PSA (prostate specific antigen) testing for prostate cancer

An information sheet for men considering a PSA test

What is the aim of this leaflet?

Prostate cancer is a serious condition. The PSA test, which can give an early indication of prostate cancer, is available to you if you want to be tested. However, experts disagree on how useful the PSA test is. This is why there is a lot of research and why there is no national screening programme for prostate cancer in the UK. The aim of this information sheet is to give you balanced information about the PSA test and things you may want to think about. We hope it will help you decide whether or not you should have the test, but there is no simple right or wrong answer.

What is the prostate?

The prostate is a sex gland which lies just below the bladder in men. It provides bathing fluid to help produce healthy sperm. The prostate surrounds the tube (called the urethra) that carries urine from the bladder out through the penis. Because of this, problems affecting the prostate gland can sometimes affect how you urinate as well as possibly changing your sexual function.

What do we know about prostate cancer?

Prostate cancer is the most common cancer and the second most common cause of cancer deaths in men in the UK. Each year in the UK about 35,000 men are diagnosed with prostate cancer and 10,000 die from the disease. Prostate cancer is less common in men below the age of 50 years, and the average age at diagnosis is 70 to 74 years. The risk is greater for men who have a family history of prostate cancer and black-African and black-Caribbean men. Prostate cancer is also more common in western countries, suggesting that there may be a link with lifestyle factors, such as diet.

Prostate cancer can grow slowly or very quickly. Slow-growing cancers are common and may not cause symptoms or shorten life.

What is a PSA test?

The PSA test is a blood test that measures the level of PSA (prostate specific antigen) in your blood. PSA is made by the prostate gland, and some of it will leak into your bloodstream depending on your age and the health of your prostate.

A raised PSA level may mean you have prostate cancer. However, other conditions which are not cancer (for example, enlargement of the prostate, prostatitis, urinary infection) can also cause higher PSA levels in the blood. About 2 out of 3 men with a raised PSA level will not have prostate cancer. The higher the level of PSA, the more likely it is to be a sign of cancer. The PSA test can also miss cancer.

When you have a PSA test you should not have:

- an active urinary infection;
- ejaculated in the last 48 hours;
- exercised heavily in the last 48 hours;
- had a prostate biopsy in the last 6 weeks; or
- had a DRE (digital rectal examination) in the last week.

Each of these may produce an unusually high PSA result.

What happens after a PSA test?

The PSA test can miss cancer, so a negative test does not necessary mean you do not have prostate cancer. Equally, a raised PSA may mean you have prostate cancer, but the PSA can be falsely raised for a number of reasons. YOU MUST THEREFORE MAKE AN APPOINTMENT TO SEE A GP EVEN IF THE PSA TEST IS NORMAL OR NEGATIVE. In order to determine what to do next, the GP will perform a digital rectal examination (examination of the back passage with a gloved finger) to feel the prostate gland. He or she will also take into account any family history of prostate cancer, your ethnic background and any previous PSA test results and discuss these with you. In some cases, extra PSA tests may help to make the situation clearer or check for any changes.

What are the Pros and Cons of having a PSA Test

Pros

A PSA test can help pick up prostate cancer before you have any symptoms.

A PSA test may help to pick up a fast-growing cancer at an early stage when treatment may stop the cancer spreading and causing problems.

Slow-growing prostate cancer might not need treatment. You might be able to have regular check-ups, including PSA tests, to keep an eye on your cancer. This can avoid or delay the side effects of treatment.

Having regular PSA tests could be helpful for men who are more at risk of prostate cancer. This can help spot any changes in your PSA level, which might be a sign of prostate cancer. But we need more research to show how often you might need a test.

Cons

You might have a raised PSA level, even if you don't have prostate cancer. Around three quarters of men (76 per cent) with a raised PSA level don't have prostate cancer.

If your PSA level is raised you may need more tests, including a biopsy. The biopsy has some risks, such as pain, infection and blood in the urine and semen. Up to 3 in 50 men (six per cent) may get a serious infection after a biopsy.

The PSA test can miss prostate cancer. 1 in 50 men (two per cent) with fast-growing prostate cancer have a normal PSA level.

You might be diagnosed with a slow-growing prostate cancer which would never have caused you any problems or shortened your life. But being diagnosed with cancer could make you worry and you might decide to have treatment that you didn't need.

Treatments for prostate cancer have side effects which can affect your daily life. These include urinary and bowel problems, and problems getting and keeping an erection.

It can be difficult to decide whether or not to have a PSA test

If you are not sure please make an appointment with a GP to discuss the test in more detail.

If you decide to have the PSA test, please remember: **YOU MUST MAKE AN APPOINTMENT TO SEE A GP TO DISCUSS THE RESULTS, EVEN IF THE PSA TEST IS NORMAL OR NEGATIVE**