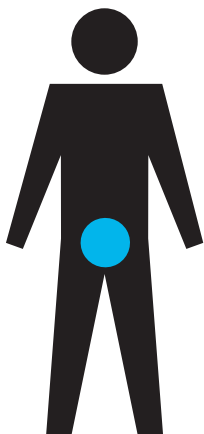


SPOTLIGHT ON

Prostate Biopsy

- i. Trans-rectal ultrasound prostate biopsy**
- ii. Trans-perineal prostate biopsy**
- iii. Template trans-perineal biopsy**
- iv. MRI fusion guided prostate biopsy**



Our aim is to help all those affected by prostate problems whether it is the benign condition BPE (an enlarging prostate), the benign disease prostatitis or prostate cancer. It is anticipated that most of our information will be suitable, relevant and helpful for men and those born biologically male who still have a prostate. However, there might be times when your health care (such as appointments and treatment(s)) may be slightly different from our information. Our information will not be as applicable for those men not born with a prostate. Most of our publications will use the term ‘you’ but there may be times that we will have to use the terms man, men or male.

It might be helpful if you are comfortable and willing to make your healthcare team aware of your gender identity so that they can provide the most relevant information and appropriate health care for you.

About your prostate

Only men (and those born biologically male) have a prostate. The prostate starts out about the size of a pea then slowly grows reaching the size of a walnut when in their 20s. Around the age of 40, it starts to grow or enlarge again, and this may cause problems when passing urine.

Where is it?

The prostate is inside the pelvis, just below the bladder and in front of the back passage. It wraps around the tube, called the urethra, which allows urine to flow out of the bladder and, for some, semen to pass out through the penis. Therefore, the prostate can't be seen palpated/checked from outside the body.

What does the prostate do?

It supplies a thick, clear fluid that mixes with sperm to form semen, called the ejaculate. This fluid helps to nourish and protect sperm during intercourse. The prostate also makes Prostate Specific Antigen, or PSA, which is a protein that makes semen more fluid and so helps sperm to move more easily.

Why has the urologist, GP, or CNS asked me to have a prostate biopsy?

It helps to decide what the problem might be within your prostate; if it is a benign (not cancerous) enlargement of your prostate and to check and confirm whether you might have cancer in your prostate.

However, the biopsy not only picks up cancer in the prostate but it can also find out how aggressive the cancer may be and help the urologist decide on which treatment options may be suitable.

Before having a prostate biopsy, you will most likely have had:

- **A raised PSA level.**

Because some PSA leaks out of the prostate, it's normal to find PSA in blood. This is called your PSA level. So, a small amount of blood is taken to measure the amount of PSA in your blood. This can be used to help the GP, urologist or CNS decide what is going on. Your PSA level can be raised for a variety of reasons such as prostatitis (inflammation of the prostate), BPE (benign prostatic enlargement) or prostate cancer. For more information see 'PSA get the knowledge' <https://www.prostatescotland.org.uk/wp-content/uploads/resources/The-PSA-Test.pdf>

- **An abnormal digital rectal examination (DRE).**

If your GP, urologist or CNS has some concerns about your DRE such as any hardened area, odd shape or unusual lump;

- **Previous biopsy results.**

If previous biopsy results were normal or perhaps doubtful and you still have raised PSA levels or if your biopsy showed prostate cells that were abnormal but not cancerous;

- **An MRI scan or subsequent MRI has shown cause for concern;**

- **If you have already been diagnosed with prostate cancer** and have chosen Active Surveillance to manage your prostate cancer, a biopsy may be done to find out if the cells in the prostate are changing or have changed. In some situations, an MRI scan may be done prior to having a biopsy.

Please see page 18-19 for more information on MRI and mpMRI scans.

What is a prostate biopsy?

It is a test that your urologist, CNS (clinical nurse specialist) or GP may

ask you to have done. It involves taking small samples of tissue from your prostate then looking very carefully at these under a microscope.

