

For Appointments Call: 08 8267 1424

# HDR Brachytherapy for Prostate Cancer

## What is HDR brachytherapy?

High dose rate (HDR) brachytherapy is a treatment option for some men with intermediate risk or higher risk prostate cancer. It is a form of radiation treatment that has 2 parts:

1. An operation under general anaesthetic where rods are temporarily inserted into the prostate to allow a short burst of high dose radiation to be delivered to the prostate. The rods are removed at the end of the operation.
2. An additional short course of external beam radiation, given as an outpatient procedure.

Overall, these combined treatments give a high dose of irradiation to the prostate, and as the HDR 'boost' is localised to the prostate, side effects of irradiation may be reduced.

## Criteria for HDR

Not every man with prostate cancer is suitable for HDR brachytherapy. Certain criteria need to be met to ensure it is right for you, and that the prostate cancer can be effectively treated. These criteria will be discussed with you, and include:

- Grade/stage of prostate cancer
- Size of the prostate
- Presence of symptoms from your waterworks, and flow rate
- No previous radiation treatment in the area

## How is HDR brachytherapy delivered?

The HDR equipment is complex, and a

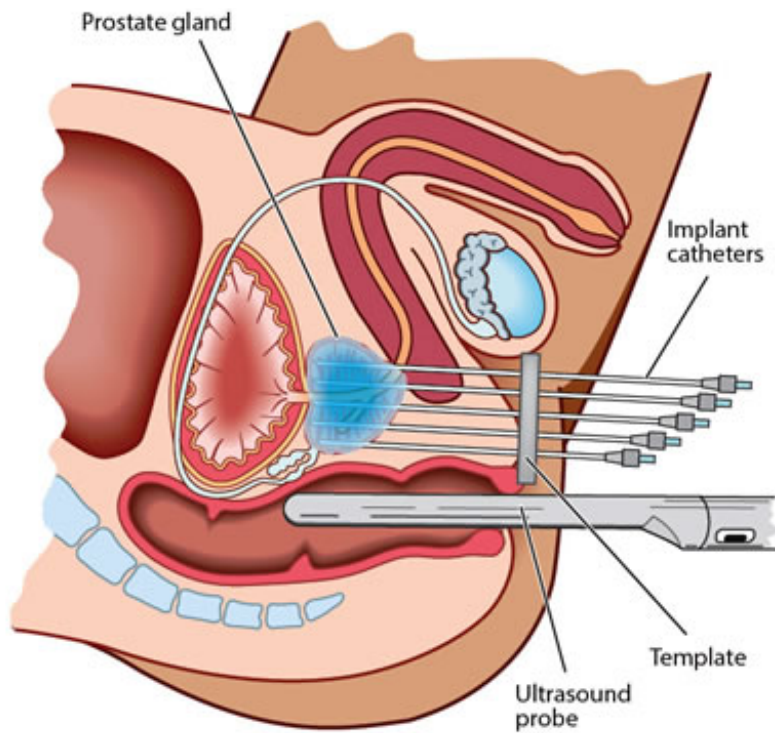


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large team are involved, including your urologist, a radiation oncologist, anaesthetist, radiation nurses, radiation therapists and radiation physicists. This team is based at the Royal Adelaide Hospital, so this part of your treatment will be performed there.

The procedure involves a general anaesthetic, followed by catheter insertion. The prostate is imaged with ultrasound, and then carefully mapped for planning the exact site of needle insertion. A number of needles are inserted through the skin of the perineum (this is the skin between the scrotum and back passage) and into the prostate, and the radioactive source is passed along the needles, under computer software control. The needles are removed, but the catheter is left in

overnight.

## After the procedure

The catheter is removed the next morning, and you can go home once you have passed urine. Drink plenty of water for a couple of days, and take the tablets you have been given to help with urination. It is normal to have a small amount of soreness and discomfort in the area, but this should settle. A small amount of blood in the urine is normal.

## Potential side effects and complications

All procedures have the potential for side effects. Although these complications are well recognised, the majority of patients do not have problems after a procedure.

Risks of the anaesthetic need to be discussed with the anaesthetist who will be looking after you during the operation, and who will visit you beforehand.

There are specific risks with this surgical procedure, and these will be discussed with you before your procedure. As a guide to complement that one-on-one discussion with your surgeon, these include:

### Common

- A small amount of blood in the urine is common for a few days
- Irritation of your waterworks should also settle quite quickly

### Occasional

- Infection in the bladder requiring antibiotics

## Rare

- Inability to pass urine immediately after catheter removal. If this happens, a new temporary catheter will need to be inserted. This will be removed a few days later.

## Very rare

- Sepsis (infection spreading from the urine/prostate). Symptoms can include feeling very unwell, a high or swinging temperature, chills, shaking, and a fast heartbeat. This is very rare but needs immediate medical attention. Please contact your GP or urologist immediately or go straight to your nearest emergency department.
- Heavy bleeding from the waterworks requiring hospital admission
- Retention of urine that doesn't respond to a period with a catheter. In this case you may need to perform intermittent [self catheterisation](#) for a period of time.

**If you have heavy bleeding or any of the signs of sepsis, please contact the rooms immediately on 08 8267 1424. If out of hours, please go to your nearest emergency department.**

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### Disclaimer

This information is intended as an educational guide only, and is here to help you as an additional source of information, along with a consultation from your urologist. The information does not apply to all patients.

Not all potential complications are listed, and you must talk to your urologist about the complications specific to your situation.

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