

## ROBOTIC-ASSISTED RADICAL PROSTATECTOMY (RARP)

### Introduction

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2000 men are diagnosed with prostate cancer every year in Western Australia. Robotic-assisted laparoscopic prostatectomy is performed to treat localised prostate cancer in men with a life expectancy of 10 years or more. The aim is to remove the cancer and prostate completely to achieve a cure.

### What does the procedure involve?

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The surgery is performed under general anaesthesia and takes 3-4 hours. Six ports are placed through small keyhole incisions to allow fine instruments to be inserted into the abdomen. Dr Ooi works at a console in the same room and controls the robotic arms to perform the operation, with the help of the assistant surgeon and scrub nurse at the bedside with the patient.

The prostate gland and two sacs behind the prostate (seminal vesicles) are removed. The vas deferens (tubes that carry sperm to the urethra) is cut. The nerves that control erections run on the capsule of the prostate. In low-intermediate risk cancer, these nerves can be preserved by gently lifting them off the capsule. In high-risk cancer, these nerves may be involved and are removed, resulting in erectile dysfunction. The bladder is stitched to the urethra, and a tube (indwelling catheter or IDC) is left in the urethra for one week whilst the tissues heal.

RARP video (2:26 mins) <https://www.youtube.com/watch?v=HK-bW-IOEIU>

### What are the alternatives?

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Active surveillance

Open or laparoscopic radical prostatectomy

External beam radiotherapy - conventional or stereotactic (Cyberknife, SABR)

Low or high dose rate brachytherapy

Experimental - high-intensity focused ultrasound (HIFU), Nanoknife

## What are the risks of surgery?

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All operations have risks. For RARP, potential complications include:

### Common (>10%)

Temporary difficulties with urinary control (weeks-months)  
Impairment of erections and impotence  
Inability to ejaculate and infertility

Information about intimacy & relationships <https://prostatecanceruk.org/prostate-information/living-with-prostate-cancer/sex-and-relationships>

### Occasional (1-10%)

Anastomotic leak or scarring - longer catheterisation or further surgery  
Urinary incontinence >12 months - pads or further surgery  
Urinary tract infection  
Apparent shortening of the penis  
Development of a hernia in the groin or wound sites  
Lymph collection in the pelvis (when lymph nodes have been removed)  
Discovery that cancer cells have spread, requiring further treatment

### Rare (<1%)

Blood loss requiring transfusion  
Anaesthetic or cardiorespiratory problems - intensive care  
Chest infection, clots in the legs and lung, stroke, heart attack, death  
Rectal injury, requiring temporary colostomy (<0.5%)  
Blindness, in pre-existing undiagnosed and untreated glaucoma (<0.1%)

## What should I do before surgery?

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- See a pelvic floor physiotherapist to learn exercises that improve bladder control
- Use PicoPrep at 3pm the day before surgery to clear bowel content
- Do not eat, drink, or chew gum for 6 hours before surgery
- If you are obese, losing weight makes surgery easier and improves outcomes
- If you smoke, quitting makes anaesthesia safer and reduces complication rates
- If you are on blood thinning medication, discuss this with Dr Ooi

## What should I expect after surgery?

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The usual hospital stay is 2 nights. Sips of fluid are provided initially, followed by light diet. Please ask for pain or nausea medication if required. The nurses will assist with daily activities and teach you how to manage the catheter with a leg bag. Try to sit out of bed and go for short walks to improve breathing and circulation. Wound dressings are waterproof and will start peeling off after a few weeks.

## Discharge information

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Wear comfortable loose clothing and arrange for someone to stay at home with you for a few days. Drink 2L of fluid each day and eat a normal diet. If you are constipated, do not strain or push. Use psyllium husks or laxatives instead and avoid suppositories or enemas. Do not lift anything >5kg or perform strenuous activities for 6 weeks.

The continence nurse will see you after 1 week to remove your catheter. Use pads to absorb any leakage and do your pelvic floor exercises regularly. Take Tadalafil daily to help with recovery of erectile function. If you take blood-thinning medications, please check with Dr Ooi when to restart them. You can drive once you are off pain medications and can do so safely. Most people take 3-4 weeks off work to convalesce.

Please contact Dr Ooi's rooms, the hospital, ward or nurse manager if you have any concerns, such as excessive pain, bleeding, fever, wound issues, or catheter problems. General advice is also available on our website in the Procedures section.

## Appointments

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- Dr Ooi will see you 2-3 weeks after surgery to check on your progress and give you the pathology results
- Make an appointment to see your physiotherapist as well to check and reinforce the pelvic floor exercises
- A sexual health consultation is extremely beneficial to treat erectile problems - please ask Dr Ooi for a list of providers