There are 4 types of biopsy:

- i. TRUS which is a trans-rectal ultrasound and biopsy.** At the time of writing this is still the most common way to have a biopsy in Scotland if you have a raised PSA and/or the urologist, CNS or GP have concerns when they examined your prostate. It involves taking small tissue samples from your prostate through the wall of the back passage with the guidance of a small ultrasound probe.
- ii. Trans-perineal prostate biopsy with local anaesthetic.** Small tissue samples are taken from your prostate through the perineum (the skin area between the scrotum and back passage). This approach also uses an ultrasound probe in the back passage. Usually, there will be two needles going through the perineum to take the necessary prostate tissue samples. This decreases the number of puncture wounds in the perineum. This approach is becoming more common now as it can access areas in the prostate that **might** be difficult to reach with the transrectal approach.
- iii. Template trans-perineal biopsy.** It involves placing a special grid against your perineum (the skin between your scrotum and back passage) and taking tissue samples from your prostate through the perineum. This may be done in certain circumstances.
- iv. MRI fusion guided biopsy.** This uses both MRI and ultrasound scan images to find the areas of concern in the prostate. An MRI scan (done prior to the biopsies) is superimposed on the ultrasound scan images done during the biopsy. This helps target any suspicious area(s) seen on the MRI scan in a more accurate way. (MRI means magnetic resonance imaging. See page 18-19 for information on MRI and mpMRI scans.

It's important to be aware that you may not be suitable for all these types of biopsy and some types of biopsy may not be available in your area. In addition, there may be a clinical reason for the urologist or CNS choosing a particular type of biopsy.

Who does the prostate biopsy?

In some areas this will be done by the urologist or CNS who is looking after you. In many areas, the biopsy service is led by a CNS or urology CNS. Occasionally a biopsy may be done by a radiologist (a specialist in X-rays).

Before having a prostate biopsy, tell the urologist or CNS:

- If you have any problems with bleeding
- If you have an allergy to any medicines like antibiotics
- About any other medicines, herbal pills or herbal supplements you are taking. It would be helpful if you make a list of these and give the list to the CNS or urologist
- If you take any drugs to thin your blood such as warfarin, clopidogrel, rivaroxaban, apixaban, edoxaban or dabigatran. If you take another medicine to thin your blood and it's not mentioned here, please let the CNS or urologist know about your blood thinning medicine. You should have been asked to stop these before the biopsy so ask when you can start to take these again; never stop these unless specifically advised by the team doing the biopsy
- If you take aspirin, ibuprofen or other non-steroidal anti-inflammatory drugs
- If you have been unwell with any other medical condition in the past few days
- If you have an artificial heart valve, achilles problems/tendonitis or epilepsy

The information that follows about prostate biopsy is meant as general guidance. As procedures may vary slightly from hospital to hospital, ask for more advice from staff at the hospital you are attending. If you have been given any specific guidance by the hospital then it is important that you follow their instructions.

Consent form

The urologist or CNS will explain more about the type of biopsy that you will have and what will happen during the biopsy. You will have a chance to ask any questions about the procedure or let them know if you have any worries about having the biopsy and what the results might mean for you. You can ask when you are likely to get the results of the biopsy and who you may need to get in touch with.

After agreeing to go ahead with the biopsy you will need to sign a consent form.

On the day of the biopsy

When attending for the biopsy arrive with a comfortably full bladder so you are ready to provide a urine sample before your procedure. This will be checked for any signs of a urine infection.

Please read this introduction to know which pages are relevant for the type of biopsy you will be having.

This booklet is to help you, your partner or your spouse understand more about prostate biopsy and help you be more prepared for the procedure.

Not all types of biopsy mentioned in this booklet are available in every health board. In addition, there may be a clinical reason for the urologist or CNS choosing a particular type of biopsy.

You should only read the information about the type of biopsy that the urologist/clinical nurse specialist has indicated that you will be having.

There are 5 sections to the booklet.

Section 1 is about Trans-rectal Rectal Ultrasound biopsy TRUS pages 7-10

Section 2 is about Trans-perineal Biopsy with local anaesthetic pages 10-13

Section 3 is about Template trans-perineal prostate biopsy pages 13-17

Section 4 is about MRI fusion guided biopsy pages 18-19

Section 5 This section contains important information that you should read after any type of biopsy pages 20-22

Section 1 What is a TRUS Biopsy? (trans-rectal ultra-sound)

This is to take small samples from your prostate through the wall of the back passage. This uses an ultrasound scan, special needle and local anaesthetic.

How to prepare for the biopsy

You do not need to fast, when going in for your TRUS biopsy. You can have breakfast or lunch as usual.

You can take your other medicines as usual on the day of your biopsy except those to thin your blood see page 5.

