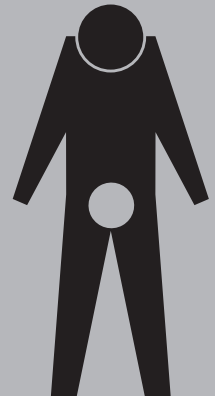


PSA Explained



Introduction

This booklet is to help you (and your partner) decide if having a PSA test is the best decision for you.

At the time of writing, the PSA blood test is the best test that doctors have to check for problems with your prostate. However, it is not perfect. There are benefits, but there are also drawbacks in having the test.

At present, PSA screening is not recommended in the UK. However, this continues to be looked into. Within the Prostate Cancer Risk Management Pack, the guidance for GPs states that:

“Any man over 50 who asks for a PSA test after careful consideration of the implications should be given one.”

All of this will be explained more to you as you read the booklet. For further information or to take a symptom self-test go to our website www.prostatescotland.org.uk

What is the prostate?

If you don't know what your prostate is, where it is or what it does, you're certainly not alone. In fact, most people don't know! Many men still find it uncomfortable or difficult to talk about the prostate as it plays a role in both passing urine and sexual intercourse.

Only men have a prostate. It starts out about the size of a pea then slowly grows to the size of a walnut, until the man is in his 20s. Around the age of 40 it starts to grow or enlarge again and this may cause problems for a man when passing urine or not being able to pass urine.

Where is it?

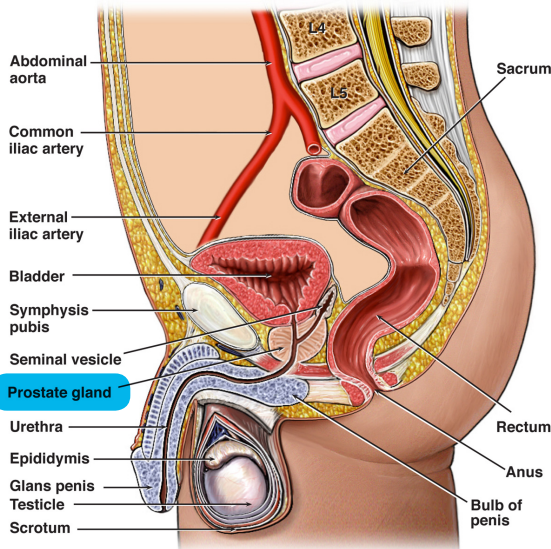
The prostate is inside the pelvis, just below the bladder and in front of the back passage. It wraps around the tube called the urethra that allows urine to flow out of the bladder and for semen to pass out through the penis. So, the prostate can't be seen or checked from outside the body.

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 sexual intercourse. The prostate also makes PSA.

What is PSA, the PSA test and what does it involve?

The prostate produces a protein called Prostate Specific Antigen (PSA). Some PSA 'leaks' out of the prostate into the bloodstream; so, it's normal for some PSA to be in your blood. Your GP will take a blood sample and send this to the laboratory to measure how much PSA is in your blood. You will hear this called your PSA level.



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Why is a PSA test done?

The main reason is to check for things going wrong with the prostate such as Benign Prostatic Hyperplasia - BPH (sometimes this is called Benign Prostatic Enlargement - BPE), Prostatitis or to check for prostate cancer. It can also be done if:

1. A man has difficulty in passing urine
2. You ask for the test if you are worried about prostate cancer even though you don't have any symptoms, and you have thought through what the result might mean for you and your family
3. You or your doctor decide on a PSA test if there has been a close relative (father or particularly a brother) affected by prostate cancer as there is an increased risk of developing prostate cancer
4. You are from an African/Caribbean background as there is a higher risk of developing prostate cancer
5. There is a strong family history of certain kinds of breast cancer
6. Your doctor suggests the test to rule out prostate cancer
7. Your doctor is checking your prostate to make sure that treatment is working or if it needs to be changed. In this case, a repeat PSA test will be necessary

What does the PSA level tell me about my prostate?

