

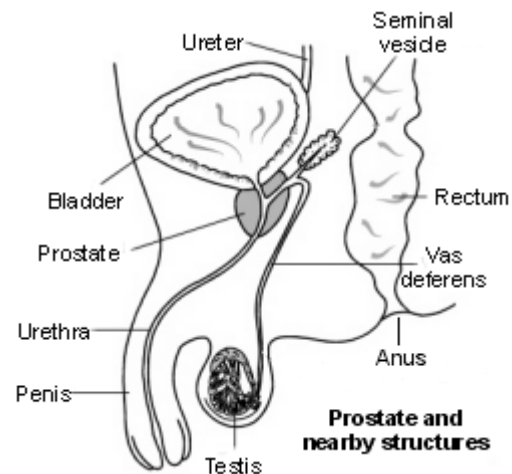
The PSA Test for Prostate Cancer

This leaflet is designed to help you decide whether to have the PSA blood test for prostate cancer. You might have no symptoms but just want to check that you don't have prostate cancer, or you might be thinking about the test because you have developed prostate symptoms. There are pros and cons about having the test which are detailed below.

What is the prostate gland?

The prostate gland (just called 'prostate' from now on) is only found in men. It lies just beneath the bladder (see diagram). It is normally about the size of a chestnut. The urethra (the tube which passes urine from the bladder) runs through the middle of the prostate. The prostate helps to make semen, but most semen is made by the seminal vesicle (another gland nearby).

The most common problem of the prostate is prostate enlargement (also called Benign Prostatic Hyperplasia). This is a benign (non-cancerous) condition where the prostate gets bigger ('enlarges') gradually after the age of about 50. By the age of 70, about 8 in 10 men have an enlarged prostate. This condition can cause symptoms such as passing urine frequently, difficulty in passing urine, etc. A separate leaflet gives more details about prostate enlargement.



The other main condition which can affect the prostate is prostate cancer.

Prostate cancer

Prostate cancer is a common cancer in older men. Every year in the UK about 22 000 men are diagnosed with prostate cancer. About 8 in 10 cases occur in men over the age of 65. It is rare in men under 50. Unlike many other cancers, prostate cancer is often present for years without you realizing it. This is because in many cases the cancer is slow growing and can take many years to cause any symptoms. By the age of 80, more than half of all men will have some cancer cells in their prostate - but only 1 in 30 of them will actually die from it.

However, some prostate cancers are fast growing and can spread to other parts of the body. It is these faster growing cancers that tend to cause the most problems and can be a cause of death.

A separate leaflet discusses prostate cancer in more detail.

What is the PSA test and who might have it done?

It is a blood test that measures the level of PSA in your blood. PSA stands for **P**rostate **S**pecific **A**ntigen. PSA is a protein made by the prostate which naturally leaks into the bloodstream.

Some men with symptoms of a prostate problem may consider having the test. The symptoms of benign prostate enlargement can be similar to the symptoms of a developing prostate cancer. Some men without any symptoms consider having the test to 'screen' for prostate cancer.

However, in both of these situations, the decision to have a PSA test is controversial as there are pros and cons. See below.

What does the PSA test tell me about my prostate?

A raised PSA level can be a sign that you have prostate cancer. The PSA level is often raised well before any symptoms of prostate cancer develop. So the test can help to detect early prostate cancers (which may have a better chance of being successfully treated than more advanced prostate cancers.) As a rule, the higher the PSA level, the more likely that you have prostate cancer.

However, a raised PSA level can also occur in other prostate conditions such as some cases of benign enlargement of the prostate and inflammation of the prostate (prostatitis). In particular, a PSA level that is mildly or moderately raised has a good chance of being due to a benign condition, but could be due to prostate cancer. Overall, about 2 in 3 men with a raised PSA level do not have prostate cancer.

Also, if you do have prostate cancer, a single PSA test cannot tell you whether a prostate cancer is slow or fast growing.

And also, in some cases, the PSA level may be normal even when there is cancer there. Up to 1 in 5 men with prostate cancer have a normal PSA level.

So, the PSA test is not an accurate test for prostate cancer.

What happens if my PSA level is high?

There are no hard and fast rules, and even the experts don't always agree on the best course of action. What happens next depends on whether or not you have any symptoms, your personal risk of prostate cancer, how high the PSA level is, and your age (the older you are, the higher your PSA level is likely to be whether or not you have prostate cancer).

As a rough guide, there are three main options after a PSA test:

- **PSA not raised:** Highly unlikely to have cancer. No further action.
- **PSA slightly raised:** Probably not cancer, but might need to repeat the test.
- **PSA definitely raised:** Probably need a biopsy to find out if you have prostate cancer.

Biopsy of the prostate

If your PSA level is raised, you may be referred to a specialist for a prostate biopsy. This is because a definite diagnosis of prostate cancer can only be made by taking cells from the prostate and then looking at them under a microscope. A biopsy involves using an ultrasound scanner to guide a metal probe into the rectum. This test can be uncomfortable, and sometimes painful.

The biopsy is not without risks. For example, there is a small risk of introducing infection into the prostate during the procedure, which can sometimes be serious. Some men bleed quite a bit following the procedure.

Also, the biopsy itself is not foolproof and 100% accurate. If the biopsy does not show any cancer cells, that doesn't completely rule out an early cancer. Of every 100 men who have cancer of the prostate, the biopsy will miss the cancer in about 20 of them.

What if I have got early prostate cancer?

Even if you are diagnosed as having prostate cancer, there is still some disagreement among experts as to when to treat it, and if so, what is the best treatment. The decision to treat depends on factors such as the type, grade and stage of the cancer. (See leaflet called *Prostate Cancer* for details.)

For example, there is no proof that treating early prostate cancers helps men live any longer than they would have done. Most men with early prostate cancer will not die as a result of it; in particular older men in their 70's or 80's, or those with a slow-growing cancer. Also, some of the treatments for prostate cancer can cause serious side effects in some cases.

So, in summary, pros and cons of the PSA test?

Possible benefits of having the test

- It may provide reassurance if the test result is normal.
- It can help to detect prostate cancer before any symptoms develop.
- Treatment in the early stages of prostate cancer could help you live longer and avoid the complications of cancer (although there is no good evidence that this is so).

Possible disadvantages

- It might detect a slow-growing cancer that may never cause any symptoms or shorten your life span. But the diagnosis of 'cancer' may cause you significant anxiety which could affect your quality of life.
- It may lead you to have treatment for early prostate cancer which might not help you live longer. Also, the main treatments for early prostate cancer do carry some risk and can cause side-effects.
- It could miss cancer in the prostate, and falsely reassure you that all is well.
- It could lead to anxiety and a biopsy when you have no cancer.

Ultimately, the decision should be taken by yourself in conjunction with your GP who can advise further and who knows your particular circumstances.

Further help and information

Prostate Research Campaign UK

10 Northfields Prospect, Putney Bridge Road, London, SW18 1PE
Tel: 020 8877 5840 Web: www.prostate-research.org.uk

Prostate Help Association

Langworth Lincoln LN3 5DF
Web: www.pha.u-net.com

(Email or postal contact only. Please send two 1st class stamps for initial information.)

© EMIS and PIP 2005 Updated: October 2006 PRODIGY Validated

Comprehensive patient resources are available at www.patient.co.uk