You may be told to stop taking your blood thinning medicines before your biopsy. You can always ask the CNS if you take any medicines to thin your blood if you are at all unsure.

It's important that you don't stop taking your blood thinning medicine, without first asking advice from your CNS, urologist or GP and always follow their guidance.

To reduce the risk of infection, you may be asked to take antibiotic tablets immediately before the procedure.

Perhaps in some hospitals you may be asked to have an enema to clear your bowel before the biopsy. The hospital staff will let you know if this is likely to be the case.

How is a TRUS biopsy done?

You will be asked to lie on your left side with your knees bent up towards your chest. It helps both you and the urologist or CNS if you can manage to relax.

The urologist or CNS will slide a gloved finger into your back passage to examine your prostate.

Then a small, ultrasound instrument coated with gel is gently passed into your back passage.

The instrument is about the size of a thumb and works by releasing sound waves. The echoes from the sound waves give a clear picture of the shape and size of your prostate that the urologist or CNS can see on a screen. You may find having the probe in your back passage uncomfortable, but it shouldn't hurt.

When the urologist or CNS has a picture of your prostate on the screen, they usually measure the size of your prostate, then guide a special needle through the wall of the back passage to reach the prostate.

An injection of anaesthetic is given to numb your prostate.

You will be given an antibiotic before and after biopsy.

Then another very fine needle is used to take small samples of tissue from your prostate very quickly. You might feel a short, sharp pain or stinging as the special needles take these samples, although usually the local anaesthetic stops you feeling any pain. You will hear a 'clicking' noise as the samples are taken.

Tell the urologist or CNS if you are feeling very uncomfortable having the samples taken as they may be able to give you some additional local anaesthetic to numb the area.

How many samples are taken?

Although the number may vary, it's usually 10 or more small samples from targeted areas.

Will I have an anaesthetic?

You will have an injection of local anaesthetic to numb your prostate which usually stops you feeling any pain.

How long does it take to have the biopsy?

You can expect to be in hospital for up to 2 hours. In total the procedure takes about 15 minutes. The first part of the procedure makes sure that the ultrasound instrument is in the correct place and giving clear pictures of your prostate.

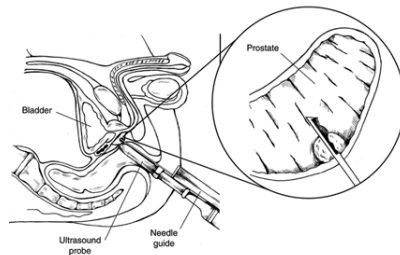


Image from Library of the National Institute of Diabetes and Digestive and Kidney Disease

Taking each tissue sample (biopsy) only takes a matter of seconds, in total around 5-10 minutes.

Will I have a catheter?

Not usually.

Will I have to stay in hospital and for how long?

You will not usually need to stay in hospital.

After the biopsy and before going home

After the biopsy, you may feel a bit lightheaded, so take your time and get up slowly. If you continue to feel faint or unwell, you should let the nurses know.

You will most likely go back to a waiting area and may be given some fluid to drink.

Before you go home, you will be asked to pass urine to make sure that you can pass urine and that it's not too blood stained.

You may be given a date to come back to see the urologist or CNS or other arrangements made to let you know your results. There's no harm asking how you will get your result if you're not too sure.

What are the potential side-effects?

- Blood in your urine. This is quite common and should clear up in about a week. But for some it may take slightly longer anything up to 2-3 weeks.
- Blood in your semen. This is quite common and usually lasts for about 4-6 weeks. This may depend on the frequency of ejaculation.
- Blood when you pass a motion
- A dull ache. You may feel an ache in the prostate and/or in the area between your scrotum and back passage
- Urine retention. If you are not able to pee at all (called retention of urine) then you should get in touch with your GP, CNS or NHS 24. You may need to have a catheter for a short time
- Risk of infection. Some men are at risk of developing an infection after biopsy. There is detailed information about the signs of infection and what you should do on page 20

Medication to take when going home

You may be given a short course of antibiotics to take at home. Remember to finish all the tablets as shown on the packet.

You may be advised to take simple pain killers such as paracetamol if you have any pain from the biopsy.