If you have a raised PSA level the most usual causes are:

1. The prostate becoming inflamed known as Prostatitis
2. The prostate growing bigger or enlarging, called Benign Prostatic Hyperplasia (BPH). You may also hear this called Benign Prostatic Enlargement (BPE)
3. A urinary tract infection
4. For 2 out of 3 men a raised PSA level will not mean prostate cancer. But for some men it can be a sign of having prostate cancer. However, a single PSA test may not definitely confirm whether you have prostate cancer or how quickly it is likely to grow. It is often done alongside other tests or examinations, e.g. Digital Rectal Examination (DRE)

What is a Digital Rectal Examination (DRE)

This is a straightforward procedure and usually one of the first examinations that your GP will do, if your PSA level is raised. A DRE gives the doctor an idea of the shape, size and condition of your prostate. The doctor will be checking for any hardened area, odd shape or unusual lump. Having this examination along with a PSA test helps the doctor to decide what may be best for you.

Because the prostate can't be seen or checked from outside the body, you will usually be asked to lie on the bed on your side. The doctor will then put a gloved finger into your rectum or back passage to feel your prostate. Although you may feel embarrassed and a bit uncomfortable, it shouldn't hurt. It's much better for you and the doctor if you can manage to relax. Remember the doctor has done this many times before and understands how you might be feeling.

If I go ahead, when can I expect to get the results of my PSA test?

If you decide to have a PSA test, the results will be sent to your GP or the specialist who asked for the test. The results can take up to 2 weeks to come back. Ask the doctor when you can expect to hear about the results of your test as this can be a worrying time. Ask if you have to phone for the results or if you will be contacted directly.

What might the results mean for me?

YOUR PSA LEVEL IS NOT RAISED.

In all probability no further action will be taken. You might find that you will be asked to have another PSA test to confirm the result at a later date especially if you are over 50 or have a brother or father who had prostate cancer.

YOUR PSA LEVEL IS RAISED.

You will need some further tests including more PSA tests and your doctor may want to do a DRE. Your GP may refer you to a specialist for further tests such as a prostate biopsy to check for disease in the prostate. Once a diagnosis is made, you will be given lots of information in order that you and your doctor can decide on the type of treatment that is right for you.

What is the normal level for PSA?

To some extent this depends on your age. The older you get, the higher your PSA level is likely to be. The doctor who gets your PSA results will take this into account. In some areas there may be slight differences in the levels used and your doctor will explain this to you.

AGE	Suggested upper levels of PSA (ng/ml)
40 - 49	2.5
50 - 59	3
60 - 69	4
70 and over	5

Surely then I should have this test done?

With any medical test it is better to get a clear answer of “no you don’t have cancer” or “yes you do have cancer”. Unfortunately, the PSA test is not quite that good or definite. It is best used as a guide to the possibility of having prostate cancer. In fact, for the majority of men, as many as 8 out of 10, a raised PSA level will not mean the man has prostate cancer. If your PSA level is raised then you may need to have further tests to find out exactly what is going on.

BENEFITS OF TAKING THE TEST

- It may reassure you if the test result is normal
- It can **help** to detect prostate cancer before any symptoms develop
- It may find cancer at an early stage so you will have the benefit of getting treatment early
- Starting treatment in the early stages of prostate cancer may mean the treatment is much more effective and **perhaps** mean the cancer could be cured
- For some men and their families knowing is better than not knowing
- Even if cancer is more advanced and the treatment is not as successful, having the test and treatment started earlier may still help you to live longer

DRAWBACKS OF TAKING THE TEST

- The PSA level could come back as normal when there is cancer in the prostate, and falsely reassure you that all is well. This is called a **false negative**
- The PSA level could come back as being raised even though you do not have cancer. This can cause a lot of unnecessary worry for you and your family. This is called a **false positive**
- If the PSA level is raised, you might be sent to have a biopsy and other invasive tests, even though you do not have cancer
- The test can't tell if the cancer will be slow-growing or fast-growing
- The treatment of early prostate cancers **might** not help you live longer. The treatments themselves can have side effects
- Even although the cancer may be slow-growing and unlikely to affect your general wellbeing you are 'labelled' as having cancer and this can cause you and your family to worry

Making the decision that is right for me.

The right decision for you can be different from that made by a friend, relative, workmate or colleague.

