What happens after a Prostate Biopsy

Patient Information – Urology Service

What happens after prostate biopsy?

After the biopsy there are two things you need to do:

- **Drink plenty of fluid to flush through any blood that may be in your urine.**
- **You must take your antibiotic tablet 12 hours after your biopsy.**

If you develop signs of an infection (such as high fevers and shaking), immediately report to the Emergency Department at either Christchurch or Ashburton Hospital.

You will be **notified by phone** of your results by the Clinical Nurse Specialist the week after your biopsy. This is regardless of whether there is cancer or not in your prostate.

NO cancer in the prostate

In a case of no cancer in the prostate, you will need to keep having your prostate checked regularly. The current advice is to see your GP for a rectal (bottom) examination of the prostate and a PSA blood test once a year.

Cancer in the prostate

If your biopsy shows cancer in the prostate, we encourage you to attend a presentation about prostate cancer by the Clinical Nurse Specialist on the same day that you have an appointment to see your urologist.

This presentation will discuss the treatments of prostate cancer.

These treatment options include:

- Watch and wait
- Active surveillance
- Surgery (radical prostatectomy)
- Radiation therapy
- Hormonal therapy.

1. Watch and wait

Sometimes if there is a small amount of cancer which appears under the microscope to be slow growing, or if the PSA level is not very high, it will be appropriate merely to observe the cancer rather than treat it aggressively.

A policy of observation may also be appropriate where it is felt that your age or medical condition makes it unlikely that the cancer will cause any problems within your expected lifetime. Generally, a watch and wait policy involves regular checks of your prostate by PSA blood tests. The aim is to control the cancer rather than getting rid of it completely.

2. Active surveillance

If your biopsy has shown some cancer that is judged to be low risk and early stage, then there is an option of being placed on active surveillance.

Active surveillance is a management strategy for many men with low risk prostate cancer. The cancer is not immediately treated but is very closely monitored. It is only treated if it shows evidence of change. This involves regular blood tests and biopsies with the aim to promptly treat the cancer and cure it if it shows signs of changing. Your cancer will be monitored with regular tests that have a set timeframe. These tests aim to find any changes that suggest the cancer is growing.

The concept of active surveillance is that low risk, low volume prostate cancer has a very low chance of causing harm over a very long period of time. On the other hand, the treatments for prostate cancer can have significant potential side effects. The idea is to monitor the disease and only intervene if there is a change in the characteristics of the cancer that increases the risk of being on active surveillance. If this occurs, intervention will begin.

The main risk of active surveillance is the potential of 'missing the boat' in terms of treating the prostate cancer while it is curable and developing disease that is incurable.

In the large studies of active surveillance that have been conducted, the risk of this occurring is around 3%. This risk needs to be balanced against the risk of treating a cancer that never needed treatment in the first place due to its low risk, and the side effects of the treatment options.

Active surveillance involves the following programme of tests:

PSA (blood test)

- Tested every three months for the first year
- Tested every six months for the next 18 months
- Tested yearly thereafter.

Biopsy

Repeat biopsies will be recommended at the following intervals:

- After six months
- After a further two years
- A further three years after this
- Every five years thereafter.

The reason to repeat the biopsy is to make sure the cancer is not changing. Generally, once you reach the age of 75 years, you will revert to blood tests only.

MRI scan

This may be undertaken prior to the second biopsy.

3. Radical prostatectomy

A radical prostatectomy is designed to be an attempt to cure the prostate cancer. It is an operation performed by making a cut from the umbilicus (tummy button) to the pubic bone. The prostate is completely removed, and the bladder is joined back onto the urethra (tube from the bladder to empty the urine). A catheter (flexible plastic tube) is placed to help drain the urine in the short-term.

The procedure generally takes two hours.

Following the operation patients are usually in hospital for two nights. This time will involve initially having a self-controlled pain pump. By the time of discharge patients will be moving freely and looking after their catheter. The catheter remains in for 14 days and is managed at home with a drainage bag that is attached to your leg.