If you normally take warfarin, rivaroxaban, apixaban, clopidogrel, edoxaban or dabigatran ask when you should start this again. These are some of the names of blood thinning tablets. If you know you take a different medicine to thin your blood, then let your CNS know and ask when you should start it again.

Please now go to pages 20-22 to read more about going home, getting your results and why it might be necessary to have another biopsy in future.

Section 2 Trans-perineal (TP) prostate biopsy

Small tissue samples are taken from your prostate through the perineum. The instrument/device to take the tissue samples is hand-held by the urologist and guided into different areas in the prostate. Usually, there will be two needles going through the perineum (skin between your scrotum and back passage) to take the necessary prostate tissue samples.

TP biopsy is fast becoming the standard way of having a biopsy as the chance of developing an infection after this type of biopsy is lower.

How to prepare for the TP biopsy

If you have been told that you are having a local anaesthetic, you do not need to fast when coming in for your TP biopsy. You can have breakfast or lunch as usual.

You can take your other medicines as usual on the day of your biopsy except those to thin your blood see page 5.

You may be told to stop taking your blood thinning medicines before your biopsy. You can always ask the CNS if you take any medicines to thin your blood if you are at all unsure.

It's important that you don't stop taking your blood thinning medicine, without first asking advice from your CNS, urologist or GP and always follow their guidance.

How is the TP biopsy done

Usually, you will have had an mpMRI scan a week or 2 before your organised TP biopsy.

The TP biopsy will usually be done in a specialised clinic room in the day bed or out- patient area at the hospital.

You will lie on a couch with your legs apart and slightly raised with special supports. This is to give the urologist or CNS access to your perineum.

Your scrotum will be taped up and away from your perineum.

The urologist or CNS will slide a gloved finger into your back passage to examine the prostate.

You may feel your perineum being cleaned with a special disinfectant and antiseptic spray before the biopsy.

A special cooling spray is used to help prevent any pain/numb the area for the 2 injections into the perineum. After this you will have some local anaesthetic.

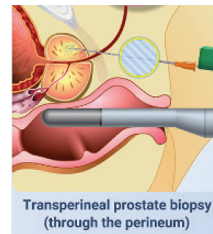
Once the areas have been successfully numbed, the special hand-held device will be positioned on the perineum. Then the needle guide will carefully be inserted through the perineum. Usually once on the left side and once on the right side.

Will I have an anaesthetic?

The local anaesthetic will most likely be given in 2 stages:

- i. The first injection will be into the skin of your perineum. This makes the area(s) that the fine needles go through numb.
- ii. The second injection is to numb the nerves around your prostate.

You might find that these will sting for a short time but very quickly the area will be numbed.



Source: www.YouAndProstateCancer.com Men's Health Network and Mechanisms in Medicine Inc. Copyright Mechanisms in Medicine Inc. All rights reserved. Reprinted with permission from Mechanisms in Medicine Inc.

How many samples are taken?

Around 18-28 core tissue samples are taken. (A core sample means that a very fine hollow needle is gently pushed into the prostate. When it is pulled out, inside the needle will be a small prostate tissue sample).

If the urologist has any additional specific area(s) they want to target then they can carefully guide the device to these areas. Extra samples from suspicious areas may be taken in addition.

How long does a TP biopsy take?

You will not usually need to stay in hospital but on average you can expect to be up to 2 hours in the day bed/out-patient area. Taking the biopsy samples takes around 20 minutes.

Will I have a catheter?

It's not usually necessary.

Will I have to stay in hospital and for how long?

Usually this will be done as a day case or as an out-patient procedure.

What are the potential side-effects?

- Blood in your urine. This is quite common and should clear up in about a week. But for some it may take slightly longer - anything up to 2-3 weeks.
- Blood in semen. This is quite common and usually lasts for about 4-6 weeks. This may depend on the frequency of ejaculation.
- Slight bruising of the skin and perineum.
- Temporary discomfort in back passage or soreness in back passage area.
- On a few occasions, swelling can occur in the prostate which can lead to difficulties in passing urine.
- Urine retention. If this leads to you not being able to pee at all (called retention of urine), then you will need to get in touch with your GP, CNS or NHS 24. This only happens for very small number of men, around 1-2%.

In some cases, you may need to have a catheter for a short time.

- Risk of infection. A very small number of men might be at risk of developing an infection after biopsy. There is detailed information about the signs of infection and what you should do on page 20.

