. For example, planning your day to make the most of when you have more energy.



Read more in our fact sheet, **Fatigue and prostate cancer**. You can also get tips on dealing with fatigue in our interactive guide at prostatecanceruk.org/guides

Our fatigue support service

Our fatigue support service is designed to help you manage your fatigue. It involves four telephone appointments with one of our Specialist Nurses. They will help you make changes to your behaviour and lifestyle that can help with your fatigue. Find out more on our website at prostatecanceruk.org/get-support, or speak to our Specialist Nurses.



Dealing with prostate cancer

Some men say being diagnosed with prostate cancer changes the way they think and feel about life. You might feel scared, worried, stressed, helpless or even angry.

At times, lots of men with prostate cancer get these kinds of thoughts and feelings. But there's no 'right' way to feel and everyone reacts in their own way.

This section suggests some things you can do to help yourself and people who can help. Families can also find this a difficult time and they may need support and information too. They may want to read our booklet,



When you're close to a man with prostate cancer: A guide for partners and family.

How can I help myself?

Everyone has their own way of dealing with prostate cancer, but you may find some of the following suggestions helpful.

Look into your treatment options

Find out about the different treatments you could have. Bring a list of questions to your doctor or nurse. And ask about any side effects so you know what to expect and how to manage them. This will help you decide what's right for you.



Talk to someone

Share what you're thinking – find someone you can talk to. It could be someone close or someone trained to listen, like a counsellor or your doctor or nurse. People involved in your care should be able to help with any questions or concerns you might have.

Set yourself some goals

Set yourself goals and plan things to look forward to – even if they're just for the next few weeks or months.

Look after yourself

Take time out to look after yourself. When you feel up to it, learn some techniques to manage stress and to relax – like breathing exercises or listening to music. If you're having difficulty sleeping, talk to your doctor or nurse.

Eat a healthy, balanced diet

We don't know for sure whether any specific foods have an effect on prostate cancer. But eating well can help you stay a healthy weight, which may be important for men with prostate cancer. It's also good for your general health and can help you feel more in control. Certain changes to your diet may also help with some side effects of treatment. For more information, read our fact sheet, **Diet and physical activity for men with prostate cancer.**



Be as active as you can

Keeping active can improve your physical strength and fitness, and can lift your mood. We don't know for sure if physical activity can help slow the growth of prostate cancer. But it can help you stay a healthy weight, which may help to lower your risk of advanced prostate cancer. Physical activity can also help with some side effects of treatment. Even a small amount can help. Take things at your own pace. Read more in our fact sheet, **Diet and physical activity for men with prostate cancer.**



Get more ideas about how to look after yourself from Macmillan Cancer Support, Maggie's Centres, Penny Brohn UK, or your nearest cancer support centre. You can also find more ideas in our booklet, **Living with and after prostate cancer: A guide to physical, emotional and practical issues.**

Check out our online 'How to manage' guides

Our interactive guides have lots of practical tips to help you manage symptoms and side effects. We have guides on fatigue, sex and relationships, urinary problems, and advanced prostate cancer. Visit prostatecanceruk.org/guides

Who else can help?

Your medical team

It may be useful to speak to your nurse, doctor, GP or someone else in your medical team. They can explain your diagnosis, treatment and side effects, listen to your concerns, and put you in touch with other people who can help.



Our Specialist Nurses

Our Specialist Nurses can help with any questions and explain your diagnosis and treatment options. They have time to listen, in confidence, to any concerns you or those close to you have.

Trained counsellors

Counsellors are trained to listen and can help you find your own ways to deal with things. Many hospitals have counsellors or psychologists who specialise in helping people with cancer – ask your doctor or nurse at the hospital if this is available. Your GP may also be able to refer you to a counsellor, or you could see a private counsellor. To find out more, contact the British Association for Counselling & Psychotherapy.

Our one-to-one support service

Our one-to-one support service is a chance to speak to someone who's been there and understands what you're going through. They can share their experiences and listen to yours. You can discuss whatever's important to you.



Our Specialist Nurses will try to match you with someone with similar experiences.

Our online community

Our free online community is a place to talk about whatever's on your mind – your questions, your ups and your downs. Anyone can ask a question or share an experience.

Local support groups

At local support groups, men get together to share their experiences of living with prostate cancer. You can ask questions, share worries and know that someone understands what you're going through. Some groups have been set up by local health professionals, others by men themselves. Many also welcome partners, friends and relatives.

To find out more about any of the above, visit prostatecanceruk.org/get-support or call our Specialist Nurses on 0800 074 8383.



When I had side effects, it was good to be able to call the Specialist Nurses, who were always very helpful.