Two to three weeks after the operation an appointment is made for you to see the Continence Nurse Specialist who will remove the catheter and show you exercises that you will need to do to help regain control of your bladder. Initially, most men will have to wear pads to control varying amounts of leakage. Generally, these are no longer required after three to six months due to strengthening of the muscles through the exercises.

A radical prostatectomy can also cause impotence, or an inability to have an erection. The likelihood of this occurring depends to a large degree on the way the operation is performed. However, it is true that at best only 30% to 50% of men regain normal erections. This does not mean that you cannot continue to have a sex life. There are two important points. Firstly, with some creativity men can have orgasms without having an erection. Secondly, a number of agents are available to help bring back erections, although these do mean that the spontaneity of the sexual act is often diminished.

Robotic Surgery

In order to minimise the trauma from surgery and to allow for faster recovery, it is possible to perform a radical prostatectomy with keyhole surgery (robot-assisted laparoscopic radical prostatectomy). This procedure is only available in the private sector.

3. Radiation treatment

External Beam Radiation

Radiation therapy kills the cancer cells within the prostate without the need for the prostate to be removed. The success rates for radiation therapy and surgery (radical prostatectomy) are similar.

Treatment is given daily (involving about 15 minutes per day) over a course of up to seven to eight weeks.

Patients usually continue to work throughout their treatment and are able to continue with their normal activities.

During the treatment the bladder and bowel may be affected which can make you go to the toilet more frequently. These problems usually settle within a few weeks after finishing the radiation therapy.

Longer term radiation therapy can leave some men with permanent changes to their bowel habit. 10% to 20% of men will go to the toilet more than once a day and most men consider this a minor change. The risk of leaking urine is extremely low.

Impotence may occur over time following external beam radiation treatment. Less than 50% of men will suffer with impotence at five years. Impotence can respond to medications.

Brachytherapy

In some cases the radiation can be applied with radioactive seeds that are implanted into the prostate under anaesthesia. This has generally less side effects than external beam radiation. This treatment is only available in the private sector.

5. Hormonal treatment

In hormonal treatment we are not trying to cure the cancer but trying to control the cancer. The cancer needs male hormones (testosterone) to grow, so by reducing the hormones in the body the cancer is 'starved of food'.

The idea of these various forms of hormonal treatment is to control the cancer for a period of time. They will not eradicate it from the body, but often the control will be long enough that the cancer does not cause further problems.

In general, hormonal treatment is used in patients who have cancer that has advanced beyond the confines of the prostate and therefore cannot be cured by either a radical prostatectomy or radiation therapy.

Hormonal treatment is also used for those patients who, for medical or age reasons, are not suitable for a radical prostatectomy or radiation therapy.

There are two main ways to provide this hormonal treatment:

Orchidectomy (removal of the testicles)

Orchidectomy is an operation to remove the testicles. This is a day surgery operation where you will not need to stay in hospital overnight. This operation removes the source of testosterone, which is produced in the testicles. Doing this creates a situation not unlike menopause in women where men can experience hot flushes and will often put on a little bit of weight.

Over the longer term there may also be some thinning of the bones. The other side effect of this treatment is a loss of sexual desire and the loss of the ability to have an erection.

Injections and/or tablets

Injections are given once every three months. There are similar side effects with the injections as with the orchidectomy. There are also tablet forms of hormonal treatment that block the ability of male hormones to act on the prostate. Hormonal treatments can sometimes cause upset of the intestinal tract and diarrhoea or liver problems.

Injections, unlike the orchidectomy surgery, are reversible. Surgery has now become a very rarely performed option due to the availability and convenience of injections.

If your biopsy comes back showing you have a cancer of the prostate, your urologist will guide you in making a decision as to what treatment is best for you. It is highly recommended that you attend the prostate cancer presentation by the clinical nurse specialist before this appointment – you are welcome to bring a support person with you.

Contact information

For more information about:

- Hospital and specialist services, go to *www.cdhb.health.nz*
- Your health and medication, go to *www.healthinfo.org.nz*

For information on parking, how to get to the hospital, and visiting hours, please visit *www.cdhb.health.nz*