After the biopsy and before going home

- After the biopsy, you may feel a bit lightheaded, so take your time and get up slowly. If you continue to feel faint or unwell, you should let the nurses know.
- You may notice some very slight bleeding where the 2 needles went through the perineum.
- Before you go home, you will be asked to pass urine to make sure that you can pass urine and that it's not too blood stained.
- You may be given a date to come back to see the urologist or CNS or other arrangements made to let you know your results. There's no harm asking how you will get your result if you're not too sure

Medications to take at home

You may be advised to take simple pain killers such as paracetamol if you have any pain from the biopsy.

If you normally take warfarin, rivaroxaban, clopidogrel, edoxaban, dabigatran or Apixaban ask when you should start this again. These are some of the names of blood thinning tablets. If you know you take a different medicine to thin your blood, then let your CNS know and ask when you should start it again.

Please now go to pages 20-22 to read more about going home, getting your results and why it might be necessary to have another biopsy in future.

Section 3 What is template trans-perineal (TP) biopsy?

This is to take small samples from your prostate through the skin of the perineum (the skin between the scrotum and back passage). This uses an ultrasound scan, special grid, special needle and local anaesthetic or occasionally a general or spinal anaesthetic.

Why might I have a template trans-perineal (TP) biopsy?

It may be done if:

- The cancer is thought to be at the front of the prostate. Areas such as this cannot be easily reached in a TRUS biopsy through the back passage
- If you have previously had surgery to your back passage
- If you have previously had a TRUS biopsy that didn't pick-up prostate cancer, but there are ongoing concerns about your PSA level
- An MRI scan has shown a suspicious area(s) in your prostate
- Your prostate is very large

How to prepare for a template TP biopsy

If you have been told that you are having a **local** anaesthetic, you do not need to fast, when coming in for your template TP biopsy. You can have breakfast or lunch as usual.

If you have been told that you are having a **general** anaesthetic, you will most likely be advised not to eat or drink for 6 hours before your biopsy. If the information sent/given by the hospital is different, then please follow their guidance.

You can take your other medicines as usual on the day of your biopsy except those to thin your blood see page 5.

You may be told to stop taking your blood thinning medicines before your biopsy. You can always ask the CNS if you take any medicines to thin your blood if you are at all unsure.

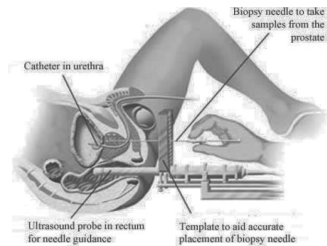
It's important that you don't stop taking your blood thinning medicine, without first asking advice from your CNS, urologist or GP and always follow their guidance.

To reduce the risk of infection, you may be asked to take antibiotic tablets immediately before the procedure.

How is a template TP biopsy done?

You will most likely be admitted on the day of your procedure, you will be examined, and the procedure will be explained again to you.

When in theatre you will lie on your back and your legs will be slightly raised and put into special supports. This is to give the urologist or CNS access to your perineum and later can place the special grid on your perineum. You will need to be in this position for about 20 minutes so if you feel very uncomfortable let the urologist or CNS know.



The urologist or CNS will slide a gloved finger into your back passage to examine the prostate.

You may feel your perineum being cleaned with an antiseptic liquid.

After this the ultrasound probe will be slid into your back passage to give clear pictures of your prostate so that the biopsies can be taken.

In order to take samples from all areas of the prostate, a special grid (or template) is used which has holes every 5mm and this is placed against the perineum. The very fine biopsy needles are put into the prostate through the holes and samples of tissue are taken very quickly in a regular, organised way throughout the grid. If you have a local anaesthetic, you will hear a 'clicking' noise as the samples are taken. If you have a local anaesthetic, tell the urologist or CNS if you are feeling very uncomfortable having the samples taken as they may be able to give you some additional local anaesthetic to numb the area.

Once all the samples have been taken, the grid is taken away and a firm dressing is applied to the perineum and a pair of disposable pants will help keep this in place.

Will I have an anaesthetic?

It's becoming more common to have a local anaesthetic, rather than a general anaesthetic, when having a template TP biopsy. Local anaesthetic will most likely be given in 2 stages:

- i. The first injection will be into the skin of your perineum. This is to make the area(s) that the fine needles go through numb
- ii. The second injection is to numb around your prostate

You might find that these will sting for a short time but very quickly be numbed

How many samples are taken?