- Think through all the benefits and drawbacks of having or indeed not having the test. Sometimes writing these down can help you to make up your mind. This might also help when you speak to your GP
- Make sure your decision feels right for you
- Speak to your partner too as they may have some thoughts on this. There are questionnaires for you both in the pocket at the back of this booklet
- Check out websites or contact other organisations for more information

If your PSA level is raised you may be given an appointment at the hospital to have a prostate biopsy. For some men having a biopsy and other tests then waiting for the results may cause worry and stress.

Sometimes this anxiety and unease can continue for some time afterwards, even when the test results did not find any cancer. Please remember being anxious or worried around this time is not uncommon. Many hospitals now have nurse specialists who are happy to talk over the tests and test results with you if you have any concerns or questions.

You can also ask your GP for more information or just to talk it over. You will feel more confident if you, your partner and GP can decide together what is right for you.

What happens if I don't want to or can't make the decision?

Everybody is different. For some people it is important that they are involved in any decisions about their health. Others prefer not to take decisions and be guided by their doctor. It is best if you talk it over with your GP and let your doctor know what you think about having the PSA test.

What happens if I ask for the test and the doctor says 'NO'?

Within the Prostate Cancer Risk Management pack, the guidance for GPs states that: "Any man over 50 who asks for a PSA test after careful consideration of the implications should be given one".

So before going to see your doctor:

- Think about the advantages and drawbacks of the PSA test and why you want to have a PSA blood test
- Have your reasons for wanting the test very clear in your mind
- Write your reasons down to make sure you don't forget anything and help you talk it over with your GP

Wouldn't it be easier if all men over 50 just had the test?

At the present time PSA screening for prostate cancer is not recommended in the UK. However, this is currently being considered by the National Screening Committee and will continue to be reviewed. This is because:

- A single PSA test is not considered to give a reliable enough result and may cause families to worry unnecessarily
- The test cannot tell the difference between slow-growing cancers and the aggressive form of cancer. So, a large number of men with a slow-growing cancer would go through all kinds of tests and then be diagnosed with prostate cancer. However, this slow-growing form of cancer would probably not cause any symptoms or shorten their life. In fact, these men would probably die with the disease but not because of it
- There are some risks linked to the additional tests, e.g. prostate biopsy that the man has to go through as well as the risk of developing an infection

So, instead, the PSA test is available for all men over 50 as long as they have thought through all the consequences of having the test. It is available for younger men too, if they request it or if they are at greater risk of developing the disease, or, if their doctor thinks it would be beneficial.

Are there any times when I shouldn't have the test done?

PSA levels can be affected by several things so may give a false high level of PSA in your blood. Let your doctor know if any of these apply to you and put off having the test:

- If you have an active or have had a recent urinary infection
- If you have ejaculated in the last 48 hours
- If you have exercised energetically in the last 48 hours
- If you have had a prostate biopsy in the last 6 weeks
- If you have had a DRE (Digital Rectal Examination) in the last week
- If you have had a prostate massage
- Tell your doctor about any medications or herbal remedies you are taking

Will I get another PSA and when?

To a great extent, this will depend on the results of your PSA test. You should talk this over with your doctor. However, if after getting the result of your first PSA test the result was not conclusive or if it was borderline, the doctor may want to do another PSA blood test or a PSA test to measure the free PSA in your blood.

PSA travels in the blood in two forms:

- Unattached to a protein in the blood called Free PSA
- Attached or bound to a protein in the blood called Bound PSA

The Free PSA test measures the proportion of unattached or Free PSA to the total amount of PSA in your blood sample.

It is thought that a higher amount of free PSA in a test means a lower chance of having prostate cancer.

Further PSA tests may also be more likely if your brother or father has or had prostate cancer or you are from an African/Caribbean background.

If you are having your PSA levels checked regularly, you may find it difficult to remember dates and what the PSA level was. It may be helpful to use the Prostate Log Book included with this booklet to record the results (a copy can also be downloaded from our website www.prostatescotland.org.uk, or you can contact Prostate Scotland on 0131 226 8157 for one).

