

# Retroperitoneal Lymph Node Dissection (RPLND)

**Retroperitoneal Lymph Node Dissection (RPLND)** is a surgical procedure to remove lymph nodes from the back of the abdomen (retroperitoneum) where testicular cancer commonly spreads.

Prof Lawrentschuk performs this surgery using the **da Vinci robotic system**, which provides enhanced precision, visual clarity, and control. It is important to note that the robotic system does not operate autonomously; all movements are directed entirely by Prof Lawrentschuk from a console.

## Why is RPLND required?

**RPLND** is recommended to:

- Remove cancerous lymph nodes and reduce the risk of cancer spreading
- Provide accurate staging of the cancer
- Treat residual lymph node masses after chemotherapy

It plays a crucial role in both **diagnosis and treatment** of testicular cancer and may lead to a cure without additional therapy in some cases.

## **Before surgery**

You will be contacted 1–2 weeks prior to your scheduled procedure with specific fasting instructions and hospital admission details. You will also receive a link to complete your online admission forms.

It is important to advise the rooms if you are taking any **blood thinners** or any prescribed medications for **diabetes or weight loss purposes.** The rooms can be contacted on (03) 9329 1197.

# **During surgery**

The procedure is performed under **general anaesthesia** or a **spinal anaesthesia**. It consists of the following steps:

- Several small incisions are made in the abdomen.
- A robotic system is used to insert a camera and instruments through these incisions.
- Prof Lawrentschuk controls the robotic arms from a console, providing enhanced dexterity and a 3D magnified view.
- Lymph nodes in the retroperitoneum are carefully dissected, removed and sent for pathology testing.

The procedure may take longer than open RPLND (completion of procedure without robotic instruments) due to setup and precision steps, but usually results in shorter hospital stays and less post-operative pain.

## Following surgery

#### **Hospital stay**

You will be admitted on the day of your surgery, with a typical hospital stay **lasting 3-5 nights**. Post-operatively, patients may spend the first night or longer in the Intensive Care Unit (ICU). Please note that:

- Normal eating is usually delayed for several days due to bowel inactivity (ileus), which can take up to a
  week to resolve.
- Pain at the incision sites is common but is usually well-managed with medication.

### Recovering at home

Once at home, please note the following:

- **Driving** should be avoided for 2-3 weeks or once you are comfortable enough without the requirement of strong pain medication.
- Returning to work is not recommended for at least 2 weeks
- Vigorous exercise or heavy lifting should be avoided for 6-8 weeks
- You can usually return to light activities within 2-3 weeks

## Possible side effects

#### Common (1 in 2 to 1 in 10):

- Temporary pain or discomfort at the incision sites
- Nausea or delayed return of bowel function (ileus)

#### Occasional (1 in 10 to 1 in 50):

- Infection of wounds or internal sites (e.g. chylous ascites)
- Incomplete removal of lymph nodes
- Retrograde ejaculation (dry orgasm), which may be temporary or permanent

#### Rare (1 in 50 to 1 in 250):

- · Significant bleeding or need for blood transfusion
- Damage to nearby structures (e.g. blood vessels, nerves, bowel, ureter)

# **Alternative treatment options**

Alternative treatment options include:

- Surveillance: Careful monitoring with imaging and blood tests for certain early-stage cancers
- Chemotherapy: Often used for advanced disease or when lymph nodes are extensively involved
- Open RPLND: A traditional surgical method with larger incisions

Prof Lawrentschuk will discuss the most suitable course of action for you.

## When to seek help

Please contact **Prof Lawrentschuk's rooms** at (03) 9329 1197 or attend your nearest **Emergency Department** if you experience:

- Signs of infection, including fever.
- · Long-lasting nausea and vomiting.
- Excessive pain that you can't control with your prescribed medications.
- Inability to pass gas or have a bowel movement.

# Follow-up and monitoring

A follow-up appointment will be scheduled 6-8 weeks post-surgery to:

- Review your recovery
- Discuss histopathology results of the removed tissue

Pathology results are typically available within 10–14 days. In some cases, your results may be reviewed in a **multidisciplinary team meeting** to determine the most effective next steps. If this occurs, you will be notified and kept informed of the team's recommendations.