The number of samples taken can vary in different hospitals and with the man's individual circumstances. Anything from 24 samples to around 38 samples may be taken.

How long does it take to have this type of biopsy?

You can expect to be in hospital for up to 2 hours. The whole procedure takes between 20–40 minutes.

Will I have a catheter?

Not usually. Although occasionally it may be necessary to have a catheter put in place during the procedure.

Will I have to stay in hospital and for how long?

Usually this will be done as a day case or as an out-patient procedure. Occasionally, depending on individual circumstances or if you have had a general anaesthetic, you may have to stay in hospital overnight.

After the biopsy and before going home

After the biopsy, you may feel a bit lightheaded, so take your time and get up slowly. If you continue to feel faint or unwell, you should let the nurses know. If you have had a general anaesthetic the nurses in the recovery area will guide you on when to get up.

Before you go home, you will be asked to pass urine to make sure that you can pass urine and that it's not too blood stained.

Afterwards, because there may be some slight bleeding from the perineum, you will be given a pad to put into your underwear or a pad and some disposable pants.

If you have stayed in overnight and have a catheter, then this will be taken out and you should be able to go home once hospital staff have checked to make sure that you are passing urine normally.

You may be given a date to come back to see the urologist or CNS or other arrangements made to let you know your results. There's no harm asking how you will get your result if you're not too sure.

What are the potential side-effects?

- Blood in your urine. This is quite common and should clear up in about a week. But for some it may take slightly longer - anything up to 2-3 weeks.
- Blood in semen. This is quite common and usually lasts for about 4-6 weeks. This may depend on the frequency of ejaculation.
- Bruising of the skin and perineum
- Temporary discomfort in back passage or soreness in back passage area
- On a few occasions, swelling can occur in the prostate which can lead to difficulties in passing urine
- Urine retention. If the swelling leads to you not being able to pee at all (called retention of urine) then you will need to get in touch with your GP, CNS or NHS 24. In some cases you may need to have a catheter for a short time
- Risk of infection. A very small number of men might be at risk of developing an infection after biopsy. There is detailed information about the signs of infection and what you should do on page 20

Medication to take when going home

Antibiotics are given during the procedure. If you are given antibiotic tablets to take at home remember to take these as directed on the packet/box and finish all the tablets.

You may be advised to take simple pain killers such as paracetamol if you have any pain from the biopsy.

If you normally take warfarin, rivaroxaban, clopidogrel, edoxaban, dabigatran or Apixaban ask when you should start this again. These are some of the names of blood thinning tablets. If you know you take a different medicine to thin your blood, then let your CNS know and ask when you should start it again.

Please now go to pages 20-22 to read more about going home, getting your results and why it might be necessary to have another biopsy in future.

Section 4 What is MRI guided TRUS Biopsy and MRI guided trans-perineal biopsy?

As explained previously, these are to take small samples from your prostate through the wall of the back passage or through the perineum, using an ultrasound scan, special needle and local anaesthetic.

However, this type of biopsy also involves overlaying (or fusing) a recently taken MRI high- definition picture onto the live images on screen from the ultrasound scan.

Once these two types of specialist diagnostic techniques are fused together by special computer software, they provide a detailed 360°, 3D picture of the man's prostate. The advantage being the biopsy needle can be very accurately targeted to specific areas in the prostate. This type of biopsy may not be available in all hospitals.

Magnetic Resonance Imaging (MRI) scan

An MRI scan uses strong magnetic fields, radio waves and special computer software/programmes to produce detailed pictures of your prostate, surrounding tissues, bones and other organs. So unlike x-rays it doesn't use radiation.

Multiparametric Magnetic Resonance Imaging (also shortened to mpMRI)

Standard MRI scans can be enhanced by using intravenous contrast that allows additional imaging parameters to be collected, which improve the ability of radiologists to identify abnormal areas in the prostate (e.g. diffusion weighted images, dynamic contrast enhancement). Using these different parameters can highlight differences between healthy and unhealthy tissue.

It's called multiparametric (mp) when 2 or more of these parameters are used. It may be that 4 different parameters are used to identify prostate cancer. By using parameters in this way, an mpMRI scan shows the prostate very clearly and if there is anything unusual/suspicious in or around the prostate.