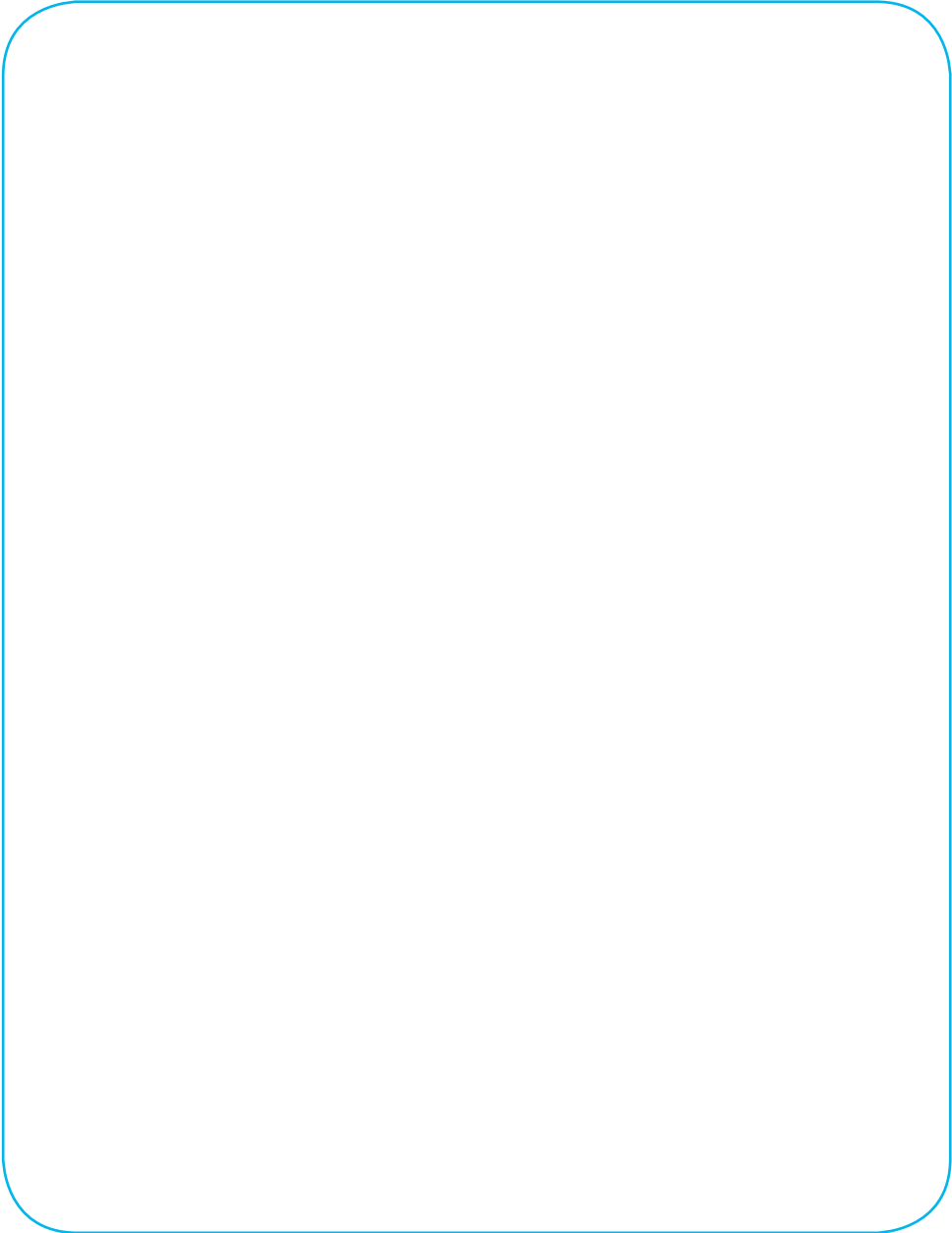
Who else might I be referred to?

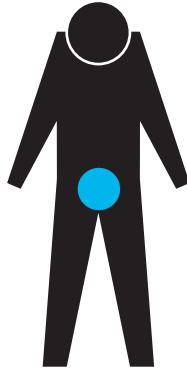
After doing further tests, your GP might decide to refer you to the hospital to see a urologist who specialises in diseases affecting the prostate for further tests or examinations. You might also see a nurse who specialises in diseases affecting the prostate.

Are there any other tests I might have done?

You may be sent to hospital to have a prostate biopsy. This will be done by a urologist or specialist nurse. You can ask them any questions, or let them know if you have any worries, about having the biopsy or what the results might mean for you.

For this test, a small probe is passed into your back passage, up to your prostate; a special needle takes 10 or more tiny samples from your prostate. These samples are sent to a lab to be examined under a microscope to check for any changes.





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