

PSA 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 that prostate cancer may be present, is now available to men who wish to be tested. However, experts disagree on the usefulness of the PSA test. It is not yet known whether or not PSA testing will save lives from prostate cancer. The aim of this information sheet is to give you balanced information about the PSA test, which we hope will help you decide whether or not having the test is the right thing for you.

You may wish to discuss this information with your doctor or practice nurse.

What do we know about Prostate Cancer?

Prostate cancer is the second most common cause of cancer deaths in men. Each year in the UK about 22,000 men are diagnosed with prostate cancer and 9,500 die from the disease. Prostate cancer is rare in men below the age of 50 years, and the average age of diagnosis is 75 years. The risk is greater in those with a family history and is also known to be greater in African American men. Prostate cancer is also more common in the West, suggesting that there may be a link with western lifestyle factors, such as diet.

The prostate gland lies below the bladder. Prostate cancers range from very fast growing cancers to slow growing cancers. Slow growing cancers are common and may not cause any symptoms or shorten life.

- Prostate cancer is the second most common cause of cancer deaths in men
- Prostate cancer is rare in men under the age of 50 years

What is a PSA test?

The PSA test is a blood test that measures the level of PSA in your blood. PSA (Prostate Specific Antigen) is a substance made by the prostate gland, which naturally leaks out into the blood stream. A raised PSA can be an early indication of prostate cancer. However, other conditions which are not cancer (e.g. enlargement of the prostate, prostatitis, urinary infection) can also cause a rise in PSA.

Approximately 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 cancer.

The PSA test can also miss prostate cancer.

- A PSA test involves a blood test
- If the level of PSA in the blood is raised, this may indicate that prostate cancer is present.
- However, many men with a raised PSA will not have prostate cancer
- The PSA test can also miss prostate cancer

What happens after the PSA test?

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

PSA level is not raised

- Unlikely to have cancer.
- No further action.

PSA slightly raised

- Probably not cancer, but you might need further tests.

PSA definitely raised

- Your GP will refer you to see a specialist for further tests to find out if prostate cancer is the cause.

If the PSA level is raised, what further tests would be carried out?

If your PSA is definitely raised, a prostate biopsy is required to determine if cancer is present. This involves taking samples from the prostate through the back passage (bottom). Most men find this an uncomfortable experience, and some describe it as painful. Sometimes complications or infection may occur. Approximately 2 out of 3 men who have a prostate biopsy will not have prostate cancer. However, biopsies can miss some cancers and worry about prostate cancer may remain even after a clear result.

- While a raised PSA level in the blood may indicate cancer, a prostate biopsy is still required to determine if cancer is present
- About 2 out of 3 of men who have a biopsy will not have prostate cancer

If early prostate cancer is detected, what treatments are used?

There are three main options for treating early prostate cancer which are summarised below:

- **Radiotherapy:** This involves a course of radiotherapy treatment on the prostate gland at an outpatient clinic. The aim is to cure, although there are possible side effects. Impotence (erection problems) may be suffered by between 2 and 6 out of every 10 men (25-60%). Up to 1 in every 10 men (10%) may experience diarrhoea or bowel problems, and up to 1 in every 20 men (5%) may experience bladder problems.
- **Surgery:** This involves an operation to remove the prostate gland. The aim is to cure, although again there are possible side effects. Up to 2 in every 10 men (20%) may experience some bladder problems, and between 2 and 8 out of every 10 men (20-80%) may experience impotence (erection problems) after surgery.
- **Active monitoring:** This involves regular check-ups to monitor the cancer and check it is not growing. The advantage is that for many men it avoids the side effects of radiotherapy and surgery. If there are signs that the cancer is developing, treatment would be offered. The disadvantage is that the cancer may grow to a more advanced stage. Some men find the uncertainty difficult to cope with.

So should I have the PSA test?

Benefits of PSA testing

- It may provide reassurance if the test result is normal
- It may find cancer before symptoms develop
- It may detect cancer at an early stage when treatments could be beneficial
- If treatment is successful, the consequences of more advanced cancer is avoided

Downside of PSA testing

- It can miss cancer, and provide false reassurance
- It may lead to unnecessary anxiety and medical tests when no cancer is present
- It might detect slow-growing cancer that may never cause any symptoms or shortened life span
- The main treatments of prostate cancer have significant side-effects, and there is no certainty that the treatment will be successful

Further information

If you have any questions or wish to receive more information about PSA testing and prostate cancer you can discuss it further with your doctor or practice nurse, or look at one of the following sources of information:

Useful web-sites on prostate cancer and PSA testing:

<http://www.nelc.org.uk>
<http://www.cancerscreening.nhs.uk>
<http://www.dipex.org>

Booklet:

Understanding the PSA Test
 Cancer BACUP
 3 Bath Place
 Rivington Street
 London EC2A 3DR
 Cancer BACUP Helpline:
 0808 800 1234

Internet:

<http://www.cancerbacup.org.uk>

Book:

Understanding Prostate Disorders
 Professor D Kirk
 British Medical Association (BMA)
 ISBN:1-898205-87-6

Cancer Research UK web-site:

<http://www.cancerresearchuk.org>
<http://www.cancerhelp.org.uk>

Helpline: 0800 226237