When might an mpMRI scan be used?

- i. In most UK centres, it's becoming standard practice for men to have an mpMRI scan before a prostate biopsy
- ii. For further clarification of risk of a significant prostate cancer to help decide whether to perform a biopsy or not
- iii. To give a baseline (initial/starting point) image then check on any changes if the man has chosen Active Surveillance
- iv. To confirm if treatment for prostate cancer has been successful

What happens?

The machine used to do an MRI scan is like a long tunnel.

Before the scan staff will ask about your health and if you have any metal implants like a pacemaker and you will have to take off any metal jewellery/piercings.

As the scan is done in the narrow 'tunnel' you should tell staff if you don't like or have a fear of enclosed/confined spaces.

You will be asked to lie flat on your back on a narrow table and pillows might be used to help you stay still and in the correct position. The table glides into the tunnel and the images are recorded while you are in the tunnel. At some points, you might be asked to lie totally still and even hold your breath while the images are being taken; you might find it's quite noisy in the tunnel.

The scan takes around 30 – 40 minutes and you might be asked to wait afterwards to make sure that the images are clear and sharp.

What happens after mpMRI scan?

It will take time for the results of the scan to be reported back to you. This may be an anxious time both for you and your family. Some men deal with this by reading about prostate disease and prostate cancer so they have more information.

Section 5 Important information after any type of biopsy

Infection - a side-effect to look out for after any type of biopsy

After any type of biopsy, a small number of men may be at risk of developing an infection. This is less likely if you have had a trans-perineal biopsy.

If you have been given antibiotic tablets it's really important to take all of these as directed by the urologist or CNS.

However, after any biopsy if you:

- Can't pee at all
- Pass a lot of blood from your back passage
- Pass a large number of blood clots
- Have a burning feeling when passing urine
- Are in severe pain
- Develop a high temperature over 37.5°C and feel hot, cold and shivery
- Notice your urine is cloudy and has a bad smell

An infection like this needs to be treated right away. You should contact your GP, CNS or NHS 24 straight away. If you have been given a particular number to call by hospital staff, then you should call that number.

Going home

- As you might feel uncomfortable or lightheaded, it may be best to have someone drive you home. If you have to drive, it's probably best to wait an hour or 2 to make sure you're ready and fit enough to drive
- If you have had a general anaesthetic, ask the urologist, CNS or ward staff for more advice. You may need to check with your insurance company about your cover after your anaesthetic and you need to be able to do an emergency stop
- If you are given antibiotics to take at home, it's important that you read

the instructions carefully and make sure that you finish the full course of tablets

- If you are in a lot of pain, you may be able to take over-the-counter painkillers such as paracetamol or ibuprofen. Ask the urologist, CNS or pharmacist if you are unsure what you can take
- If you are on any blood thinning tablets, ask the urologist, CNS or GP when you can start taking these again
- Take it easy for the rest of the day
- Try to drink plenty of fluids to help flush out any possible infection
- Get back to your normal activities as soon as you feel up to it, although you may be advised to avoid energetic exercise for the first few days
- Apart from the day of the procedure, most likely, you will not need any extra time off work unless you have a very strenuous job. If you had a trans-perineal biopsy, then you may not need any time off but take it easy for 2-3 days unless you have a strenuous job
- If you receive anal sex then you may like to consider the following guidelines:
 - Waiting for up to 2 weeks (or until you feel comfortable) after a transrectal biopsy (TRUS). Having anal sex within this time may cause bleeding, pain or increase the risk of infection.
 - Waiting for a week (or until you feel comfortable) after a trans-perineal biopsy or precision point biopsy. Having anal sex within this time may not allow bruising to settle, and potentially make intercourse painful.

Ask your CNS, GP or urologist for further advice.

What happens after I've had the biopsy?

The samples of tissue are sent to a laboratory to be examined in great detail for any signs of prostate cancer, so you won't get the results straight away.

How long before I get the results?

The results will go to your urologist or GP in about 2-3 weeks' time. This may vary from area to area so ask the urologist or CNS who did the biopsy when you are likely to get your results. If you don't hear after 3 weeks,

there's no harm phoning the CNS at the hospital to ask about your results. In some hospitals, the urologist or CNS will phone and give you the biopsy results. Waiting for your results may be an anxious time both for you and your family. Some men deal with this by reading about prostate disease and prostate cancer so they have more information.

