Prostate Cancer: Options for localised cancer

Information for patients, families and friends
About this booklet

This booklet provides information about treatment for localised prostate cancer and what to expect.

If you have any questions please speak to your Radiation Oncologist or the other helpful staff at Alfred Health Radiation Oncology during your next visit.

The Cancer Council of Victoria produces an easy to read prostate cancer information booklet. Copies of the booklet can be found at Alfred Health Radiation Oncology or go to their website www.cancervic.org.au.

What factors influence treatment choices?

Patient related
These are often the most important in determining the choice of treatment.

These factors include:
- Age.
- Life-expectancy.
- Personal preference towards treatment options and side effects.
- Cost.
Prostate cancer related
- Extent of disease.
- Histopathologic grade (the appearance of the tumour under microscopic examination).
- PSA-level.

Prostate related
- Size of the gland.
- Degree of benign enlargement.
- Amount of obstruction to urine flow.

Other medical factors
- Heart disease.
- Lung disease.
- Vascular disease.
- Bleeding disorders.
- Previous bowel or pelvic surgery.
- Inflammatory bowel disease.
- Previous treatment for serious malignancies.
Treatment Options

Watchful Waiting

Watchful waiting is often a valid treatment. You and your doctor might select this option if it appears likely that the disease is so slowly progressive that you are unlikely to be troubled by it.

It has the advantage that it avoids the trouble, cost, and potential side-effects of active treatment. However, the risk is that the disease may progress more rapidly than anticipated and then cause trouble which might have been avoided.

Active Surveillance

This is a common plan with cancer that does not look like a threat to men’s health, but where doctors think that they could watch it carefully in order to immediately do something if the cancer changes to become more worrisome. In the right patients, this approach can achieve the same levels of cancer control as immediate treatment, but allow avoidance of the side-effects of active treatment for as long as possible, and perhaps forever.

Radical prostatectomy

Radical prostatectomy is surgical removal of the prostate. It has very good cure rates in patients with disease confined to the prostate gland.

It involves a major operation, a hospital stay for around a week, and an indwelling urinary catheter for a while longer. Most, but by no means all, men become impotent and a small proportion of men are left with permanent incontinence. Some men will also need to have radiation treatment as well.
External beam radiation therapy
This is the use of an x-ray beam produced by a treatment machine, called a linear accelerator.

External beam radiation therapy delivers a high dose of radiation to the prostate and the immediate surrounding tissue. It has high cure rates for early stage disease, but it is often chosen for locally-advanced disease in which the cure rates are not quite so high.

Treatment involves 4-8 weeks of daily attendance at a radiation therapy centre, from Monday to Friday.

Common side effects are tiredness, bowel irritation and bladder irritation. Radiation therapy can also have long term complications, including impotence and minor disturbance in usual bowel habit. Occasional rectal or urinary bleeding is sometimes seen; serious bleeding is very rare.

High dose-rate brachytherapy
High dose-rate brachytherapy is usually given in combination with hormones and external beam radiation therapy. This combination has been shown to have better cure rates and fewer side effects than external beam radiation therapy alone.
High dose-rate brachytherapy involves a small surgical procedure, under anaesthetic, in which hollow plastic catheters are inserted into the prostate. These plastic catheters are used to transport a small radioactive source into the prostate, delivering the radiation treatment.

High dose-rate brachytherapy is usually delivered in a couple of treatments, over two days, as an inpatient. Once all the treatments are completed the plastic catheters are removed from the prostate and you can leave hospital.

**Seed or low dose-rate brachytherapy**

Seed or low dose-rate brachytherapy is a treatment option for men with early stage prostate cancer. It has comparable cure rates to radical prostatectomy.

Seed brachytherapy involves placing small radioactive seeds permanently into the prostate to administer radiation. It is done in theatre under general anaesthetic.

**Advantages**
- Quick.
- Involves only a minor surgical procedure.
- Causes little disruption to your home or work life.
- Little chance of incontinence or rectal bleeding.
- Smaller risk of impotence compared with other active treatments.

**Disadvantages**
- Significant bladder irritation for months afterwards is common.
- Occasionally men might require a urinary catheter.
Other treatments

Other treatments can be used for men with prostate cancer, but are unlikely to lead to long term control or cure. These are briefly mentioned for completeness.

Hormone treatment

Hormone treatment or androgen deprivation involves suppression of the male hormone, testosterone. This can be done in many ways, either with drugs or surgically. It will cause a regression of the prostate cancer, and remission from the disease that may last many years. Inevitably the cancer has the potential to come back, given sufficient time.

This form of treatment is commonly used in men with early stage prostate cancer in a combination with radiation, but also with surgery.

Trans-urethral resection of prostate (or TURP)

This involves a urological surgeon removing part of the prostate. It is usually done for men with obstruction to their urine flow. Most commonly, such obstruction is not caused by cancer. If it is, then the TURP will treat the symptom of the cancer, but will not cure the underlying cancer.
Chemotherapy
Chemotherapy is the use of drugs to kill cancerous cells. It is very effective for some cancers but has very limited use for prostate cancer.

Chemotherapy is sometimes used in advanced disease to help alleviate symptoms, but it has no proven place for the attempted cure of localised prostate cancer.

Cryotherapy
Cryotherapy involves the destruction of tissue through the use of extremely low temperatures. For prostate cancer, cryotherapy is used to freeze the prostate tissue, causing irreversible damage.

Cryotherapy is typically used for men who:
- Have local recurrence after any form of radiation treatment.
- Older men, those not fit for surgery and those that do not wish to have radiation therapy.

At the moment cryotherapy is not supported by Medicare, so the treatment is quite expensive.

High-intensity focused ultrasound (or HIFU)
High-intensity focused ultrasound or HIFU is a highly precise procedure that applies high-intensity focused ultrasound energy to locally heat and destroy diseased or damaged tissue.

HIFU is typically used for men who:
- Have local recurrence after any form of radiation treatment.
Men with symptomatic prostate cancer who do not want to have surgery or radiation therapy.

At the moment HIFU is not supported by Medicare, so the treatment is quite expensive.

**How can I find out more?**

Please ask your Radiation Oncologist if you require further information on treatment options for prostate cancer. We have more detailed information booklets on many of the treatment options described here.

Further information can also be found on our Melbourne Prostate Institute website [www.melbourneprostate.org](http://www.melbourneprostate.org).