A personal experience

Questions to ask your doctor, nurse or radiographer



You may find it helpful to keep a note of any questions you have to take to your next appointment.

Will I have a planning session at a different time to the treatment, or immediately before?

Will I have external beam radiotherapy or hormone therapy as well?

What side effects might I get?

How will we know if the treatment has worked?

What should my PSA level be after treatment and how often will you measure it?

If my PSA continues to rise, what other treatments are available?

More information

Bladder and Bowel UK

www.bbuk.org.uk

Telephone: 0161 607 8219

Impartial information and advice about bladder and bowel problems.

British Association for Counselling & Psychotherapy

www.bacp.co.uk

Telephone: 01455 883 300

Information about counselling and details of therapists in your area.

Cancer Research UK

www.cancerresearchuk.org

Telephone: 0808 800 4040

Information about cancer and clinical trials.

Macmillan Cancer Support

www.macmillan.org.uk

Telephone: 0808 808 0000

Practical, financial and emotional support for people with cancer, their family and friends.

Maggie's Centres

www.maggiescentres.org

Telephone: 0300 123 1801

Drop-in centres for cancer information and support, and an online support group.

Pelvic Radiation Disease Association

www.prda.org.uk

Telephone: 01372 744 338

Support for men with long-term side effects of radiotherapy.

Penny Brohn UK

www.pennybrohn.org.uk

Telephone: 0303 3000 118

Runs courses and offers support for people with cancer and their loved ones.

Sexual Advice Association

www.sexualadviceassociation.co.uk

Information about sexual problems and their treatments, including erection problems.

About us

Prostate Cancer UK has a simple ambition: to stop men dying from prostate cancer – by driving improvements in prevention, diagnosis, treatment and support.



This fact sheet is part of the Tool Kit. You can order more fact sheets, including an **A to Z of medical words**, which explains some of the words and phrases used in this fact sheet.

Download and order our fact sheets and booklets from our website at **prostatecanceruk.org/publications** or call us on **0800 074 8383**.

At Prostate Cancer UK, we take great care to provide up-to-date, unbiased and accurate facts about prostate cancer. We hope these will add to the medical advice you have had and help you to make decisions. Our services are not intended to replace advice from your doctor.

References to sources of information used in the production of this fact sheet are available at **prostatecanceruk.org**

This publication was written and edited by our Health Information team.

It was reviewed by:

- Peter Bownes, Deputy Head of Radiotherapy Physics, Head of Brachytherapy and Gamma Knife Physics, Medical Physics and Engineering, St James's University Hospital, Leeds
- Professor Peter Hoskin, Consultant Clinical Oncologist, Mount Vernon Cancer Centre, Northwood
- Phil Reynolds, Consultant Radiographer in Prostate Radiotherapy, The Clatterbridge Cancer Centre NHS Foundation Trust
- Our Specialist Nurses
- Our Volunteers.

Tell us what you think

If you have any comments about our publications, you can email:

yourfeedback@prostatecanceruk.org



**Speak to our
Specialist Nurses**

0800 074 8383*

prostatecanceruk.org

Donate today – help others like you

Did you find this information useful? Would you like to help others in your situation access the facts they need? Every year, over 47,000 men face a prostate cancer diagnosis. Thanks to our generous supporters, we offer information free to all who need it. If you would like to help us continue this service, please consider making a donation. Your gift could fund the following services:

- £10 could buy a Tool Kit – a set of fact sheets, tailored to the needs of each man with vital information on diagnosis, treatment and lifestyle.
- £25 could give a man diagnosed with a prostate problem unlimited time to talk over treatment options with one of our Specialist Nurses.

To make a donation of any amount, please call us on **0800 082 1616**, visit **prostatecanceruk.org/donate** or text **PROSTATE** to **70004**[†].

There are many other ways to support us. For more details please visit **prostatecanceruk.org/get-involved**

[†] You can donate up to £10 via SMS and we will receive 100% of your donation. Texts are charged at your standard rate. For full terms and conditions and more information, please visit prostatecanceruk.org/terms



Registered with
**FUNDRAISING
REGULATOR**



f Like us on Facebook: **Prostate Cancer UK**

t Follow us on Twitter: **@ProstateUK**

© Prostate Cancer UK March 2019
To be reviewed June 2021

Call our Specialist Nurses from Monday to Friday 9am - 6pm, Wednesday 10am - 8pm

* Calls are recorded for training purposes only.
Confidentiality is maintained between callers and Prostate Cancer UK.

Prostate Cancer UK is a registered charity in England and Wales (1005541) and in Scotland (SC039332). Registered company number 02653887.