After getting the results, you will most likely be given an appointment to see the urologist at the hospital.

Why might I have another prostate biopsy done?

This can vary from person to person depending on your results. You may have another prostate biopsy done if:

- Your TRUS biopsy result didn't show any cancer but your digital rectal examination (DRE) found that your prostate was not a normal shape or size or there were some hardened areas or lumps. This is because such small samples are taken during the TRUS biopsy that it may be possible to miss small areas of cancer in your prostate
- Your biopsy results did not show cancer but there is still some cause for concern
- You may have a trans-perineal biopsy if you have already had a number of TRUS biopsies and these have not shown why your PSA is raised
- Your PSA level is continuing to rise
- Your brother, father or close family relative has or has had prostate cancer
- Abnormal, but not cancerous cells, have been found in your prostate
- Prostate cancer has been diagnosed and you have chosen Active Surveillance to manage your prostate cancer, so that any cell changes in the prostate can be picked up. To keep a check on what is happening, your GP, urologist or CNS may ask you to have a PSA blood test once a year or possibly a bit more regularly. If you have any questions or concerns about your biopsy or what it means then speak to your GP or CNS at the hospital

Helpful resources from Prostate Scotland

Once you have seen the CNS or urologist and have been given your diagnosis, you may find some of the following resources useful:

For **benign prostatic enlargement** we have:

‘Men and their plumbing’

‘BPE explained’

<https://www.prostatescotland.org.uk/disease-tests-and-treatments/benign-prostatic-hyperplasia-bph>

For **prostatitis** we have:

Prostatitis – a simple straightforward guide

Prostatitis explained

<https://www.prostatescotland.org.uk/disease-tests-and-treatments/prostatitis>

For **prostate cancer** we have:

A start to help you understand prostate cancer

Early prostate cancer explained

Advanced prostate cancer explained

Spotlight on guides dealing with a specific treatment or care issue

<https://www.prostatescotland.org.uk/disease-tests-and-treatments/prostate-cancer>

COMPASS support service

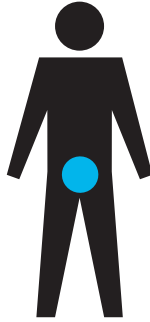
<https://www.prostatescotland.org.uk/help-and-support-for-you#COMPASS>

Our work:

All our awareness materials, introductory guides, explanatory guides and ‘Spotlight on’ guides such as this booklet are available free of charge to individuals and their families and all healthcare settings.

If you found the booklet helpful, you can help us reach many more people with awareness and information about prostate disease and prostate cancer by doing the following:

- Obtaining and wearing a Prostate Scotland badge
- Volunteering some of your time
- Taking part in or organising a fundraising event or making a donation



Prostate Scotland acknowledges the help and support from the members of the group:

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Professor Alan McNeill, Consultant Urologist, Western General Hospital, Edinburgh

Mr Feras Al Jafarri, Consultant Urologist, NHS Fife

Dr David Astill

Derek Brown

Brian Corr, Urology Clinical Nurse Specialist, Raigmore Hospital, Inverness

Alan Dickinson

Dr Andrew Dunlop, General Practitioner Principal, East Calder Medical Practice, West Lothian

Mr Daniel Good, Consultant Urologist, Western General Hospital, Edinburgh

Ms Stephanie Guillaumier, Consultant Urologist, NHS Fife

Sioned Hancock, Advanced Practice Physiotherapist NHS Lothian

Scott Little, Clinical Nurse Specialist, Western General Hospital, Edinburgh

Bill Taylor, Advanced Practice Physiotherapist specialising in pelvic floor dysfunction, Lecturer in Physiotherapy

Dr Ashleigh Ward, Nurse Consultant Cancer and Palliative Care NHS Forth Valley

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The information contained in this leaflet has been developed by Prostate Scotland and reviewed by its Advisory Group of doctors. This leaflet is not intended to replace medical advice or seeing a doctor for specific illnesses or symptoms.

The printing of this booklet was made possible by a very kind anonymous donation. Prostate Scotland would like to thank the Scottish Government and Sir Tom Farmer through the Farmer Foundation, for their initial funding of the Information and Advice Project.

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Date: Reviewed October 2022 © Prostate Scotland

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